

## PARTITION COEFFICIENTS AND THEIR USES

ALBERT LEO,\* CORWIN HANSCH, AND DAVID ELKINS

Department of Chemistry, Pomona College, Claremont, California 91711

Received March 31, 1971

### Contents

I. Introduction	525
A. Purpose	525
B. Historical	526
II. Theoretical	527
A. Henry's Law	527
B. Nonideal Behavior of Solutes	527
C. Thermodynamics of Partitioning Systems	531
D. Energy Requirements for Phase Transfer	532
III. Experimental Methods	537
IV. Linear Free-Energy Relationships among Systems	538
V. Additive-Constitutive Properties	542
VI. Uses of Partition Measurements	548
A. Countercurrent Distribution	548
B. Measurement of Equilibria	548
C. Relationship to HLB and Emulsion Systems	548
D. Measurement of Dissolution and Partitioning Rate of Drugs	549
E. Liquid Ion-Exchange Media and Ion-Selective Electrodes	550
F. Measurement of Hydrophobic Bonding Ability. Structure-Activity Parameters	550
VII. The Use of Table XVII	551
VIII. Glossary of Terms	554

### I. Introduction

#### A. PURPOSE

In spite of the scientific community's continuing interest over the past 90 years in partitioning measurements, no comprehensive review of the subject has ever been published. In fact, no extensive list of partition coefficients has appeared in the literature. The largest compilation is that of Seidell;<sup>1</sup> smaller compilations have been made by Collander,<sup>2-5</sup> von Metzsch,<sup>6</sup> and Landolt.<sup>7</sup> The task of making a complete listing is nearly

impossible since *Chemical Abstracts* has not indexed the majority of the work of the last few decades under the subject of partitioning. While reference may be made under the name of a compound, this is of very little help in organizing a list of known values. Actually, in recent years relatively few partition coefficients have been determined in studies simply devoted to an understanding of the nature of the partition coefficient. The vast majority have been measured for some secondary reason such as the correlation of relative lipophilic character with biological properties of a set of congeners.

In the course of structure-activity studies undertaken by this laboratory over the past decade, many values for partition coefficients of drugs have been found in the biochemical and pharmaceutical literature. From references in these papers, many other values have come to light. As these values have been uncovered, they have been fed into a computer-based "keyed-retrieval" compilation which, while admittedly not complete, is still far more comprehensive than any yet published.

This compilation is not the primary reason for the present review. Work<sup>8</sup> on the correlation of hydrophobic bonding in biochemical systems with partition coefficients has been greatly hindered because of the lack of any survey of the field. This review is written in the hope that the organization of the scattered works on this subject will be of help to others. However, the more dynamic part of the subject is the use of the partition coefficient in the study of intermolecular forces of organic compounds. This subject, while still in the embryonic stage, holds promise for the better understanding of the interaction of small organic molecules with biomacromolecules. Equation 1 is one of many known examples<sup>9</sup> of a

$$\log \frac{1}{C} = 0.75 \log P + 2.30 \frac{n}{42} \frac{r}{0.960} \frac{s}{0.159} \quad (1)$$

linear free energy relationship relating two "partitioning-like" processes. In eq 1,  $C$  is the molar concentration of organic compound necessary to produce a 1:1 complex with bovine serum albumin *via* equilibrium dialysis. This partitioning process is related linearly to  $\log P$  which is the partition coefficient of the compound between octanol and water. The number of molecules studied is represented by  $n$ ,  $r$  is the cor-

(1) A. Seidell, "Solubility of Organic Compounds," Vol. II, 3rd ed, Van Nostrand, Princeton, N. J., 1941.

(2) R. Collander, *Physiol. Plant.*, **7**, 420 (1954).

(3) R. Collander, *Acta Chem. Scand.*, **3**, 717 (1949).

(4) R. Collander, *ibid.*, **4**, 1085 (1950).

(5) R. Collander, *ibid.*, **5**, 774 (1951).

(6) F. von Metzsch, *Angew. Chem.*, **65**, 586 (1953).

(7) Landolt-Bornstein, "Zahlenwerte und Functionen," Vol. 2, Springer-Verlag, Berlin, 1964, p 698.

(8) C. Hansch, *Accounts Chem. Res.*, **2**, 232 (1969).

(9) F. Helmer, K. Kiehs, and C. Hansch, *Biochemistry*, **7**, 2858 (1968).

relation coefficient, and  $s$  is the standard deviation from regression. Many such linear relationships between solutes partitioned in different solvent systems have been uncovered (section IV). A summary of this work should provide a better understanding of the octanol-water model system and further the application of such linear free energy relationships to "partitioning-like" processes in more complex biological systems.

Another aspect of this review is to summarize the present understanding of the recently discovered<sup>10</sup> additive-constitutive character of the partition coefficient. This property promises to be of value in studying the conformation of molecules in solution.

## B. HISTORICAL

The distribution of a solute between two phases in which it is soluble has been an important subject for experimentation and study for many years. In one form or another this technique has been used since earliest times to isolate natural products such as the essences of flowers.

The first systematic study of distribution between two immiscible liquids which led to a theory with predictive capabilities was carried out by Berthelot and Jungfleisch.<sup>11</sup> These investigators accurately measured the amounts present at equilibrium of both  $I_2$  and  $Br_2$  when distributed between  $CS_2$  and water. They also measured the amounts of various organic acids,  $H_2SO_4$ ,  $HCl$ , and  $NH_3$  when distributed between ethyl ether and water. From these early investigations came the first appreciation of the basic fact that the ratio of the concentrations of solute distributed between two immiscible solvents was a constant and did not depend on the relative volumes of solutions used.

It was concluded from these early observations that there was a small variation in partition coefficient with temperature, with the more volatile solvent being favored by a temperature decrease. It was also evident that some systems, notably succinic acid partitioned between ether and water, did not obey their simple "rule" even in dilute solution, but they intuitively felt the rule would be justified nonetheless.

In 1891, Nernst made the next significant contribution to the subject.<sup>12</sup> He stressed the fact that the partition coefficient would be constant only if a *single* molecular species were being considered as partitioned between the two phases. Considered in this light, partitioning could be treated by classical thermodynamics as an equilibrium process where the tendency of any single molecular species of solute to leave one solvent and enter another would be a measure of its activity in that solvent and would be related in the usual fashion to the other commonly measured activity functions such as partial pressure, osmotic pressure, and chemical potential. As the primary example of a more exact expression of the "Partition Law," it was shown that benzoic acid distributed itself between benzene and water so that

$$\sqrt{C_s}/C_w = K \quad (2)$$

where  $C_s$  is the concentration of benzoic acid in benzene (chiefly in dimeric form),  $C_w$  is the concentration of benzoic acid in water, and  $K$  is a constant combining the partition

coefficient for the benzoic acid monomer and the dimerization constant for the acid in benzene.<sup>13</sup> Since benzoic acid exists largely as the dimer in benzene at the concentration employed, the monomer concentration in benzene is proportional to the square root of its total concentration in that solvent. Of course, Nernst was also aware that, at low concentrations, the concentration of benzoic acid in the aqueous phase would have to be corrected for ionization.

This association and dissociation of solutes in different phases remains the most vexing problem in studying partition coefficients. For a true partition coefficient, one must consider the same species in each phase. A precise definition of this in the strictest sense is impossible. Since water molecules and solvent molecules will form bonds of varying degrees of firmness with different solutes, any system more complex than rare gases in hydrocarbons and water becomes impossible to define sharply at the molecular level. Very little attention has been given to the fact that solutes other than carboxylic acids may carry one or more water molecules bound to them into the nonaqueous phase. This is quite possible in solvents such as *sec*-butyl alcohol which on a molar basis contains more molecules of water in the butanol phase than butanol!

During the early years of the twentieth century a great number of careful partition experiments were reported in the literature, most of which were carried out with the objective of determining the ionization constant in an aqueous medium of moderately ionized acids and bases. As a point of historical fact, the method did not live up to its early promise, partly because of unexpected association in the organic solvents chosen and partly because of solvent changes which will be discussed in detail in a following section.

After reliable ionization constants became available through other means, partitioning measurements were used to calculate the association constants of organic acids in the nonaqueous phase as a function of the temperature. This yielded values of  $\Delta H$ ,  $\Delta S$ , and  $\Delta G$  for the association reaction.<sup>14-18</sup> However, any calculation of self-association constants from partition data alone can be misleading when hydrate formation occurs.<sup>19,20</sup>

As early as 1909, Herz<sup>21</sup> published formulas which related the partition coefficient ( $P$ ) to the number of extractions necessary to remove a given weight of solute from solution. His formula, with symbols changed to conform to present usage, is as follows.

If  $W$  ml of solution contains  $x_0$  g of solute, repeatedly extracted with  $L$  ml of a solvent, and  $x_1$  g of solute remains after the first extraction, then  $(x_0 - x_1)/L =$  concentration of solute in extracting phase and  $x_1/W =$  concentration remaining in original solution.

(13) Occasionally,  $K$  values obtained in this fashion have been reported as "partition coefficients." In this report all such values have been corrected to true  $P$  values whenever the different terminology was apparent.

(14) M. Davies, P. Jones, D. Patnaik, and E. Moelwyn-Hughes, *J. Chem. Soc.*, 1249 (1951).

(15) J. Baniewicz, C. Reed, and M. Levitch, *J. Amer. Chem. Soc.*, 79, 2693 (1957).

(16) M. Davies and D. Griffiths, *Z. Phys. Chem. (Frankfurt am Main)*, 2, 353 (1954).

(17) M. Davies and D. Griffiths, *J. Chem. Soc.*, 132 (1955).

(18) E. Schrier, M. Pottle, and H. Scheraga, *J. Amer. Chem. Soc.*, 86, 3444 (1964).

(19) E. N. Lassette, *Chem. Rev.*, 20, 259 (1937).

(20) R. Van Duyne, S. Taylor, S. Christian, and H. Affsprung, *J. Phys. Chem.*, 71, 3427 (1967).

(21) W. Herz, "Der Verteilungssatz," Ferdinand Enke, Stuttgart, 1909, p 5.

(10) T. Fujita, J. Iwasa, and C. Hansch, *J. Amer. Chem. Soc.*, 86, 5175 (1964).

(11) Berthelot and Jungfleisch, *Ann. Chim. Phys.*, 4, 26 (1872).

(12) W. Nernst, *Z. Phys. Chem.*, 8, 110 (1891).

$$P = \frac{x_1}{W} \bigg/ \frac{x_0 - x_1}{L}$$

$$x_1 = x_0 \frac{PW}{PW + L}$$

If  $x_2$  is the amount of solute remaining after the second extraction with an equal volume,  $L$ , of extractant, then

$$x_2 = x_1 \frac{PW}{PW + L} = x_0 \left[ \frac{PW}{PW + L} \right]^2 \quad (3)$$

For the general case where  $n$  extractions are made, eq 3 takes the general form

$$x_n = x_0 \left[ \frac{PW}{PW + L} \right]^n \quad (4)$$

During the 1940's the mechanical technique of multiple extraction was vastly improved, and countercurrent distribution became an established tool for both the separation and characterization of complex mixtures.<sup>22</sup> It is beyond the scope of this review to deal with the great wealth of literature on this subject. The interested reader may consult the reviews for details.<sup>22, 23</sup>

Partition coefficients can be obtained from countercurrent distribution studies and many such values appear in Table XVII. The equation used for such studies is

$$T_{n,r} = \frac{n!}{r!(n-r)!} \left( \frac{1}{P+1} \right)^n (P)^r \quad (5)$$

where  $T_{n,r}$  represents the fraction of the total material in the  $r$  tube distributed through  $n$  tubes.<sup>24</sup> For distributions involving more than 20 transfers and when  $P$  is near unity, the following simpler relationship applies

$$N = n \left( \frac{P}{P+1} \right) \quad (6)$$

where  $N$  = position of peak,  $n$  = number of transfers, and  $P$  = partition coefficient.

During the two decades bracketing the turn of the century, while the partition coefficient was being studied by physical chemists as an end in itself, pharmacologists became quite interested in the partition coefficient through the work of Meyer<sup>25</sup> and Overton<sup>26</sup> who showed that the relative narcotic activities of drugs often paralleled their oil/water partition coefficients. However, the correlation of so-called nonspecific narcotic activity with partition coefficients did not lead to any really useful generalizations in understanding the mechanism of drug action in the broad sense. Consequently, the interest of both groups in partition coefficients declined greatly. In fact, even the exciting technique of countercurrent distribution did little to stimulate serious studies of partition coefficients *per se*. It is only the recent use of partition coefficients as extrathermodynamic reference parameters for "hydrophobic bonding" in biochemical and pharmacological systems which generated renewed interest in their measurement.<sup>8, 9</sup>

(22) L. C. Craig and D. Craig in "Technique of Organic Chemistry," Vol. III, Part I, A. Weissberger, Ed., Interscience, New York, N. Y., 1950, p 171.

(23) L. C. Craig, *Bull. N. Y. Acad. Med.*, **39**, 686 (1963).

(24) B. Williamson and L. Craig, *J. Biol. Chem.*, **168**, 687 (1947).

(25) H. Meyer, *Arch. Exptl. Pathol. Pharmacol.*, **42**, 110 (1899).

(26) E. Overton, "Studien über die Narkose," Fischer, Jena, Germany, 1901.

The symbols and nomenclature associated with partitioning processes have varied considerably. Before the turn of the century, the term "distribution ratio" was often used. Gradually, partition coefficient has become more widely used since *Chemical Abstracts* has indexed under this heading rather than distribution ratio. We shall use partition coefficient when referring to data which have been corrected for ionization, dimerization, etc., so that one is presumably referring to the distribution of a single species between two phases. It is appreciated that there is considerable uncertainty about the nature of "hydrate formation," and attempts to correct partition coefficients for the relative degree of *specific* association with water molecules or solvent molecules are very few. The expression "partition ratio" should be reserved to refer to uncorrected distributions of solute between two phases. Various symbols such as  $K$ ,  $K_D$ ,  $K_P$ ,  $D$ , and  $P$  have been used to represent the partition coefficient. We have chosen to use  $P$  partly because it has become more widely used in recent years than other symbols and because discussions with  $P$  very often involve many other equilibrium constants.  $P$  stands out from the variety of  $K$  values and is more easily followed in discussions, especially since this symbol is used sparingly in the literature pertaining to physical organic chemistry.

## II. Theoretical

### A. HENRY'S LAW

The most general approach to distribution phenomena is to treat the Partition law as an extension of Henry's law. For a gas in equilibrium with its solution in some solvent

$$m/p = K \quad (7)$$

where  $m$  = mass of gas dissolved per unit volume and  $p$  = pressure at constant temperature. Since the concentration of molecules in the gaseous phase is proportional to pressure,  $p$  can be replaced by  $C_1$  and the mass/unit volume of gas in solution designated by  $C_2$ . Equation 7 can then be restated as

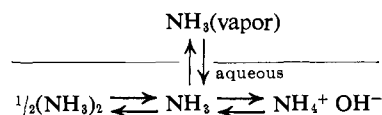
$$C_2/C_1 = K \quad (8)$$

In the most general terms, then, the concentrations of *any singular molecular species* in two phases which are in equilibrium with one another will bear a constant ratio to each other as long as the activity coefficients remain relatively constant. The "catch" to the above simple definition is that it assumes no significant solute-solute interactions as well as no strong specific solute-solvent interactions.

Many large interesting organic compounds deviate considerably from ideal behavior in water and various solvents so that one is not always even reasonably sure of the exact nature of the molecular species undergoing partitioning.

### B. NONIDEAL BEHAVIOR OF SOLUTES

In many instances solute molecules can exist in different forms in the two phases. This problem can be illustrated with the relatively simple and well-studied case of ammonia.



In this example, Henry's law is not obeyed, and there is wide variation of  $m/p$  (or  $C_2/C_1$ ) with concentration. Calingaert and

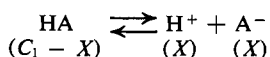
Huggins<sup>27</sup> considered the ionization equilibrium and found that  $C_2/[C_1(1 - \alpha)] \cong K$ ; the degree of ionization is represented by  $\alpha$ , and  $K$  was found to be constant to within 3% over a 300-fold range of concentrations. Moelwyn-Hughes<sup>28</sup> points out that if one allows for both ionization and dimerization assigning a value of  $K = 3.02$  mol/l. for the equilibrium constant for the reaction  $2(\text{NH}_3) \rightleftharpoons (\text{NH}_3)_2$ , then a constant partition ratio is obtained for concentrations up to 1.6  $M$ .

The equation allowing for both dimerization and ionization can be cast in several forms and the choice is merely one of convenience in handling the data. In treating their data on the distribution of acids between water and toluene, benzene, or chloroform, Smith and White<sup>29</sup> assigned the following symbols in developing a useful set of equations.

- $C_1$  = concentration of total solute in aqueous phase in mol/l.  
 $C_2$  = concentration of total solute in organic phase in mol/l. (in terms of monomer molarity)  
 $X$  = concentration of ions in aqueous phase  
 $N = C_1 - X_1$  = concentration of un-ionized molecules in water at the first concentration level  
 $n = C_1' - X_1'$  = concentration of un-ionized molecules in water at the second level  
 $P$  = concentration single molecules in organic phase/concentration single molecules in aqueous phase  
 $K_D$  = dissociation constant of double into single molecules in organic phase  
 $K_A$  = dissociation constant of single molecules into ions in aqueous layer

For aqueous equilibrium

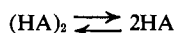
$$K_A = X^2/(C_1 - X)$$



and

$$X = \frac{-K_A + \sqrt{K_A^2 + 4K_A C_1}}{2} \quad (9)$$

For equilibrium in the organic phase<sup>30</sup>



$$K_D = \frac{2P[C_1 - X_1]^2}{C_2 - P(C_1 - X_1)} = \frac{2(PN)^2}{C_2 - PN} = \frac{2(Pn)^2}{C_2' - Pn} \quad (10)$$

$$P = \frac{C_2 n^2 - C_2' N^2}{(n - N)nN} \quad (11)$$

It is readily apparent that any set of experimental values of  $C_1$  and  $C_2$  are apt to have one or more aberrant points, and, furthermore, it is not always apparent how high a concentration must be reached before other solvent effects introduce sizable errors into the relationship which assumes a constancy for the two phases. For this reason it is advisable to recast eq 10 in another form.

$$K_D = 2(PN)^2/(C_2 - PN)$$

which is equivalent to

$$K_D(C_2 - PN) = 2(PN)^2$$

Multiplying by  $1/K_D N^2$  and rearranging, we obtain

$$C_2/N^2 = P(1/N) + \text{constant} \\ \text{constant} = 2P^2/K_D \quad (12)$$

It is evident that a plot of  $(C_2/N^2)$  vs.  $1/N$  will yield a straight line with slope =  $P$ . If there are sufficient data points, any aberrant values will be apparent, and the concentration beyond which the linear relationship no longer holds is more obvious.

A good deal of the data on acids in the literature had never been treated in this manner. To make these calculations from data which recorded a range of *total* concentrations in each phase (regardless of whether present as dimer, ion, etc.), we have written a small computer program to calculate  $1/N$  and  $C_2/N^2$  for each concentration value and  $P$  for each consecutive set of two concentrations. The program also punches a set of cards with  $C_2/N^2$  and  $1/N$  values which can then be used with a regression program to eliminate aberrant values and values beyond the true linear relationship. Whenever possible, the  $P$  values in Table XVII have been calculated in this way and 95% confidence intervals have been placed on them.  $P$  values so obtained were used to calculate  $K_D$  values in Table II.

A slightly altered form of eq 12 has also been widely used.<sup>14,31</sup> Stated in terms of the above symbols, it is

$$\frac{C_2}{N} = P + \frac{2P^2}{K_D} N \quad (13)$$

In this form a plot of  $N$  vs.  $1/N$  yields the value of  $P$  from the intercept (the partition coefficient at zero concentration where dimerization can be ignored). The value of the dimer dissociation constant can be obtained from  $P$  and the slope. It is obvious that dividing both sides of eq 13 by  $N$  yields an equation of the form of eq 12 and thus a given set of data should yield the same values for  $P$  and  $K_D$  by either method of calculation. We prefer to use the Smith and White equations, especially where no data points were measured at low concentrations and where, therefore, there can be a wider 95% confidence interval in the intercept value as compared to the confidence interval on the slope.

In calculating partition coefficients or association constants of acids, one is of course quite dependent on the quality of equilibrium constants available. For example, Moelwyn-Hughes,<sup>32</sup> in reviewing data reported by Rothmund and Drucker,<sup>33</sup> assumed no dimerization of picric acid in benzene and obtained a value of 0.143 for the ionization constant of picric acid in water. If, on the other hand, we accept the value of 0.222 for the  $K_A$  of picric acid as determined by conductivity measurements<sup>34</sup> and recalculate Rothmund and Drucker's data, a  $P$  value of 48.77 is found instead of 31.78. The  $K_D$  value, as calculated by eq 12, is very nearly infinity; *i.e.*, there is very little association in the benzene phase. This is a departure from the behavior of unsubstituted phenols in benzene. Endo<sup>35</sup> used partitioning data to show that the dissociation constant for the phenol trimer in benzene is approximately 1.

Ionization and self-association are not the only fates which can befall the carboxylic acid monomer (or other polar molecules) and complicate the calculation of the true partition coefficient and association constant.<sup>19,20</sup> If the solute forms a

(27) G. Calingaert and F. Huggins, Jr., *J. Amer. Chem. Soc.*, **45**, 915 (1923).

(28) E. A. Moelwyn-Hughes, "Physical Chemistry," 2nd ed, Pergamon Press, New York, N. Y., 1961, p 1085.

(29) H. Smith and T. White, *J. Phys. Chem.*, **33**, 1953 (1929).

(30) In eq 10, Smith and White omitted 2 in the numerator.

(31) Reference 28, p 1081.

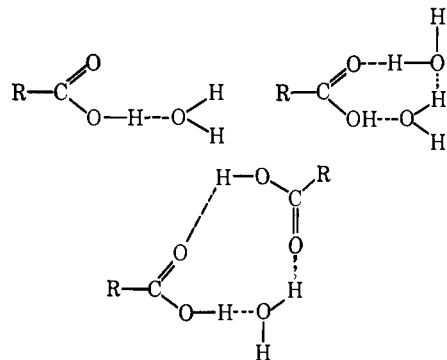
(32) Reference 28, p 1082.

(33) V. Rothmund and K. Drucker, *Z. Phys. Chem.*, **46**, 827 (1903).

(34) J. Dippy, S. Hughes, and L. Laxton, *J. Chem. Soc.*, 2995 (1956).

(35) K. Endo, *Bull. Chem. Soc. Jap.*, **1**, 25 (1926).

firmly bonded hydrate, there is another set of equilibria to worry about in the organic phase. In order to best explain variation of  $P$  with concentration in the system of benzoic acid distributed between benzene and water, it was proposed<sup>20</sup> that three hydrates are present in the benzene. By a rather complex



curve-fitting technique using solubility data of water in benzene and benzoic acid in benzene, equilibrium constants for the three types of hydrates were estimated. In Table I the associa-

Table I  
Hydration and Dimerization of Benzoic Acid in Benzene

	Temp, C°	$K_D$	$P$
Van Duyne, <i>et al.</i> <sup>20</sup>			
Method A	25	589	0.95
Method B	25	298	1.31
Schilow and Lepin <sup>36</sup>	23.5	109	2.30
Smith <sup>37</sup>	25	260 <sup>a</sup>	1.63
Huq and Lodhi <sup>38</sup>	25	244	1.56
Hendrixson <sup>39</sup>	10	?	1.43
Hendrixson <sup>39</sup>	40	?	2.10

<sup>a</sup> An average of six different determinations.

tion constants and partition coefficients for benzoic acid in benzene are given, and the results assuming hydrate formation are compared with results neglecting it. It is evident from Table I that the calculations which take hydrate formation into account affect the partition coefficient as well as the dimerization constant. However, if method B<sup>20</sup> is accepted, it does not yield values far out of line from those determined by other investigators.

Although preferred by Van Duyne, *et al.*, method A is open to criticism for it assumes that the dimerization constant ( $K_{20}$  in their paper) is the same in dry benzene as in "wet." Completely apart from any tendency to encourage hydrate formation, the addition of water to benzene could be expected to increase the dielectric constant and by this means alone should lower  $K_D$  (association).<sup>19, 40</sup> However, it must be admitted that there is evidence which supports a lesser or negligible role for a change from a "dry" to a wet organic solvent.<sup>14</sup>

In Table II are listed a number of association constants for carboxylic acids in various solvents calculated according to the

method discussed above. Sometimes  $K_{\text{assoc}}$  was found to vary with concentration at levels below  $5 \times 10^{-3} M$ , and in these cases the constant value at higher concentrations was chosen. The variation at the lower concentrations may be more a function of the analytical techniques employed in measurement rather than a meaningful physical phenomenon, although this is by no means completely clear from the data. One must keep the arguments of Van Duyne, *et al.*,<sup>20</sup> in mind when considering these constants. If hydrate formation is always involved with carboxylic acids in solvents such as benzene, then the association constants of Table II will generally be too low.

Not much in the way of useful generalizations can be made from the data in Table II. It is of interest that there is a general trend of the degree of dimerization by solvents; toluene > benzene > chloroform >> ether. The fact that benzene values are lower than toluene is likely due to the greater solubility of water in benzene. In fact, the solubility of water in the organic solvent as seen from Table VIII is in inverse order to the degree of dimerization, water being most soluble in ether and least soluble in toluene.

Considering a single solvent, toluene, the dimerization constant appears to increase with the size of the alkyl group, at least up through valeric acid. This effect seems to correlate most closely with Taft's steric parameter,  $E_s$ . While eq 14 is

$$\log P_{\text{assoc}} = -0.470(\pm 0.32)E_s + 1.989(\pm 0.20) \quad (14)$$

$$\begin{array}{ccc} n & r & s \\ 8 & 0.824 & 0.223 \end{array}$$

quite significant statistically ( $F_{1,6} = 12.6$ ), the correlation is not very high. It does suggest, however, that the steric effect of the alkyl moiety of the acid is most important. Adding a term in  $pK_a$  to eq 14 does not improve the correlation. One cannot place a great deal of confidence in eq 14 since there is considerable overlap between the two parameters,  $pK_a$  and  $E_s$ , for the set of acids under consideration ( $r^2 = 0.834$ ). Equation 14 does suggest that the large alkyl groups might inhibit hydrate formation and in this way favor dimerization.

There is little trend to be seen in the scattered group of halo fatty acids and substituted benzoic acids, but the statement<sup>40</sup> that the more highly chlorinated acids are more highly associated does *not* seem supported.

In the development of eq 12 and 13 it was assumed that association in the organic phase proceeded no further than the dimer stage. For the case of acetic acid in the benzene-water system, it has been shown<sup>16</sup> that neither partition coefficient nor the dimerization constant values calculated from this type of expression would be markedly altered if some trimer or tetramer were also formed. These authors calculated  $K_{1-3}$  to be  $2.35 \times 10^{-4}$ , but suggest that this might well be viewed as a correction in the dimerization equilibrium constant and therefore not have any real molecular significance.

While there is little or no evidence for association beyond the dimer state for low molecular weight carboxylic acids, other types of solutes have a greater associative tendency. For instance, a sudden increase in  $P^{*50}$  (apparent partition coeffi-

(36) N. Schilow and L. Lepin, *Z. Phys. Chem.*, **101**, 353 (1922).

(37) H. W. Smith, *J. Phys. Chem.*, **26**, 256 (1922).

(38) A. K. M. S. Huq and S. A. K. Lodhi, *ibid.*, **70**, 1354 (1966).

(39) W. S. Hendrixson, *Z. Anorg. Chem.*, **13**, 73 (1897).

(40) C. Brown and A. Mathieson, *J. Phys. Chem.*, **58**, 1057 (1954).

(41) N. A. Kolossowsky and I. Megenine, *Bull. Soc. Chim. Fr.*, **51**, 1000 (1932).

(42) W. Herz and H. Fischer, *Chem. Ber.*, **38**, 1138 (1905).

(43) N. A. Kolossowsky and S. F. Kulikov, *Z. Phys. Chem.*, **A169**, 459 (1934).

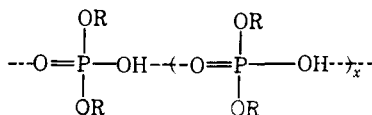
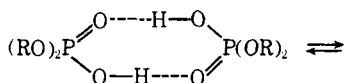
(44) F. S. Brown and C. R. Bury, *J. Chem. Soc.*, **123**, 2430 (1923).

Table II  
Association Constants of Acids

Acid	Toluene		Benzene		CHCl <sub>3</sub>		K <sub>ASSOC</sub>	Other solvent	Ref
	K <sub>ASSOC</sub>	Ref	K <sub>ASSOC</sub>	Ref	K <sub>ASSOC</sub>	Ref			
1. Formic	29	41	121 <sup>a</sup>	45	26	45	0.6	Nitrobenzene	48
2. Acetic	42	42	28	42	60	45	43	CCl <sub>4</sub>	45
							0	Ether	46
3. Propionic	133	29	94	29	31	29	78	Xylene	46
							0.5	Ether	49
4. Butyric	182	29	97	29	52	29	2 <sup>a</sup>	Xylene	46
5. Isobutyric	300	29	182	29	64	29			
6. Valeric	200	29	140	29	49	29			
7. Isovaleric	225	29	138	29	80	29			
8. Hexanoic	94	29	96	29	30	29	160	Xylene	46
							0.1	Ether	49
9. Isohexanoic			68	29	50	29			
10. Crotonic	450	29	271	29	136	29	419	Xylene	46
11. Chloroacetic	132 <sup>a</sup>	43			96 <sup>a</sup>	43	1.6	Nitrobenzene	43
	4.5	42	2.2	42					
12. Bromoacetic	0	29	0	29	53	46			
13. Iodoacetic	60	29	37	29	16	29			
14. β-Chloropropionic	100	29	55	29	35	29			
15. α-Bromopropionic	30	29	16	29	9.5	29			
16. β-Bromopropionic	65	29	61	29	25	29			
17. β-Iodopropionic	133	29	95	29	64	29			
18. α-Bromobutyric	47	29	22	29	22	29			
19. Dichloroacetic	44	43					157	CCl <sub>4</sub>	43
							0	Ether	43
20. Trichloroacetic	0	43			0	43	0	Ether	46
							0	Nitrobenzene	43
21. Picric	0	36	0.6	33	0	47			
		42							
22. Benzoic	79	29	295	37	33	29	0	Ether	46
			298	20	120	17	1440	Xylene	46
			108	36					
23. o-Toluic	21	29			1	29			
24. p-Toluic	291	29			3.3	29			
25. o-Methoxybenzoic	3.9	29			0	29			
26. p-Methoxybenzoic	82	29			0.3	29			
27. o-Chlorobenzoic	106	29			11	29	312	Xylene	46
28. m-Chlorobenzoic	25	29			0	29			
29. p-Chlorobenzoic	0	29			0	29			
30. o-Nitrobenzoic	0	29			1	29			
31. m-Nitrobenzoic	78	29			61	29	133	Xylene	46
32. p-Nitrobenzoic	0	29			0	29			
33. o-Bromobenzoic					30	29			
34. m-Bromobenzoic					0	29			
35. Salicylic	17	29			44	29	57	Xylene	46
36. Acetylsalicylic	143	29			75	29			
37. Methylanthranilic					85	29			
38. Phenylacetic	145	29	151	29	56	29			
39. Anthranilic					770	29			

<sup>a</sup> Doubtful value.

cient or partition ratio) of dibutyl phosphate in hexane (when  $C_{org} = 0.05 M$ ) can be explained in terms of the conversion of the dimer to a polymer chain.



For solutes showing negligible ionization (the work with the phosphate esters was done in 0.1 M HNO<sub>3</sub>) in the aqueous phase, it is easy to test if a higher polymer is formed in the organic phase. It has been pointed out<sup>45</sup> that if a trimer is formed

(45) A. Bekturov, *J. Gen. Chem.*, **9**, 419 (1939).

(46) H. W. Smith, *J. Phys. Chem.*, **25**, 204, 605 (1921).

(47) W. Herz and M. Lewy, *Z. Elektrochem.*, **46**, 818 (1905).

(48) N. A. Kolossowsky and A. Bekturov, *Bull. Soc. Chim. Fr.*, **2**, 460 (1935).

(49) W. U. Behrens, *Z. Anal. Chem.*, **69**, 97 (1926).

(50) D. Dyrssen and L. D. Hay, *Acta Chem. Scand.*, **14**, 1091 (1960).

$$K_{\text{assoc}} = C_{\text{tr}}/(C_{\text{mon}})^3 \quad (15)$$

where  $C_{\text{tr}}$  = concentration trimer in organic phase and  $C_{\text{mon}}$  = concentration monomer in organic phase. Hence

$$C_{\text{app}} = C_{\text{mon}} + 3C_{\text{tr}} = C_{\text{mon}} + 3K_{\text{assoc}}C_{\text{mon}}^3 \quad (16)$$

where  $C_{\text{app}}$  = total concentration solute in organic phase (regardless of form), and  $C_w$  = concentration in water phase (no polymerization). Assuming trimer cannot exist in the aqueous phase, the true partition coefficient for monomer is

$$P = C_{\text{mon}}/C_w$$

Therefore

$$C_{\text{app}} = PC_w + 3K_{\text{assoc}}(PC_w)^3$$

$$P^* = P + 3K_{\text{assoc}}P^3C_w^2 \quad (17)$$

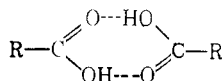
A plot of the apparent partition coefficient,  $P^*$ , vs. the water concentration squared,  $C_w^2$ , should give a straight line with the intercept yielding the value  $P$  and the slope yielding the value  $K_{\text{assoc}}$ .

Many investigators have followed similar derivations, but some have not limited the applications to relatively un-ionized solutes. For example, Almquist<sup>51</sup> observed a straight line plot of  $C_o/C_w$  vs.  $C_w$  with picric acid in the chloroform-water system. Assuming the applicability of the general relationship

$$C_o/C_w = n(K_{\text{assoc}}P^n C_w^{n-1}) + P \quad (18)$$

he calculated that the true partition coefficient was 0.46 and the association constant was 8.6. However, if we use the measured ionization constant for picric acid, we get constant values of  $P = 15.8$  and  $K_{\text{assoc}} = 0$ . As pointed out above, picric acid is apparently not associated in benzene, and we would expect it to be even less associated in chloroform. Furthermore, the value of 15 for  $P$  fits in much better when compared to the octanol-water system by means of the regression equation A in Table VIII.

Most investigators have assumed that the amount of dimerization of aliphatic acids in the aqueous phase is insignificant, an assumption which seems reasonable if only a head-to-head dimer is possible.



However, with higher homologs other possibilities exist. Micelle formation becomes quite significant even at low concentrations with long-chain fatty acids.<sup>52</sup> Even though one works at concentrations below the critical micelle concentration (cmc), the problem of association in the aqueous phase cannot be eliminated. Entwinement of the long alkyl chains occurs in very dilute solutions.<sup>53</sup> Careful examination of cryoscopic data, Raman spectra, and vapor pressure measurements<sup>16,54,55</sup> have been interpreted to yield aqueous phase dimerization constants for carboxylic acids which increase with chain length: formic, 0.04; acetic, 0.16; propionic, 0.23; butyric, 0.36. From a careful study of the distribution of acetic

acid in the benzene-water system, it was concluded<sup>16</sup> that the dimer association constant in water is only one-fifth this large (*i.e.*, 0.033). Nevertheless, the effect becomes quite large with dodecanoic acid, making the determination of a true monomer partition coefficient almost impossible.<sup>56</sup> Thus the present data have not completely eliminated the possibility of head-to-head dimerization of fatty acids in the aqueous phase, but the preponderance of new evidence<sup>18</sup> favors the "chain entwinement" viewpoint.

Distribution studies have also been made with other types of solutes which are known to form micelles at relatively low concentrations in water such as alkylpyridinium and pyridonium chlorides and *p-tert*-octylphenoxypolyoxyethanol surfactants. Over a range of solute concentrations below cmc, constant  $P$  values have been observed.<sup>57,58</sup>

### C. THERMODYNAMICS OF PARTITIONING SYSTEMS

Solvent systems which are almost completely immiscible (*e.g.*, alkanes-water) are fairly well behaved and lend themselves to more rigorous thermodynamic treatment of partitioning data than solvent systems which are partially soluble in each other.<sup>17,59,60</sup> The following development can be applied more strictly to the former systems, but the departures from ideality exhibited by the more polar solvent systems are not so great as to render this approach valueless. They will be discussed later. It should be noted here that the *thermodynamic* partition coefficient is a ratio of mole fractions ( $P' = X_o/X_w$ ), and it should not be confused with the more common expression of  $P$  which is a dimensionless ratio of concentrations.

Cratin<sup>61</sup> has presented a lucid discussion of some of the aspects of the thermodynamics of the partitioning process. The following discussion is drawn from his analysis which relies heavily on extrathermodynamic assumptions.

For each of the "i" components comprising an ideal solution, the following equation is assumed to hold

$$\mu_i(T,P,X) = \mu_i^\theta(T,P) + RT \ln X_i \quad (19)$$

where  $\mu_i^\theta$  is the chemical potential of pure "i" in the solution under specified conditions, and  $X_i$  is its mole fraction.  $\mu_i^\theta$  is not the actual chemical potential of pure "i" but the value it would have if the solution remained ideal up to  $X_i = 1$ . It can be shown<sup>61</sup> that, for dilute solutions, the chemical potential based on mole fractions is larger than that based on molar concentrations by a factor of  $RT \ln \bar{V}_s^\circ$ , where  $\bar{V}_s^\circ$  is the molar volume of solvent and therefore

$$\mu_i(T,P,X) = \mu_i^\theta(T,P) + RT \ln \bar{V}_s^\circ + RT \ln C_i \quad (20)$$

An interesting approach to the study of the intermolecular forces involved in partitioning is to assume that the free energy of transfer of a molecule can be factored into the contributions of its various parts; that is,  $P$  is an additive-constitutive property of a molecule (see section V). Cratin<sup>61</sup> considered the thermodynamic implications of this concept. Assuming that the total transfer free energy of a molecule ( $\mu_i$ ) is made up of a

(51) H. Almquist, *J. Phys. Chem.*, **37**, 991 (1933).

(52) J. L. Kavanau, "Structure and Function in Biological Membranes," Vol. I, Holden-Day, San Francisco, Calif., 1965, p 11.

(53) P. Mukerjee, K. J. Mysels, and C. I. Dulin, *J. Phys. Chem.*, **62**, 1390 (1958).

(54) A. Katchalsky, H. Eisenberg, and S. Lifson, *J. Amer. Chem. Soc.*, **73**, 5889 (1951).

(55) D. Cartwright and C. Monk, *J. Chem. Soc.*, 2500 (1955).

(56) C. Church and C. Hansch, unpublished results.

(57) E. Crook, D. Fordyce, and G. Trebbi, *J. Colloid Sci.*, **20**, 191 (1965).

(58) H. L. Greenwald, E. K. Kice, M. Kenly, and J. Kelly, *Anal. Chem.*, **33**, 465 (1961).

(59) R. Aveyard and R. Mitchell, *Trans. Faraday Soc.*, **65**, 2645 (1969).

(60) R. Aveyard and R. Mitchell, *ibid.*, **66**, 37 (1970).

(61) P. D. Cratin, *Ind. Eng. Chem.*, **60**, 14 (1968).

lipophilic component ( $\mu_L$ ) and  $n$  hydrophilic groups ( $\mu_H$ ), we may write

$$\mu_i(w) = \mu_L(w) + n\mu_H(w)$$

$$\mu_i(o) = \mu_L(o) + n\mu_H(o)$$

Assuming ideal behavior

$$\mu_i(w) = \mu_L^\theta(w) + n\mu_H^\theta(w) + RT \ln X(w)$$

$$\mu_i(o) = \mu_L^\theta(o) + n\mu_H^\theta(o) + RT \ln X(o)$$

Converting from mole fractions to concentration terms, the above equations become

$$\mu_i(w) = \mu_L^\theta(w) + n\mu_H^\theta(w) + RT \ln \bar{V}^\theta(w) + RT \ln C(w)$$

$$\mu_i(o) = \mu_L^\theta(o) + n\mu_H^\theta(o) + RT \ln \bar{V}^\theta(o) + RT \ln C(o)$$

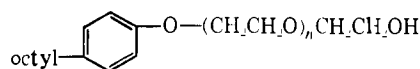
At equilibrium  $\mu_i(w) = \mu_i(o)$ ; hence equating equations, collecting terms, and replacing  $C(o)/C(w)$  by  $P$ , we obtain

$$[\mu_L^\theta(w) - \mu_L^\theta(o)] + RT \ln [\bar{V}^\theta(w)/\bar{V}^\theta(o)] + n[\mu_H^\theta(w) - \mu_H^\theta(o)] = +RT \ln P \quad (21)$$

Setting  $\Delta\mu^\theta = \mu^\theta(w) - \mu^\theta(o)$ , eq 21 takes the form

$$\log P = \frac{n\Delta\mu_H^\theta}{2.3RT} + \frac{\Delta\mu_L^\theta}{2.3RT} + \log [\bar{V}^\theta(w)/\bar{V}^\theta(o)] \quad (22)$$

If eq 22 holds, a plot of  $\log P$  vs.  $n$  will be linear with a slope equal to  $\Delta\mu_H^\theta/2.3RT$  and an intercept of  $\Delta\mu_L^\theta/2.3RT + \log [\bar{V}^\theta(w)/\bar{V}^\theta(o)]$ . Cratin illustrated the validity of eq 22 by plotting the data of Crook, Fordyce, and Trebbi<sup>57</sup> for *tert*-octylphenoxyethoxyethanols of the type



partitioned between isooctane and water. Compounds with  $n$  varying from 1 to 10 were studied. A good linear relation was obtained from  $n = 3$  to  $n = 10$ . A slight departure from linearity for  $n = 1$  and 2 was found. The linear relationship between  $n$  and  $P$  is given as<sup>58</sup>

$$\log P = -0.442n + 3.836 \quad (23)$$

From eq 23 the standard free energy change ( $25^\circ$ ) for the transfer of a mole of  $-\text{CH}_2\text{CH}_2\text{O}-$  from isooctane to water is  $-0.602$  kcal and the free energy change ( $o \rightarrow w$ ) for the *p-tert*-octylphenoxyethoxy group is  $+6.52$  kcal/mol. Of course since the partitioning data on the phenoxyethoxyethanols were obtained at a single constant temperature, this is not a very rigorous test of eq 22 since under this condition,  $\bar{V}^\theta(o)/\bar{V}^\theta(w)$  will also be constant. Nevertheless, eq 22 does define the necessary conditions for additivity of  $\log P$  values. The standard free energy of transfer of solute in the partitioning process is given by

$$\Delta G_{tr}^\theta = \Delta\bar{\mu}^\theta = RT \ln P' \quad (24)$$

With the usual assumption that the standard molar enthalpy change is not temperature dependent in the range studied,<sup>61</sup> it is true that

$$\frac{\partial \ln P'}{T} = \frac{\Delta\bar{H}^\theta}{RT^2} \quad (25)$$

where  $\Delta\bar{H}^\theta$  is equivalent to the standard enthalpy of transfer between the two solvents. It is thus possible to calculate this

enthalpy of transfer by measuring  $P'$  over a range of temperatures. In practice this is rather imprecise because of two implied assumptions: first, that the levels of each solvent dissolved in the other remain constant over the temperature range; second, if  $P$  is measured in terms of concentrations, that the ratio of solvent molar volumes remains constant also. For this reason the preferred method of obtaining the enthalpy of transfer is by measuring the heats of solution in two separate solvents, whence

$$\Delta\bar{\mu}^\theta = \Delta\bar{H}_{tr}^\theta = \Delta H^\theta(w) - \Delta H^\theta(o) \quad (26)$$

The entropy of transfer can, of course, be calculated from

$$\Delta G_{tr}^\theta = \Delta H_{tr}^\theta - T\Delta S_{tr}^\theta \quad (27)$$

Aveyard and Mitchell<sup>59,60</sup> have performed these calculations for aliphatic acids and alcohols partitioned between alkanes and water. They find much greater enthalpies for the alcohols which they ascribe to the "dehydration" of the OH function during transfer. Although the acids are also "dehydrated," they are thought to recover much of this energy in the hydrogen bonding of dimerization. The corresponding  $\Delta S$  values for the acids are much smaller than for the alcohols, and thus the net free energy changes are not greatly different.

The changes in miscibility of more polar solvent systems as a function of solute concentration have been studied in only a few systems.<sup>62-64</sup> However, experience has shown that the partition coefficient at low solute concentrations is usually not highly dependent on this effect. Even with solvent pairs as miscible as isobutyl alcohol-water, the effect is small with solutes at 0.01  $M$  or less, and solvent pairs less miscible than chloroform-water will easily tolerate 0.1  $M$  solute without appreciable miscibility changes.

Equation 25 shows how one would expect the partition coefficient to vary with temperature. However, it is not very enlightening from a practical point of view, for the necessary heats of solution are rarely available and, furthermore, there is the added unknown of the dependence of solvent molar volume on temperature. The effect of temperature on  $P$  is not great if the solvents are not very miscible with each other. A summary in Table III of results of varying degrees of accuracy for a variety of solutes in different solvent systems indicates the effect is usually of the order of 0.01 log unit/deg and may be either positive or negative. Insufficient data are present to attempt any useful generalizations.

## D. ENERGY REQUIREMENTS FOR PHASE TRANSFER

The relative roles of the various binding forces which determine the way a solute distributes itself between two phases

- (62) G. Forbes and A. Coolidge, *J. Amer. Chem. Soc.*, **41**, 150 (1919).  
 (63) P. Grieger and C. Kraus, *ibid.*, **71**, 1455 (1949).  
 (64) E. Klobbie, *Z. Phys. Chem.*, **24**, 615 (1897).  
 (65) D. Soderberg and C. Hansch, unpublished analysis.  
 (66) A. Hantzsch and F. Sebalt, *Z. Phys. Chem.*, **30**, 258 (1899).  
 (67) R. L. M. Synge, *Biochem. J.*, **33**, 1913 (1939).  
 (68) T. S. Moore and T. F. Winmill, *J. Chem. Soc.*, **101**, 1635 (1912).  
 (69) E. M. Renkin, *Amer. J. Physiol.*, **168**, 538 (1952).  
 (70) H. Meyer, *Arch. Exp. Pathol. Pharmacol.*, **46**, 338 (1901).  
 (71) J. Mindowicz and I. Uruska, *Chem. Abstr.*, **60**, 4854 (1964).  
 (72) R. C. Farmer and F. J. Warth, *J. Chem. Soc.*, **85**, 1713 (1904).  
 (73) T. Kato, *Tokai Denkyoku Gihō*, **23**, 1 (1963); *Chem. Abstr.*, **60**, 8701 (1964).  
 (74) J. Mindowicz and S. Bialozor, *ibid.*, **60**, 3543 (1964).



Table III  
Temperature Effect on Log *P*

Solvent-water	Solute <sup>a</sup>	Temp, °C	$\Delta \log P/\text{deg}$	Ref
Octanol	Hexanoic acid	4-22	$1.7 \times 10^{-3}$	56
	Octanoic acid	4-22	0.0	56
	<i>n</i> -Butylpyridinium bromide	4-22	$-1.0 \times 10^{-2}$	65
	<i>n</i> -Tetradecylpyridinium bromide	4-22	$-1.0 \times 10^{-2}$	65
Ethyl ether	Acetic acid	0-25	$-1.2 \times 10^{-3}$	66
	Succinic acid	15-25	$-0.9 \times 10^{-2}$	62
Chloroform	Acetyl- <i>d</i> -leucine	4-27	$-0.9 \times 10^{-2}$	67
	Acetyl- <i>d</i> -leucine	24-37	$-1.3 \times 10^{-2}$	67
	Methylamine	18-32	$1.0 \times 10^{-2}$	68
Oil	Ammonia	18-32	$0.8 \times 10^{-2}$	68
	Antipyrine	7-36.5	$1.2 \times 10^{-2}$	69
Olive	Antipyrine	7-36.5	$1.5 \times 10^{-2}$	69
Cod-liver	Ethanol	3-30	$1.1 \times 10^{-2}$	70
Cottonseed	<i>o</i> -Phenylenediamine	20-70	$3.4 \times 10^{-3}$	71
Benzene	<i>p</i> -Phenylenediamine	20-70	$4.4 \times 10^{-3}$	71
	<i>p</i> -Nitrosomethylaniline	6-25	$2.1 \times 10^{-3}$	72
	Acetic acid	6-18.5	$3.0 \times 10^{-3}$	66
	2-Methyl-5-ethylpyridine	10-30	$4.5 \times 10^{-3}$	73
Xylene	2-Methyl-5-ethylpyridine	30-50	$7.0 \times 10^{-3}$	73
	2-Methyl-5-ethylpyridine	10-30	$7.5 \times 10^{-3}$	73
Toluene	2-Methyl-5-ethylpyridine	30-50	$-4.0 \times 10^{-3}$	73
	Ethylamine	18-32	$1.7 \times 10^{-2}$	68
	Diethylamine	18-32	$1.9 \times 10^{-2}$	68
	Triethylamine	18-32	$1.9 \times 10^{-2}$	68
1-Hexanol	Malonic acid	20-60	$-1.2 \times 10^{-3}$	74
	Succinic acid	20-60	$-0.5 \times 10^{-3}$	74
Heptane	<i>p</i> -Chloroaniline	15-35	$5.5 \times 10^{-3}$	75
Isooctane	<i>p</i> - <i>tert</i> -Octylphenoxynonaethoxy-ethanol (OPE-9)	25-60	$2.8 \times 10^{-2}$	58
			Average =	$9.0 \times 10^{-3}$

<sup>a</sup> No correction made for  $\Delta pK_a/dT$  for any of the acids.

has been examined by a number of authors.<sup>76</sup> Kauzmann<sup>77</sup> has given a particularly clear summary of this thinking, especially from the point of view of the interaction of small molecules with proteins, and the following discussion relies heavily on his summary.

The study of the hydrocarbons in water shows that although the  $\Delta H$  of solution is negative (indicating a favorable enthalpy change by the evolution of heat), such compounds are notoriously insoluble in water. This reluctance to mix with water is a result of a large  $\Delta S$  for the process. It is this large energy of reordering the hydrocarbon solute and the water solvent molecules which keeps them in separate phases when placed together. The same phenomenon regulates the distribution of apolar solute molecules in an apolar solvent-water system. Table IV<sup>77</sup> illustrates this point.

A variety of work, less well defined than that of Table IV, supports the conclusion that the entropic component of  $\Delta G$  plays a large role in the position of equilibrium (partition coefficient) taken by nonpolar compounds in nonpolar water-solvent systems. Kauzmann has put forward the following facts.

1. Mixtures of lower aliphatic alcohols with water show positive deviations from Raoult's law, indicating an increase

Table IV  
Thermodynamic Changes in Hydrocarbon Transfer

	<i>T</i>	$\Delta S_u^a$	$\Delta H$	$\Delta G_u^a$
CH <sub>4</sub> in benzene → CH <sub>4</sub> in H <sub>2</sub> O	298	-18	-2800	+2600
CH <sub>4</sub> in ether → CH <sub>4</sub> in H <sub>2</sub> O	298	-19	-2400	+3300
CH <sub>4</sub> in CCl <sub>4</sub> → CH <sub>4</sub> in H <sub>2</sub> O	298	-18	-2500	+2900
Liquid propane → C <sub>3</sub> H <sub>8</sub> in H <sub>2</sub> O	298	-23	-1800	+5050
Liquid butane → C <sub>4</sub> H <sub>10</sub> in H <sub>2</sub> O	298	-23	-1000	+5850
Liquid benzene → C <sub>6</sub> H <sub>6</sub> in H <sub>2</sub> O	291	-14	0	+4070
Liquid toluene → C <sub>7</sub> H <sub>8</sub> in H <sub>2</sub> O	291	-16	0	+4650
Liquid ethylbenzene → C <sub>8</sub> H <sub>10</sub> in H <sub>2</sub> O	291	-19	0	+5500

<sup>a</sup>  $S_u$  and  $G_u$  refer to the unitary entropy and free energy in cal/mol.

in unitary free energy ( $\Delta G_u > 0$ ) for the transfer of alcohol from alcohol to water phase, this despite the fact that heat is evolved ( $\Delta H < 0$ ) on the addition of these alcohols to water. Therefore  $\Delta S_u = (\Delta H_u - \Delta G_u)/T < 0$  when an alcohol molecule is transferred to water.

2. The solubilities of many liquid aliphatic compounds (e.g., 3-pentanone, butanol, ethyl acetate, ethyl bromide) in water decrease with increase in temperature. Hence  $\Delta H$  for the transfer process must, according to the principle of Le Chatelier, be  $< 0$ . The fact that some of these substances are extremely soluble in water means that  $\Delta G_u > 0$ . Therefore,  $\Delta S_u$  for the mixing must be negative. Similar to this is the

(75) A. Aboul-Seoud and A. El-Hady, *Rec. Trav. Chim. Pays-Bas*, **81**, 958 (1962).

(76) H. Frank and M. Evans, *J. Chem. Phys.*, **13**, 507 (1945).

(77) W. Kauzmann, *Advan. Protein Chem.*, **14**, 37 (1959).

fact that on heating aqueous solutions of such compounds as nicotine, *sec*-butyl alcohol, etc., separation into two phases results at temperatures not far above room temperature.

3. The formation of micelles from detergent molecules in water is accompanied by very small heat changes; that is to say, the dissociation of micelles into individual molecules does not depend on a large positive value of  $\Delta H$ . Hence it is assumed that this association-dissociation reaction is controlled largely by a large negative  $\Delta S$ .

The origin of the large negative unitary entropy change and the small negative enthalpy change involved in partitioning between aqueous and nonaqueous phases was first clearly appreciated by Frank and Evans. They reached the conclusion that when organic compounds are placed in water, the water molecules arrange themselves around the apolar parts in what was termed "iceberg" structures. The word "iceberg" was, perhaps, not too well chosen for it was not meant to imply that the structure was as rigid or as extensive as in pure ice, and it differed further in being denser rather than lighter than water. This is apparent from the data in Table V.<sup>77</sup>

Table V  
Volume Changes in Transferring Hydrocarbons  
from Nonpolar Solvents to Water

	$\Delta V$ , ml/mol
CH <sub>4</sub> in hexane → CH <sub>4</sub> in H <sub>2</sub> O	-22.7
C <sub>2</sub> H <sub>6</sub> in hexane → C <sub>2</sub> H <sub>6</sub> in H <sub>2</sub> O	-18.1
Liquid propane → C <sub>3</sub> H <sub>8</sub> in H <sub>2</sub> O	-21.0
Liquid benzene → C <sub>6</sub> H <sub>6</sub> in H <sub>2</sub> O	-6.2

These structures were later referred to as "flickering clusters" to indicate their lack of stability. Since the entropy lost in freezing a mole of water is 5.3 cal/deg and the unitary entropy loss per mole of hydrocarbon entering the aqueous phase is only 20 cal/deg (see Table IV), either only four or five molecules are associated with each hydrocarbon unit or the structure is less firm than in pure ice.

The Frank-Evans point of view is that the stripping of the form-fitting sweater<sup>78</sup> of water molecules from the apolar part of the solute results in a large entropy change in the randomization of the water molecules. An alternative point of view is that of Aranow and Witten.<sup>79</sup> They reason that in the aqueous phase the apolar chain of a solute molecule is rigidly held in a favored rotational configuration by the structured layer of water molecules surrounding it. In the organic solvent its rotational oscillations are relatively unrestricted. They write the canonical single particle partition function,  $Z$ , for a molecule having  $n$  carbon-to-carbon bonds in the *apolar* environment as

$$Zn = \psi \left( \sum_i e^{-\epsilon_i/kT} \right)^n \quad (28)$$

Because of the threefold increase in the number of energy levels, the corresponding partition function in the water phase is

$$Zn = \psi \left( \sum_i 3e^{-\langle \epsilon_i \rangle/kT} \right)^n \quad (29)$$

The partition coefficient per  $-\text{CH}_2-$  in an alkyl chain can then be defined as

$$P = \frac{\psi_\alpha \left( \sum_j 3e^{-\langle \epsilon_j \rangle/kT} \right)^n}{\psi_\beta \left( \sum_i e^{-\epsilon_i/kT} \right)^n} \quad (30)$$

where  $\alpha$  and  $\beta$  refer to the organic and aqueous phases, respectively. This is assuming that the motions of internal rotation are separable from all other motions and that the internal rotation contribution has been assumed representable as the product of  $n$  equivalent factors. At room temperature, if  $kT$  is much smaller than the spacing between  $\langle \epsilon_0 \rangle$  and  $\langle \epsilon_1 \rangle$  or between  $\epsilon_0$  and  $\epsilon_1$ , then  $P \cong (\psi_\alpha/\psi_\beta) 3n(e^{-\langle \epsilon_0 \rangle - \epsilon_0/kT})^n$ . If  $\psi_\alpha/\psi_\beta$  varies little with  $n$  and  $\langle \epsilon_0 \rangle \sim \epsilon_0$

$$P_n/P_{n-1} \cong 3 \text{ or } \log P_{(\text{CH}_2)} \cong 0.5$$

Aranow and Witten present partition data to show that the difference in  $P$  values between adjacent members in a homologous set of fatty acids is about 3. This factor has also been observed by others<sup>4,9,80</sup> for a variety of homologous series.

A  $-\text{CF}_2-$  group would be expected to affect its environment a great deal more than a  $-\text{CH}_2-$  unit would,<sup>79</sup> but it still has a very similar geometry. Therefore, it was predicted that the  $P$  values of a hydrocarbon chain should differ from a fluorocarbon chain if the flickering cluster theory holds, but should be nearly the same if Aranow and Witten's theory holds. The following set (Table VI) of partition coefficients

Table VI  
Octanol-Water Partition Coefficients of Fluoro Compounds<sup>a</sup>

	Log $P$	$\frac{\Delta \log P}{P/CF_2}$
1. CF <sub>3</sub> CH <sub>2</sub> OH	0.41 ± 0.03	0.82
2. CF <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> OH	1.23 ± 0.06	0.58
3. CF <sub>3</sub> CF <sub>2</sub> CF <sub>2</sub> CH <sub>2</sub> OH	1.81 ± 0.06	
4. CF <sub>3</sub> COOC <sub>2</sub> H <sub>5</sub>	1.18 ± 0.04	0.94
5. CF <sub>3</sub> CF <sub>2</sub> COOC <sub>2</sub> H <sub>5</sub>	2.12 ± 0.04	

<sup>a</sup> Log  $P$  values are the result of four separate determinations made at room temperature using vapor-phase chromatography for analysis. Unpublished data: C. Church, F. Helmer, and C. Hansch.

throws some light on the problem.

In comparing compounds 1 and 2, for example, one must keep in mind the fact that the electron-withdrawing groups, when placed near elements containing lone pair electrons, usually raise the partition coefficient by an increment greater than simple additivity.<sup>10</sup> However,  $\sigma_1$  for CF<sub>3</sub> is 0.41 and  $\sigma_1$  for C<sub>2</sub>F<sub>5</sub> is 0.41<sup>81</sup> so that this effect is ruled out. Two of the three values are considerably higher than the value of 0.5/CF<sub>2</sub> predicted by the Aranow-Witten hypothesis, and therefore the partitioning data favor the Frank-Evans hypothesis.

Hydrogen bonding is the next factor to consider in studying the energy requirements for phase transfer. This factor is of paramount importance in determining the character of both the solute and the organic solvent phase. Compounds such as

(78) E. Grunwald, R. L. Lipnick, and E. K. Ralph, *J. Amer. Chem. Soc.*, **91**, 4333 (1969).

(79) R. H. Aranow and L. Witten, *J. Phys. Chem.*, **64**, 1643 (1960).

(80) C. Hansch and S. M. Anderson, *J. Org. Chem.*, **32**, 2583 (1967).

(81) W. A. Sheppard, *J. Amer. Chem. Soc.*, **87**, 2410 (1965).

alcohols, esters, and ketones have quite different properties than hydrocarbons. Moreover, as solvents, it is not simply the hydrogen bonding character of the pure compound which must be considered. One must keep in mind that rather large amounts of water (especially when figured in molar terms) are present in these oxygen-containing solvents when saturated during the partitioning process (see Table VIII). For example, octanol dissolves in water only to the extent of 0.0045 *M*. However, the molar concentration of water in octanol is 2.30. The transfer of an alcohol or acid from the water phase to a hydrocarbon phase may involve complete "dehydration" of the polar OH or COOH function. It seems highly unlikely that such complete "dehydration" would occur in, say, butanol which is 9 *M* with respect to water content at saturation. Even in octanol, which is 2.3 *M* with respect to water at saturation, it is likely that most highly polar functions would be more or less solvated by water and/or the hydroxyl function of the alcohol.

Certain solvents such as alcohols and amines can act as both donors and acceptors in hydrogen bonding. This increases their versatility as solvents. For this reason Meyer and Hemmi<sup>82</sup> suggested using oleyl alcohol-water partition coefficients as a reference system for evaluating partitioning of drugs in biological systems. Earlier workers had used esters (olive oil, cotton seed oil, etc.) to represent lipophilic biophases. Since many NH and OH groups are present in enzymes and membranes, it is not surprising that alcohol-water systems give better correlations and thus have become more widely used as extrathermodynamic reference systems.

Other intermolecular forces which must be considered in the partitioning process are dispersion forces arising out of electron correlation. It seems that these would play a minor role in setting equilibrium positions of solutes. Dispersion forces involved in complex formation in solution will largely cancel out since, when a solute molecule leaves one phase and enters a new phase, it exchanges one set of London interactions for another.<sup>83</sup>

The energy required to transfer from the aqueous phase to the organic phase any solute which contains two or more formal charges is obviously going to depend heavily on the dielectric constant of the particular organic phase in question. Most of the water-immiscible organic solvents have dielectric constants much lower than that of water, and thus charged solutes must contain rather large hydrocarbon residues to have positive log *P* values. This combination makes them very surface active and usually results in difficulties of measurement.

Amphoteric molecules such as amino acids, tetracycline, or the sulfa drugs are most lipophilic when they contain an equal number of positive and negative charges. Typical dependence of log *P* upon pH is shown in Figure 1.

For bases which can accept one or more hydrogen ions,  $A^{n+}$ , the partition coefficient,  $P_{A^{n+}}$ , is related to the partition coefficient of an associated strong acid,  $P_{H^+}$ , by the expression

$$P_{A^{n+}} = k[P_{H^+}]^n \quad (31)$$

This relationship for the 2-butanol-water system has been verified<sup>84</sup> by measuring  $P_{A^{n+}}$  of ammonia, alanine, L-

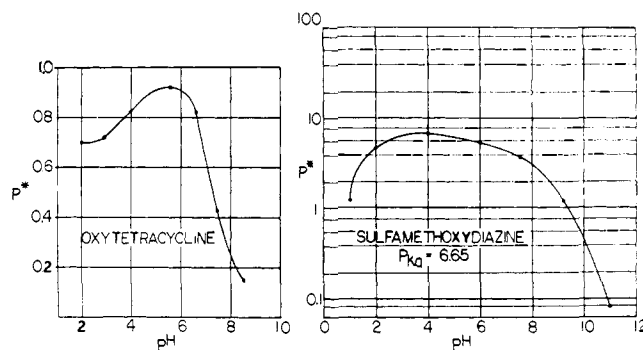


Figure 1. Variation of apparent partition coefficient with pH: (left) J. Colaizzi and P. Klink, *J. Pharm. Sci.*, **58**, 1184 (1969); (right) W. Scholtan, *Arzneim.-Forsch.*, **18**, 505 (1968).

arginine, and L-histidyl-L-histidine, as well as  $P_{H^+}$  of the strong acids HOEtSO<sub>3</sub>H, CH<sub>3</sub>SO<sub>3</sub>H, HCl, HBr, HNO<sub>3</sub>, and HClO<sub>4</sub>. A log-log plot of the *P* values gave a series of straight lines with a slope of 1 for ammonia and alanine, 2 for L-arginine, and 3 for L-histidyl-L-histidine.

Solutes which are ionized and completely dissociated in the aqueous phase present additional complications to the treatment of partitioning as strictly an equilibrium process, such as given in section II. The identity of the solute species in both phases is rarely assured. If electrical conductivity resulted solely from the current-carrying capability of single ions, then salts in organic solvents with relatively high dielectric constants (*e.g.*, nitrobenzene, 36.1; or nitromethane, 39.4) could be considered to be over 90% dissociated into single ions at 10<sup>-3</sup> *M*.<sup>85,86</sup> But as the dielectric constant decreases, the mutual energy of configurations where there are three ions in contact (A<sup>-</sup>C<sup>+</sup>A<sup>-</sup>) becomes comparable to *kT*.<sup>87</sup> At this point they are thermally stable and capable of carrying current, and therefore conductance is not proof *per se* of complete dissociation.

Even relatively hydrophilic ion pairs can be accommodated in a lipophilic solvent such as cyclohexane if this solvent contains a small amount of a dipolar solvating agent. In the instance where the cation is the large lipophilic member of the pair, the most effective solvating agents appear to be those with acidic protons, *e.g.*, chloroform, alcohols, and phenols.<sup>88</sup> In the reverse situation where the small cationic charge is unshielded, solvating species with nucleophilic sites (*e.g.*, ethers, ketones, amides, and phosphate esters) are most effective.

In considering the partitioning of carboxylic acids and amines, it is convenient to work with the  $\Delta \log P$  resulting from the addition or removal of a proton to create an ion. (This is analogous to the definition of  $\pi$  values taken up on p 542.) By this convention,  $\Delta \log P = (\log P_{ion}) - (\log P_{neutral})$  and will always have a negative sign for the more polar ion is obviously more hydrophilic.

For aliphatic acids,  $\Delta \log P$  is about -4.06; for salicylic, it is -3.09; for *p*-phenylbenzoic, it is -4.04. For a simple aliphatic amine (dodecyl), the  $\Delta \log P$  of protonation is -3.28.

(85) H. Falkenhagen, "Electrolyte," S. Herzel, Leipzig, 1932.

(86) J. C. Philip and H. B. Oakley, *J. Chem. Soc.*, **125**, 1189 (1924).

(82) K. H. Meyer and H. Hemmi, *Biochem. Z.*, **277**, 39 (1935).

(83) R. S. Mulliken and W. B. Person, *J. Amer. Chem. Soc.*, **91**, 3409 (1969).

(84) F. Carpenter, W. McGregor, and J. Close, *ibid.*, **81**, 849 (1959).

(87) R. Fuoss and F. Accascina, "Electrolytic Conductance," Interscience, New York, N. Y., 1959, p 222.

(88) T. Higuchi, A. Michaelis, T. Tan, and A. Hurwitz, *Anal. Chem.*, **39**, 974 (1967).

For amines containing an aromatic ring, the  $\Delta \log P_{H^+}$  values tend to vary (see Table XVII):

phenothiazines	= -3.65
$C_6H_5(CH_2)_3NH_2$	= -2.92
procaine	= -4.14

Protonating an aromatic nitrogen appears intermediate; e.g., for acridine,  $\Delta \log P_{H^+} = -3.90$ . Very little difference in the octanol-water  $\log P$  was observed for the amine salts whether the anion was chloride, bromide, or iodide.

It should be noted that if one wishes to measure the  $P_{\text{octanol}}$  of a dissociable organic ion, he must buffer the system more than 4 pH units away from the  $pK_a$  in most cases. The actual ratio of ionic to neutral form in the organic phase can be determined from the following expressions:

$$\log \frac{[A^-]}{[HA]}(\text{org}) = (\log P_{\text{ion}} - \log P_{\text{neutral}}) - (pK_a - \text{pH})$$

$$\log \frac{[BH^+]}{[B]}(\text{org}) = (\log P_{\text{ion}} - \log P_{\text{neutral}}) - (\text{pH} - pK_a)$$

For example, in partitioning an aliphatic carboxylic acid with a  $pK_a$  of 4.5 and the aqueous phase buffered at pH 8.5, only  $1/10,000$ th of the acid will be in the neutral form in the aqueous phase, and yet almost one-half of that present in the octanol phase will be the un-ionized species.

Since the difference in  $\log P$  between the ionic and neutral forms of solutes partitioned in other solvent systems is likely to be *greater* than that noted for octanol-water, it is even more difficult to directly measure the  $P$  values for ions in these systems. For instance, in partitioning codeine between  $CHCl_3$  and an aqueous phase 0.1 and 1.0  $N$  in HCl, the assumption was made that in neither case was the measured value distorted by any free amine in the organic phase.<sup>89</sup> However, values from Table XVII indicate that the  $\log P_{CHCl_3}$  of the free amine would be about 5.0 units higher than the hydrochloride, and therefore a  $pK_a - \text{pH}$  difference of 5 units ( $pK_a = 6.04$ ;  $\text{pH} = 1$ ) is *not* sufficient to assure that only ion pairs are being partitioned.

It is somewhat unexpected to find the  $\log P$  for the  $\geq N^+-CH_3$  group lower than that of the  $\geq N^+-H$  group. In this case, the nature of the anion appears to make a small but real difference in the  $\log P_{\text{octanol}}$  value. (For  $N$ -hexadecylpyridinium,  $\Delta \log P_{Br-Cl} = 0.12$ .) The following  $\Delta \log P_{\text{octanol}}$  values were observed for adding both a methyl group and a positive charge to an amine:

	$\Delta \log P$	Anion
Chlorpromazine	-5.35	$Cl^-$
Pyridine	-5.00	$Br^-$
$C_6H_5(CH_2)_3N(CH_3)_2$	-4.75	$I^-$

The partition coefficient of ions between a nonpolar solvent and water plays an essential role in the application of these solvents as liquid ion-exchange membranes for ion-selective electrodes.<sup>90</sup> A lipophilic anion, such as oleate, dissolved in the solvent nitrobenzene can serve as the "site" species; see Figure 2. In theory, the selectivity among various cations is completely independent of the chemical properties of the "site" species and depends solely on the difference in parti-

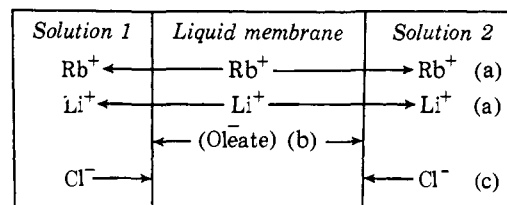


Figure 2. Ion-selective electrode (oleate in nitrobenzene): (a) Counterions which differ in  $\log P$ ; (b) the site ion (for an anion-selective electrode, dodecyl amine might be chosen); (c) co-ion.

tion coefficient of the ions in that solvent.<sup>90</sup> For instance, the partition coefficient of monovalent cations between any alcohol and water are not greatly different,<sup>91</sup> and therefore these solvents are not useful in liquid membrane electrodes. The partition coefficients in nitrobenzene, however, are markedly different,<sup>92</sup> and this solvent has been employed in a useful electrode to measure  $[Li^+]$  in the presence of  $[Rb^+]$ .<sup>90</sup> The partition coefficients for the iodides fall in the following order:  $Li^+ < Na^+ < K^+ < Rb^+ < Et_4N^+ < Bu_4N^+$ , which is the order also found for the solvent system diisopropyl ketone-water.<sup>93</sup>

Using dodecylamine as a site species, the order of anion sensitivity in a nitrobenzene membrane system is  $I^- > Br^- > Cl^- > F^-$ .<sup>90</sup> This is the same order as the partition coefficients of the anions measured in that solvent.<sup>92</sup>

For ideal behavior in a liquid membrane electrode, the site ion should be almost completely "trapped" within the organic phase, resulting in almost negligible exchange of co-ion; see Figure 2. Ideal behavior is also dependent upon complete dissociation of the site ions in the organic phase, and the concentration of site ions at which departure from ideality is noted may be a useful measure of the onset of association into ion pairs. Ion selectivity depends only slightly upon ion mobility and rates of diffusion across phase boundaries.<sup>94</sup>

Like nitrobenzene-water, the chloroform-water system gives a wide range of  $P$  values for the counterions associated with any large organic ion.<sup>95-97</sup> This again raises the question of which system should one choose for a hydrophobic parameter to be used in correlating biological activity. Perhaps if one is investigating electrical potentials in isolated nerve tissue, for example, an ion-selective system might give values which rationalize more of the data. Yet it is widely accepted<sup>98</sup> that with most drugs the biological response in the intact animal is only slightly dependent upon the nature of the counterion (as long as initial solubility is achieved), and thus a model system which is not ion selective should be preferred.

The distinction between ion-selective partitioning systems and the nonselective systems may be simply that the former have aprotic organic phases. In an extensive study of ion solvation in protic *vs.* aprotic solvents, it has been shown<sup>99</sup>

(91) H. Ting, G. Bertrand, and D. Sears, *Biophys. J.*, **6**, 813 (1966).

(92) J. T. Davies, *J. Phys. Chem.*, **54**, 185 (1950).

(93) F. Karpfen and J. Randles, *Trans. Faraday Soc.*, **49**, 823 (1953).

(94) H. L. Rosano, P. Duby, and J. H. Schulman, *J. Phys. Chem.*, **65**, 1704 (1961).

(95) R. Bock and G. Beilstein, *Z. Anal. Chem.*, **192**, 44 (1963).

(96) R. Bock and C. Hummel, *ibid.*, **198**, 176 (1963).

(97) R. Bock and J. Jainz, *ibid.*, **198**, 315 (1963).

(98) A. Albert, "Selective Toxicity," 2nd ed, Wiley, New York, N. Y., 1960, p 116.

(99) A. J. Parker, *Quart. Rev. Chem. Soc.*, 163 (1962).

(89) G. Schill, R. Modin, and B. A. Persson, *Acta Pharm. Suecica*, **2**, 119 (1965).

(90) G. Eisenman in "Ion Selective Electrodes," No. 314, R. Durst, Ed., National Bureau of Standards, Washington, D. C., 1969, pp 4-8.

that anion solvation by protic solvents decrease strongly in the order  $F^- > Cl^- > Br^- > I^- > \text{picrate}^-$ , while in aprotic solvents the order is reversed. Even though for this study methanol was used as the standard protic solvent (rather than water) and a ratio of solubilities rather than a partition coefficient measured solvent affinity, these data are quite relevant to this review. They predict the large range and correct order of  $P$  values for the above anions in the nitrobenzene-water system and predict a very small range in any alcohol-water system (nonprotic *vs.* protic solvents). The solvation values for cations<sup>100</sup> would predict a smaller protic *vs.* aprotic difference, but the methanol *vs.* dimethylformamide values place them in the expected order:  $Na^+ < K^+ < Cs^+ < Et_4N^+ < Bu_4N^+$ .

### III. Experimental Methods

By far the most extensive and useful partition coefficient data were obtained by simply shaking a solute with two immiscible solvents and then analyzing the solute concentration in one or both phases. However, mention should be made of some other fundamentally different techniques.

Occasionally the ratio of solubilities in two separate solvents has been measured and reported as a partition coefficient.<sup>101</sup> This is truly a value of  $P$  only at saturation and is apt to be quite different from the value obtained under the conditions of low solute concentration and with the two phases mutually saturated. As seen from Table VIII, the amount of water soluble in many solvents can be quite high and this modifies their solvent character considerably. Rather high concentrations of organic solutes are necessary to saturate many solvents. Not only does this make for greater solute-solute interactions, but such high concentrations actually change the character of the organic phase so that one is no longer dealing with, say, butanol as the organic phase but with some mixed solvent. However, if the information desired relates to miscible solvents,<sup>99, 100</sup> then there is little choice in the matter. An extensive study has been made of the solubility ratios of amino acids in a series of alcohols, and this should be consulted for experimental details.<sup>102, 103</sup>

Another procedure<sup>104</sup> of limited application is that of placing a volatile solute such as ethanol in a closed system with two other solvents which need not be immiscible. If the concentration of solute is determined in both solutions and if the relation between solute activity and concentration is known in one of the solutions, the dependence of activity on concentration in the other can be inferred. This method, which resembles solvent isopiestic procedures, can be used at low solute concentrations.

A rapid method which employs automatic titration for the determination of partition coefficients of organic bases between immiscible solvents has been described.<sup>105</sup> To an aqueous solution of the base hydrochloride, sufficient standard NaOH

is added to convert about 20% to the free base. The automatic titrator is then operated as a pH-Stat, and, when the immiscible solvent is added and stirred, it removes only free base from the aqueous phase. From the ratio of NaOH added prior to the addition of organic solvent, the partition ratio can be calculated.

Some solutes with surfactant properties cause troublesome emulsions to form between two immiscible solvents. Usually these can be dispersed by centrifugation or long standing or a combination of both. If this fails, diffusion techniques can be used, although they are distressingly time consuming. This method<sup>58</sup> has yielded results consistent with other procedures. It has also been shown<sup>57</sup> how a partition coefficient can be calculated from the difference between surface and interfacial tensions, but the accuracy is probably not better than an order of magnitude.

It has been mentioned that Craig countercurrent distribution procedures often yield valuable partition coefficient data. However, for purposes of characterizing or separating a particular substance, it is desirable<sup>106</sup> to work with a partition coefficient near 1. This is often accomplished through the use of mixed solvents. Also, when a clean separation of solute compounds is desired, concentrated buffers are used<sup>106</sup> to give maximum shift of  $P$  with pH. As a result, many of the partition coefficients calculated from Craig procedures have little comparative value because the solvent is unique or because the aqueous phase is at high ionic strength.

A perusal of the literature reveals that many different techniques have been employed for the simple problem of mixing and separating the two phases in order to obtain an equilibrium distribution of the solute. Many workers have used periods of shaking as long as an hour or more. Such a lengthy procedure is unnecessary. It has been found<sup>107</sup> that simple repeated inversion of a tube with the two phases establishes equilibrium in 1-2 min. With almost all of the many substances studied by these authors, equilibrium was reached with 50 inversions. Experience in our laboratory has shown that about 100 inversions in roughly 5 min produce consistent results. Very vigorous shaking should be avoided since this tends to produce troublesome emulsions. The clarity of the two phases is not a dependable criterion of the absence of an emulsion, and therefore a centrifugation step is recommended for precise determinations. This cannot be overemphasized. For convenience, partitioning can be carried out in 250-ml centrifuge bottles fitted with glass stoppers. In this way centrifugation can be accomplished without transfer of material. Avoiding cork or rubber stoppers eliminates the possibility that impurities might be introduced by these materials or that some substances might be extracted by such stoppers. Since it is desirable to work at low concentrations in each phase (0.01  $M$  or less), small amounts of impurities can cause serious error.

In measuring about 800 partition coefficients between water and octanol we have usually analyzed the solute in only one phase and obtained the concentration in the other by difference. However, if there is the possibility that absorption to glass may occur, both phases must be analyzed. Such absorption has been found to occur with ionic solutes.<sup>108</sup> Ab-

(100) R. Alexander, E. C. F. Ko, A. J. Parker, and T. J. Broxton, *J. Amer. Chem. Soc.*, **90**, 5049 (1968).

(101) B. Wroth and E. Reid, *ibid.*, **38**, 2316 (1916).

(102) E. Cohn and J. Edsal, "Proteins, Amino Acids and Peptides," Reinhold, New York, N. Y., 1943, p 200.

(103) T. McMeekin, E. Cohn, and J. Weare, *J. Amer. Chem. Soc.*, **58**, 2173 (1936).

(104) S. D. Christian, H. E. Affsprung, J. R. Johnson, and J. D. Worley, *J. Chem. Educ.*, **40**, 419 (1963).

(105) A. Brandstrom, *Acta Chem. Scand.*, **17**, 1218 (1963).

(106) L. Craig, G. Hogeboom, F. Carpenter, and V. DuVigneaud, *J. Biol. Chem.*, **168**, 665 (1947).

(107) Reference 22, p 159.

(108) J. Fogh, P. O. H. Rasmussen, and K. Skadhauge, *Anal. Chem.*, **26**, 392 (1954).

sorption may also be a serious problem when working with very low concentrations of labeled compounds ( $<10^{-6} M$ ).

It is quite helpful to estimate the partition coefficient in advance of the determination (see section V). This allows one to make a more judicious estimate of the volumes of solvents to employ. With very lipophilic molecules, for example, it is evident that relatively small volumes of nonpolar solvent must be used or there will be insufficient material left in the aqueous phase for analysis. For example, if a solute is thought to have a  $P$  value of 200, and 20 mg was partitioned between equal 100-ml volumes, the aqueous phase would end up with only 0.1 mg. If the analytical procedure has an inherent error of 0.05 mg/100 ml, the  $P$  value could vary between 133 and 400. If, however, 200 ml of water and 5 ml of nonpolar solvent were used, the water layer would contain 3.5 mg or 1.75 mg/100 ml and the same analytical accuracy would limit the range of  $P$  values from 194 to 206. With good analytical procedures and proper volume choices of solvent, log  $P$  values in the range  $-5$  to  $+5$  can be measured.

As pointed out in section II.C, many partitioning systems show temperature dependence of about 0.01 log unit/deg in the room-temperature range. Obviously, temperature control is essential for highest accuracy and is most important for the more miscible systems. For most applications, especially as an extrathermodynamic parameter for biological structure-activity relationships, variations due to temperature are hardly comparable to those inherent in the other measurements, and therefore we do not consider it a serious shortcoming that most of the values in Table XVII are simply "at room temperature" without an estimation of what that might be.

#### IV. Linear Free-Energy Relationships among Systems

Since partition coefficients are equilibrium constants, it should not be surprising that one finds extrathermodynamic<sup>109</sup> relationships between values in different solvent systems. Such an assumption was implicit in the work of Meyer<sup>25</sup> and Overton<sup>26</sup> who used oil-water partition coefficients to correlate the narcotic action of drugs. Smith<sup>46</sup> also showed the possibility of such relationships, but Collander<sup>5</sup> was the first to express the relationship in precise terms.

$$\log P_2 = a \log P_1 + b \quad (32)$$

Working with only his own partitioning data, Collander examined only the linear relationship between similar solvent systems. In particular, he showed that eq 32 held between the systems isobutyl alcohol-water, isopentyl alcohol-water, octanol-water, and oleyl alcohol-water. Hansch,<sup>110</sup> using Smith's data, later extended the comparison of relatively nonpolar systems using  $\text{CHCl}_3$ -water for  $P_1$  and the following systems for  $P_2$ :  $\text{CCl}_4$ , xylene, benzene, and isoamyl acetate.

The most useful relationships for the study of solute-solvent interactions are obtained by defining a reference system and making it the independent variable,  $P_1$ , in a set of equations of the form of eq 32. Most of the reasons behind our choice of octanol-water as the reference system have already been given, but another practical one is the fact that it is the

system with the largest number of measured values containing the widest selection of functional groups. Furthermore, a large portion of these measurements have been made in one laboratory, and therefore should be more self-consistent.

It is clearly evident from Smith's data<sup>46</sup> that, when the nonpolar phases of the partitioning systems differ widely, and especially when the solute sets contain molecules which cannot hydrogen bond along with those which can, eq 32 does *not* give a good correlation. For example, in comparing benzene-water with octanol-water, 52 assorted solutes give a regression equation with a poor correlation coefficient (0.81) and high standard deviation (0.55).

It might seem feasible to place all solutes in the order of a ratio of  $P$  values from two standard systems and group them, if possible, on this basis. This can be useful when the objective, for example, is limited to a comparison of Lewis acid strengths by using the ratio of  $P$  values between a saturated and unsaturated solvent system, hexane *vs.* *p*-xylene.<sup>111</sup> Sandell<sup>112</sup> used a similar ratio from the  $\text{CHCl}_3$  and diethyl ether systems to reach some general conclusions about the relative percentage of tautomeric forms of various solutes, but this simplified system failed when applied to certain specific cases. For example, it erroneously predicted a sizable concentration of imino form in a solution of benzenesulfonamide.<sup>113</sup> Infrared spectroscopy data<sup>114,115</sup> appear to directly contradict this conclusion.

It appeared that the simplest way to make such a separation of solute types was to take the values from a single equation and separate all the "minus deviants" into one category and the "plus deviants" into another. After one has done this for several solvent systems, one finds that the strong hydrogen bond donors are the "minus deviants" and the hydrogen bond acceptors are the "plus deviants." The ether-water system is exceptional, for while it also segregates the donors from acceptors, the deviations are reversed.

Some work has been done to establish a scale of values for H donors<sup>116</sup> and H acceptors,<sup>117</sup> but these cover only a small fraction of the solutes appearing in Table XVII. A reasonable alternative was to place some of the more common functional groups into "general solute classes" which would be compatible with the "plus deviant" and "minus deviant" categories as indicated by regression analysis. These classes also had to be compatible with the well-known rules based on the electronegativity and size of the two atoms bound by the hydrogen atom;<sup>118</sup> see Table VII.

It is to be expected that some changes in molecular structure *outside of the functional group* will have important effects on H bonding, sufficient at times to change the assigned solute class. Examples of this situation which have been allowed for are seen in no. 5 and 13, but others can be expected also.

Whenever a solute molecule contained two or more non-interacting functional groups, each of which would require classification as "A" and "B", we have placed it in the class

(111) R. Orye, R. Weimer, and J. Prausnitz, *Science*, **148**, 74 (1965).

(112) K. Sandell, *Naturwissenschaften*, **53**, 330 (1966).

(113) K. Sandell, *Monatsh. Chem.*, **92**, 1066 (1961).

(114) J. Adams and R. G. Shepherd, *J. Org. Chem.*, **31**, 2684 (1966).

(115) N. Bacon, A. J. Boulton, R. T. Brownlee, A. R. Katritzky, and R. D. Topsom, *J. Chem. Soc.*, 5230 (1965).

(116) T. Higuchi, J. Richards, S. Davis, A. Kamada, J. Hou, M. Nakano, N. Nakano, and I. Pitman, *J. Pharm. Sci.*, **58**, 661 (1969).

(117) R. W. Taft, D. Gurka, L. Joris, P. von R. Schleyer, and J. W. Rakshys, *J. Amer. Chem. Soc.*, **91**, 4794, 4801 (1969).

(118) G. Pimentel and A. McClellan, "The Hydrogen Bond," Reinhold, New York, N. Y., 1960, p 229.

(109) J. E. Leffler and E. Grunwald, "Rates and Equilibria of Organic Reactions," Wiley, New York, N. Y., 1963.

(110) C. Hansch, *Farmaco, Ed. Sci.*, **23**, 294 (1968).

Table VII

General Solute Classes	
Group "A" H donors	1. Acids
	2. Phenols
	3. Barbiturates
	4. Alcohols
	5. Amides (negatively substituted, but not di-N-substituted)
	6. Sulfonamides
	7. Nitriles
	8. Imides
	9. <sup>a</sup> Amides
Group "B" H acceptors	10. <sup>a</sup> Aromatic amines (not di-N-substituted)
	11. Miscellaneous acceptors
	12. Aromatic hydrocarbons
	13. Intramolecular H bonds <sup>b</sup>
	14. Ethers
	15. Esters
	16. Ketones
	17. Aliphatic amines and imines
	18. Tertiary amines (including ring N compounds)

<sup>a</sup> Classes 9 and 10 must be reversed when considering the ether and oil solvent systems. <sup>b</sup> *E.g.*, *o*-nitrophenol. <sup>c</sup> "Neutral" in CHCl<sub>3</sub> and CCl<sub>4</sub>.

which gave the best fit with that particular equation. It was felt that the best fit of the data would serve to categorize the dominant solvation forces in such cases. For example, *p*-methoxybenzoic acid is both an acid (class 1) and an ether (class 14). Regression equation "A" gave the best fit in the solvent systems: benzene, toluene, and xylene (see Table VIII). This suggests that the H-donor ability of the carboxyl group dominates in placing *p*-methoxybenzoic acid in the most poorly accommodated category when these solvents are compared to octanol. In the CHCl<sub>3</sub>-water system, however, *p*-methoxybenzoic acid is not so poorly accommodated (again in relation to the standard reference system), and actually the "N" equation fits it as well as the "A" (Table VIII). This suggests that the weak H-donor capability of the solvent, CHCl<sub>3</sub>, increases the accommodation of this solute by interacting with the ethereal oxygen.

Once a practical basis for sorting solutes was available, we could study the set of equations (of the form of eq 32) relating the solvent systems to see if the slope and intercept values could give some indication of the solute-solvent forces at work. In doing so, it was convenient to establish some sort of preliminary order to the solvent systems. Although the dipole moment, the dielectric constant, the solubility parameter,<sup>119-122</sup> and the molar attraction constant have each been useful in establishing a scale for solvents in certain applications, none seemed to put partitioning solvent systems into a sensible order. A simple scheme which did work was to order them according to the amount of water they contained at saturation. In Table VIII they appear in this order.

In using the slopes and intercepts of the equations of Table VIII to study solute-solvent interactions as compared to the standard solute-octanol interaction, we can consider the

slope value first. We can see that it is a measure of the solvent system's sensitivity to changes in lipophilicity of solutes. Butanol-water, as expected, has the lowest slope value and the least sensitivity. When this pair is saturated with one another, they are about as much alike as two separate phases can be. Since log *P* measures the difference in transfer energy between the two, changes in solute character will register as only small differences when compared to octanol.

Increasing the hydrocarbon chain length in the solvent alcohol increases the dissimilarity of the alcohol-water phases, and there is an increased sensitivity to solute changes. Apparently, a maximum sensitivity is reached at octanol for the slope in the oleyl alcohol equation is also 1.0.

There is some basis for the postulate that the partitioning process, outside of hydrogen bonding, is the same for solutes in each system, and therefore if hydrogen bonding were accounted for separately, the slopes of all the equations in Table VIII would be near 1.0. Some of the results reported by Higuchi and his coworkers<sup>116</sup> can be interpreted in this manner. They have used the cyclohexane-water system where the organic phase has a minimum of hydrogen-bonding ability, and to it have added a small amount of tributyl phosphate (TBP) or isopropoxymethyl phosphoryl fluoride (sarin) as H-bond acceptors. By partitioning a set of substituted phenols between the two phases they have calculated an equilibrium constant for the solute-TBP complex. Table IX contains their data and log *P*<sub>octanol</sub> values for the phenols, and from it eq 33 and 34 have been formulated. The correlation be-

$$\log P_{\text{octanol}} = 0.50 \log P_{\text{cyclohexane}} + 2.43 \quad (33)$$

<i>n</i>	<i>r</i>	<i>s</i>
9	0.791	0.391

$$\log P_{\text{octanol}} = 1.00 \log P_{\text{cyclohexane}} + 1.20 \log K_{\text{HB}} + 2.35 \quad (34)$$

<i>n</i>	<i>r</i>	<i>s</i>
9	0.979	0.140

tween partition coefficients in octanol and cyclohexane is poor, as shown by eq 33. However, when correction is made for the hydrogen-bonding ability of the phenols by adding a term in log *K*<sub>HB</sub>, a good correlation is obtained (eq 34). Moreover, the coefficient with log *P*<sub>cyclohexane</sub> is 1.00, indicating that in a rough sense the desolvation processes are the same for each system.

It is reasonable to propose that decreasing the lipophilic character of the nonaqueous phase decreases the energy required to transfer a hydrocarbon solute (or a specific segment of a solute, such as a methylene group) from the nonaqueous to the aqueous phase, and this would result in a decrease in the slope values in Table VIII in going from octanol to butanol. It would be logical to predict, therefore, that any alteration of the aqueous phase in these partitioning systems to make it more like the nonaqueous would also reduce the transfer energy and lower the slope.

There are not a great deal of data in the literature which are suitable for testing this hypothesis, but the investigations of Feltkamp<sup>125</sup> certainly support it. He measured the distribution of various barbiturates between diethyl ether and a 50:50 mixture of dimethylformamide and water. Since DMF itself is not very well accommodated by ether (log *P*<sub>ether-water</sub>

(119) J. H. Hildebrand and R. L. Scott, "The Solubility of Nonelectrolytes," 3rd ed, Reinhold, New York, N. Y., 1950.

(120) L. J. Mullins, *Chem. Rev.*, **54**, 289 (1954).

(121) S. Khalil and A. Martin, *J. Pharm. Sci.*, **56**, 1225 (1967).

(122) J. A. Ostrenga, *ibid.*, **58**, 1281 (1969).

(123) *P* values for all of the solutes used to develop the equations are listed in *J. Org. Chem.*, **36**, 1539 (1971), microfilm edition.

(124) D. Burton, K. Clark, and G. Gray, *J. Chem. Soc.*, 1315 (1964).

(125) H. Feltkamp, *Arzneim.-Forsch.*, **15**, 238 (1965).

Table VIII

Solvent Regression Equations<sup>12a</sup>

$$\log P_{\text{solvent}} = a \log P_{\text{octanol}} + b$$

—H <sub>2</sub> O concn at saturation— Solvent (vs. H <sub>2</sub> O)	10 <sup>3</sup> M	H-donor solutes Equation "A"					H-acceptor solutes Equation "B"				
		a <sup>a</sup>	b <sup>a</sup>	n	r	s	a	b	n	r	s
Cyclohexane	2.5	0.675	-1.842	26	0.761	0.503	1.063	-0.734	30	0.957	0.360
		(±0.24)	(±0.48)				(±0.12)	(±0.25)			
Heptane	3.3	1.056	-2.851	10	0.764	0.916	1.848	-2.223	11	0.954	0.534
		(±0.73)	(±1.46)				(±0.44)	(±0.93)			
CCl <sub>4</sub> <sup>b</sup>	10.0	1.168	-2.163	24	0.974	0.282	1.207	-0.219	11	0.959	0.347
		(±0.12)	(±0.15)				(±0.27)	(±0.37)			
Xylene	18.8	0.942	-1.694	19	0.963	0.225	1.027	-0.595	21	0.986	0.230
		(±0.13)	(±0.21)				(±0.08)	(±0.16)			
Toluene	25.6	1.135	-1.777	22	0.980	0.194	1.398	-0.922	14	0.971	0.274
		(±0.11)	(±0.16)				(±0.22)	(±0.37)			
Benzene	26.0	1.015	-1.402	33	0.962	0.234	1.223	-0.573	19	0.958	0.291
		(±0.11)	(±0.14)				(±0.19)	(±0.20)			
CHCl <sub>3</sub> <sup>c</sup>	68.4	1.126	-1.343	28	0.967	0.308	1.276	+0.171	21	0.976	0.251
		(±0.12)	(±0.21)				(±0.14)	(±0.17)			
Oils <sup>d</sup>	72.5	1.099	-1.310	65	0.981	0.271	1.119	-0.325	14	0.988	0.233
		(±0.06)	(±0.09)				(±0.11)	(±0.19)			
Nitrobenzene	180	1.176	-1.072	9	0.977	0.217					
		(±0.23)	(±0.20)								
Isopentyl acetate	456	1.027	+0.072	22	0.986	0.209					
		(±0.08)	(±0.13)								
Ether	690	1.130	-0.170	71	0.988	0.186	1.142	-1.070	32	0.957	0.326
		(±0.04)	(±0.05)				(±0.13)	(±0.12)			
				"Sole" Equation							
Oleyl alcohol	712	0.999	-0.575	37	0.985	0.225					
		(±0.06)	(±0.11)								
Methyl isobutyl ketone	950	1.094	+0.050	17	0.993	0.184					
		(±0.07)	(±0.11)								
Ethyl acetate	1620	0.932	+0.052	9	0.969	0.202					
		(±0.21)	(±0.18)								
Octanol	2300	1.000	+0.000								
Cyclohexanone	4490	1.035	+0.896	10	0.972	0.340					
		(±0.20)	(±0.30)								
Primary pentanols	5000 <sup>e</sup>	0.808	+0.271	19	0.987	0.161					
		(±0.07)	(±0.09)								
sec- and tert- pentanols	5320 <sup>f</sup>	0.892	+0.288	11	0.996	0.091					
		(±0.06)	(±0.06)								
2-Butanone	5460	0.493	+0.315	9	0.987	0.093					
		(±0.07)	(±0.07)								
Cyclohexanol	6510	0.745	+0.866	12	0.985	0.100					
		(±0.09)	(±0.14)								
Primary butanols	9440 <sup>g</sup>	0.697	+0.381	57	0.993	0.123					
		(±0.02)	(±0.03)								

<sup>a</sup> The values in parentheses are the 95% confidence intervals. <sup>b</sup> The "N" equation is  $\log P_{\text{CCl}_4} = 0.862 (\pm 0.60) \log P_{\text{octanol}} - 0.626 (\pm 0.70)$  ( $n = 6, r = 0.809, s = 0.462$ ). <sup>c</sup> The "N" equation is  $\log P_{\text{CHCl}_3} = 1.10 (\pm 0.09) \log P_{\text{octanol}} - 0.617 (\pm 0.12)$  ( $n = 32, r = 0.974, s = 0.254$ ). <sup>d</sup> Most liquid glyceryl triesters fit this equation; olive, cottonseed, and peanut oils were the most frequently used. <sup>e</sup> *n*-Amyl alcohol = 5.03 M in water; isoamyl alcohol = 4.50 M in water. <sup>f</sup> Water content measured for 2-pentanol only. <sup>g</sup> Water content measured for 1-butanol only.

= -1.62),<sup>2</sup> it should not greatly change the solvent properties of the water-saturated ether phase, but it must greatly reduce the protic nature of the aqueous phase. The following equation was derived using this rather limited set of solutes.

$$\log P_{\text{ether/H}_2\text{O-DMF}} = -0.321 + 0.400 \log P_{\text{octanol}}$$

n	r	s
6	0.988	0.058

The equation with two additional values for hexobarbital and phenobarbital was essentially the same (slope = 0.405)

even though these poorly predicted solutes lowered the value of *r* to 0.86. It is apparent that this drastic reduction in the protic character of the aqueous phase has reduced the sensitivity of the ether-water system to changes in lipophilicity of solutes by a factor of 2.8 (i.e., 1.13/0.4). Diethylformamide, by disrupting the water envelope around a nonpolar solute, in all probability reduces the entropy factor in phase transfer.

The intercept value for each of the regression equations in Table VIII can be used as a measure of the lipophilicity of the solvent in a slightly different fashion. It is apparent that the intercept value in the equation for a given solvent system



Table IX  
Relationship between Phenol Partition  
Coefficients in Octanol and Cyclohexane

Phenol	Log $P_{\text{Cyclohexane}}^a$	Log $K_{\text{HB}}^b$	Obsd <sup>c</sup> Log $P_{\text{Octanol}}$	Calcd <sup>d</sup> Log $P_{\text{Octanol}}$	$ \Delta \log P $
Unsubstituted	-0.85	0.00	1.46	1.50	0.04
4-Me	-0.14	-0.16	1.94	2.02	0.08
4-Et	0.40	-0.11	2.44	2.62	0.18
4- <i>tert</i> -Butyl	1.12	-0.27	3.31	3.15	0.17
3-F	-0.85 <sup>124</sup>	0.39	1.93	1.97	0.04
4-F	-1.00	0.24	1.77	1.64	0.14
4-Cl	-0.70 <sup>124</sup>	0.48	2.39	2.24	0.16
4-NO <sub>2</sub>	-1.93	1.33	1.96	2.01	0.05
2,3-(CH <sub>3</sub> ) <sub>4</sub>	0.52	0.16	2.98	3.06	0.08

<sup>a</sup> Some values are average of two determinations; see Table XVII. <sup>b</sup> From ref 117. <sup>c</sup> From ref 10 and 58. <sup>d</sup> Calculated using eq 34.

is the log  $P$  for any solute which is distributed equally between water and octanol; *i.e.*,  $\log P_{\text{Octanol}} = 0$ . Thus a negative intercept for any equation indicates that the solvent is more lipophilic than octanol, and a positive intercept indicates that it is more hydrophilic. This is more readily apparent if one examines a homologous series of solutes, for example, the carboxylic acids. The octanol log  $P$  values begin at  $-0.54$  for formic and rise to  $-0.17$  for acetic and to  $+0.33$  for propionic. Therefore, it takes between two and three lipophilic methylene groups to balance the hydrophilic carboxyl group and allow the octanol to share the solute equally with water.

In the oleyl alcohol-water system, it takes one *additional* methylene group before a carboxylic acid becomes lipophilic enough to be equally shared; *i.e.*,  $\log P_{\text{oleyl alcohol}} = 0$  between propionic and butyric. Similarly, it is noted that in nitrobenzene-water it takes two *additional* methylenes, in benzene-water it takes three, and in CCl<sub>4</sub>-water it takes about 4.5 additional groups to bring the solute to an equal lipophilic level with the organic phase.

Using the intercept values from the "A" or "sole" equation as a measure of the solvent's lipophilicity, we see that there is a very good correlation between these values and the water content at saturation.

$$\log (\text{H}_2\text{O}) = 1.077[\text{intercept}] + 0.249 \quad (35)$$

$n$	$r$	$s$
17	0.979	0.217

Sometimes it may be misleading to think of a scale of "lipophilicity" as the simple reciprocal of a "hydrophilicity" scale, but eq 35 shows that the *inability* of a partition solvent to "accommodate" water is a good measure of its lipophilic behavior toward a great assortment of organic solutes.

A more complex kind of partition, but one which can be studied by means of linear regression equations similar to those in Table VIII, is that of the distribution of small organic molecules between proteins and an aqueous phase. A large number of such examples are known which can be correlated by an equation similar to eq 32.

$$\log K = a \log P + b \quad (36)$$

In eq 36,  $K$  is an equilibrium constant measuring the binding of the small solute molecule by protein. In some work, the expression  $\log (B/F)$  has been used instead of  $K$ .  $B$

represents the per cent of small molecules partitioned onto the protein, while  $F$  is the per cent of small molecule in the aqueous phase. A number of such examples are given in Table X.

In other examples the binding constant is expressed as  $1/C$  where  $C$  is the molar concentration of small molecule necessary to produce a 1:1 (or higher, as indicated) complex of protein and small molecule.

The way the binding constant is defined greatly affects the intercepts listed in Table X so that only those defined in the same way can be compared. The slopes, however, differ very little regardless of the system, the type of compound studied, or the way in which the binding constant is defined.

Omitting the slopes for examples 1, 2, and 9 where the work was done at 4° (since it is known the slopes for the Hammett-type relationships are higher at lower temperatures), and omitting the rather deviant value of example 12, we are left with a set of 14 slopes with a mean value and standard deviation of  $0.55 \pm 0.06$ . This is amazingly constant considering the variations in conditions. The relationship between the results in Table X and those of Table VIII calls for further careful analysis. None of the slopes in Table VIII are as low as 0.54; the lowest for a carefully studied system is that of the butanols (0.72). In this sense, butanols behave more like the proteins than the other solvents of Table VIII. In fact, Scholtan<sup>130</sup> has shown that the binding of many drugs to serum protein follows the relationship

$$\log K = 0.9 \log P_{i-\text{BuOH}} + \text{constant} \quad (37)$$

In eq 37, there is almost a 1:1 relationship between the logarithms of the two kinds of equilibrium constants. In this limited sense butanol, saturated with water, resembles a protein in structure.

Of course, in actual fact, saturated butanol which contains a greater number of water molecules than butanol molecules, is not at all like a protein. If the main driving force in the transfer from water into octanol or onto a protein is desolvation of the water about the solute, then we can postulate that the degree of desolvation must be about the same in each process. In the case of butanol, the solute molecule, in entering the butanol phase, finds itself in a rather aqueous environment. While the structure of the "flickering clusters" around the solute must be largely broken up in butanol, more such structures must be present than in solvents such as octanol or benzene. In the case of the proteins of Table X, since the weighting factor with the  $\log P_{\text{Octanol}}$  term is 0.5, one could postulate that only half as much desolvation occurs on the average in partitioning onto a protein as into octanol; that is, for a given increment in hydrophobicity (say, a phenyl group), the driving force for partitioning onto protein is only half of that of partitioning into octanol. One way of rationalizing this is to postulate that the solute molecules are partitioned onto the *surface* of the protein and in this way only partially desolvated. This seems a more logical explanation than to assume that they are completely engulfed by protein

(126) C. Hansch in "Drug Design," Vol. 1, E. J. Ariens, Ed., Academic Press, New York, N. Y., 1971, p 271.

(127) A. E. Bird and A. C. Marshall, *Biochem. Pharmacol.*, **16**, 2275 (1967).

(128) C. Hansch and F. Helmer, *J. Polym. Sci., Part A-1*, **6**, 3295 (1968).

(129) J. M. Vandenbelt, C. Hansch, and C. Church, unpublished results.

(130) W. Scholtan, *Arzneim.-Forsch.*, **18**, 505 (1968).

Table X  
Partitioning of Organic Compounds between Proteins and Aqueous Phases

Type of compound	Macromolecule <sup>a</sup>	K <sup>b</sup>	a	b	n	r	s	Ref	T, °C
1. Miscellaneous	BSA (1:1)	1/C	0.75	2.30	42	0.960	0.159	9	4
2. Miscellaneous	BSA (3:1)	1/C	0.59	2.03	16	0.900	0.133	9	4
3. Barbiturates	BSA (1:1)	1/C	0.58	2.40	4	0.961	0.137	9	RT
4. Barbiturates	BSA	B/F	0.51	-1.22	17	0.896	0.181	126	RT
5. RCOO-	BSA	K	0.59 <sup>c</sup>	-6.51	5	0.966	0.213	9	23
6. Miscellaneous	BSA (1:1)	1/C	0.67	2.48	25	0.945	0.242	129	37
7. Penicillins	Human serum	B/F	0.49 <sup>c</sup>	-0.63	79	0.924	0.134	127	~22
8. Thyroxine analogs	Albumin	K	0.46 <sup>c</sup>	2.59	8	0.950	0.237	126	37
9. Miscellaneous	Hemoglobin	1/C	0.71	1.51	17	0.950	0.160	9	4
10. ROH	Ribonuclease	K	0.50	-1.56	4	0.999	0.012	9	62
11. Acetamides	Nylon	K	0.69	-7.16	7	0.961	0.203	128	26.5
12. Acetanilides	Rayon	K	0.84	-7.24	7	0.967	0.227	128	26.5
13. Barbiturates	Liver <sup>d</sup>	B/F	0.52	-1.14	5	0.973	0.124	126	RT
14. Barbiturates	Heart <sup>d</sup>	B/F	0.62	-1.48	5	0.950	0.207	126	RT
15. Barbiturates	Kidney <sup>d</sup>	B/F	0.53	-1.42	5	0.962	0.152	126	RT
16. Barbiturates	Lung <sup>d</sup>	B/F	0.56	-1.50	5	0.956	0.173	126	RT
17. Barbiturates	Brain <sup>d</sup>	B/F	0.52	-1.44	5	0.973	0.125	126	RT
18. Barbiturates	Muscle <sup>d</sup>	B/F	0.48	-1.45	5	0.970	0.121	126	RT

<sup>a</sup> BSA = bovine serum albumin. <sup>b</sup> C = molar concentration; B/F = ratio bound to free; for definition of K, see original article. <sup>c</sup>  $\pi$  values used instead of log P. <sup>d</sup> Homogenized.

(as they are in passing into butanol) but that the "sweater" of outer molecules is not completely stripped from the solute.

There are instances in which the slope relating binding to log  $P_{\text{octanol}}$  is 1. For example, the correlation of log  $1/K_m$  with log P for chymotrypsin substrates<sup>131</sup> and inhibitors is essentially 1 for substituents thought to be binding in the  $\rho_2$  area.  $K_m$  is the Michaelis constant and is an approximate binding constant. Chymotrypsin is known to contain a deep cleft which may constitute the  $\rho_2$  area and, in this instance, complete desolvation of the substituent may occur.

### V. Additive-Constitutive Properties

It was apparent to Meyer<sup>25</sup> and Overton,<sup>26</sup> as well as the other early workers in the field, that in a homologous series the partition coefficient increased by a factor of from 2 to 4 per  $\text{CH}_2$ . Cohn and Edsal<sup>102</sup> verified that this kind of additivity held for the solubility ratios of amino acids in ethanol and water. They also extended it to include values for the groups  $-\text{CH}_2\text{CONH}-$ , OH, SH, and  $\text{C}_6\text{H}_5$ , and for dipolar ionization. Collander<sup>4</sup> determined that  $\Delta P/\text{CH}_2$  fell in the range of 2 to 4 for the ether-water system and 1.8 to 3.0 for the butanol-water system. He also reported a range of values for  $\Delta P$  when the following substitutions were made: OH for H,  $\text{NH}_2$  for H,  $\text{CO}_2\text{H}$  for  $\text{CH}_3$ ,  $\text{CO}_2\text{H}$  for  $\text{CONH}_2$ , and halogens for H. In view of these long-standing observations, it is surprising that no really systematic effort was made to study the additive character of the partition coefficient until the early 60's.

#### A. DEFINITION OF $\pi$

Additivity was first established for a wide variety of groups in a study of the substituent constant,  $\pi$ , defined<sup>10</sup> in an analogous fashion to the Hammett  $\sigma$  constant

$$\pi_X = \log P_X - \log P_H$$

where  $P_X$  is the derivative of a parent molecule,  $P_H$ , and thus

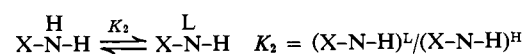
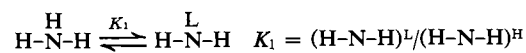
$\pi$  is the logarithm of the partition coefficient of the function X. For example,  $\pi_{\text{Cl}}$  could be obtained as follows.

$$\pi_{\text{Cl}} = \log P_{\text{chlorobenzene}} - \log P_{\text{benzene}}$$

### B. SUBSTITUENT FREE ENERGIES AND INTERACTION TERMS

It has been found that  $\pi$  values are relatively constant from one system to another as long as there are no special steric or electronic interactions of the substituents not contained in the reference system. For example, it has been found that  $\pi_{\text{CH}_3}$  for groups attached to various benzene derivatives has a value in the octanol-water system of  $0.50 \pm 0.04$  for 15 different examples. The weak interaction of the methyl group with functions as active as a nitro group is exceptional. Most other  $\pi$  values are not so constant with respect to electronic environment. For example, in 15 examples of  $\pi_{\text{NO}_2}$  in aromatic systems,  $\pi$  had a mean value and standard deviation of  $0.01 \pm 0.32$ .

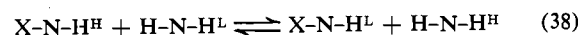
The function  $\pi$  is best viewed in extrathermodynamic terms. The symbols H-N-H and X-N-H can be used to represent a solute nuclei (N), the first one unsubstituted and the other containing the substituent X. The parameter  $\pi$  can then be defined by a comparison of two equilibria



The superscripts H and L denote the hydrophilic ( $\text{H}_2\text{O}$ ) and lipophilic (solvent) phases and refer to the phase in which the molecule is located.

$$\pi = \log K_2 / K_1$$

That is, the ratio of the equilibrium constants is equivalent to the equilibrium constant for the reaction



The free energy change resulting from the introduction of X on the first of the above equilibria would be

$$2.3RT \log K_2/K_1 = G_{X-N-H^L} + G_{H-N-H^H} - G_{X-N-H^H} - G_{H-N-H^L} \quad (39)$$

If we assume that the free energy of an individual molecule in eq 38 can be represented as the sum of its parts and their interaction, we may write

$$G_{X-N-H^L} = G_X^L + G_N^L + G_H^L + G_{XN^L} + G_{HN^L} + G_{XH^L} \quad (40)$$

In eq 40, the terms on the right represent the free energies of the substituents X or H and their interactions with the basic structure N ( $G_{XN^L}$ ) or each other ( $G_{XH^L}$ ). Formulating the other molecules in this fashion and substituting into eq 39 yields

$$2.3RT \log K_2/K_1 = G_X^L + G_{XN^L} + G_{XH^L} + G_{H^H} + G_{HN^H} + G_{HH^H} - G_{X^H} - G_{XN^H} - G_{XH^H} - G_H^L - G_{HN^L} - G_{HH^L} \quad (41)$$

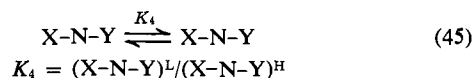
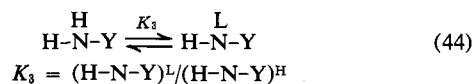
Making substitutions of the type  $G_X^L - G_{X^H} = \Delta G_X$ , eq 41 is converted to

$$2.3RT \log K_2/K_1 = \Delta G_X + \Delta G_{XN} + \Delta G_{XH} - \Delta G_H - \Delta G_{HN} - \Delta G_{HH} \quad (42)$$

If the interaction terms can be neglected, then

$$\pi = 2.3RT \log K_2/K_1 = \Delta G_X - \Delta G_H \quad (43)$$

When two functions are involved, the following equilibria must be considered.



Equation 46 can then be derived from eq 44 and 45.

$$\pi = 2.3RT \log K_4/K_3 = \Delta G_X + \Delta G_{XN} + \Delta G_{XY} - \Delta G_{HY} - \Delta G_H - \Delta G_{HN} \quad (46)$$

Subtracting eq 43 from 46 yields

$$\Delta \pi = \Delta G_{XY} + \Delta G_{HH} - \Delta G_{HY} - \Delta G_{XH} \quad (47)$$

	<i>n</i>	<i>r</i>	<i>s</i>	
$\Delta \pi = \pi_{\text{phenol}} - \pi_{\text{benzene}} = 0.82\sigma + 0.06$	24	0.954	0.097	(48)
$\Delta \pi = \pi_{\text{benzyl alc}} - \pi_{\text{benzene}} = 0.47\sigma + 0.04$	11	0.937	0.086	(49)
$\Delta \pi = \pi_{\text{phenoxycetic acid}} - \pi_{\text{benzene}} = 0.36\sigma + 0.04$	22	0.754	0.100	(50)
$\Delta \pi = \pi_{\text{nitrobenzene}} - \pi_{\text{benzene}} = -0.51\sigma + 0.28$	20	0.676	0.250	(51)

For  $\Delta \pi$  to equal or approach 0, the four interaction terms must be equal to or approach 0. (There is of course the unlikely case where they might cancel each other so that  $\Delta \pi = 0$ .) As the number of changes in the systems under comparison becomes larger, so do the interaction terms, and hence the possibility that  $\pi$  from very different systems will remain constant becomes less likely. It is apparent from this analysis that the approach of Cratin<sup>61</sup> (see section II.C) cannot be

extended indefinitely and that, for the present, one is limited to the use of model systems working outside of classical thermodynamics.

It has been shown<sup>10</sup> that the difference in  $\pi$  constants from two different systems is highly dependent on electronic interactions. This is illustrated by eq 48–51 in which the Hammett function,<sup>109</sup>  $\sigma$ , is the measure of electronic interaction. A good correlation is obtained with phenols in eq 48. The positive coefficient with  $\sigma$  indicates that an electron-withdrawing substituent, X, will be relatively better accommodated by octanol when it is moved from benzene to phenol. Surprisingly enough, a poorer correlation is obtained using  $\sigma^-$ . The reason for this may be that the linear relationship between  $\Delta \pi$  and  $\sigma$  does not cover a very wide range of  $\sigma$  values. For example, placing two nitro groups on phenol yields a negative  $\Delta \pi$  rather than a positive  $\Delta \pi$  obtained for mononitro functions in eq 48.

### 1. Inductive Effect

Relatively little systematic effort has been expended studying systems in which the inductive effect of one substituent on another can be cleanly dissected away from other effects.

It is clear in the benzyl alcohols correlated by eq 49 that electron-withdrawing substituents increase log *P* values relative to benzene. For example

$$\pi_{\text{NO}_2} = \log P_{\text{nitrobenzene}} - \log P_{\text{benzene}} = -0.28$$

$$\pi_{\text{NO}_2} = \log P_{4\text{-nitrobenzyl alc}} - \log P_{\text{benzyl alc}} = 0.11$$

In this example it seems unlikely that the primary effect on  $\pi$  is the action of  $\text{CH}_2\text{OH}$  on  $\text{NO}_2$ ; it seems more reasonable to assume that the electron-withdrawing action of  $\text{NO}_2$  on the region near the OH function is responsible for  $\Delta \pi$  of 0.39. The inductive effect of the nitro group which is insulated from the OH by the  $\text{CH}_2$  unit is apparently making the lone-pair electrons of the OH function less available for hydrogen bonding lowering the affinity of this function for the water phase. This same effect is quite apparent with anilines and phenols bearing electron-withdrawing functions. While the inductive withdrawal of electrons from the region of a function containing lone-pair electrons often raises its  $\pi$  value, this is not always so.  $\pi_{\text{C}_1}$  from the benzene system is 0.71, while  $\pi_{4\text{-Cl}}$  in the nitrobenzene system is only 0.54, and  $\pi_{3\text{-Cl}}$  is 0.61.

That the inductive effect is quite small with alkyl groups is illustrated by eq 52 and 53.

$$\pi_{\text{CH}_2} = \log P_{\text{EtNO}_2} - \log P_{\text{MeNO}_2} = 0.18 - (-0.33) = 0.51 \quad (52)$$

$$\pi_{\text{CH}_2} = \log P_{\text{PrNO}_2} - \log P_{\text{EtNO}_2} = 0.65 - 0.18 = 0.47 \quad (53)$$

### 2. Resonance Effect

The effect of electron delocalization on  $\pi$  values is well illus-

trated by the difference between aliphatic and aromatic  $\pi$  values shown in Table XI. The effect of moving functions from

Table XI

Comparison of Aromatic and Aliphatic  $\pi$  Values

Function	Aromatic $\pi$ $\log P_{C_6H_5X} - \log P_{C_6H_6}$	Aliphatic $\pi$ $\log P_{RX} - \log P_{RH}$	$\Delta\pi$ $\pi_{ar} - \pi_{al}$
NH <sub>2</sub>	-1.23	-1.19	-0.04
I	1.12	1.00	0.12
S-CH <sub>3</sub>	0.61	0.45	0.16
COCH <sub>3</sub>	-0.55	-0.71	0.16
CONH <sub>2</sub>	-1.49	-1.71	0.22
COOCH <sub>3</sub>	-0.01	-0.27	0.26
Br	0.86	0.60	0.26
CN	-0.57	-0.84	0.27
F	0.14	-0.17	0.31
Cl	0.71	0.39	0.32
COOH	-0.28	-0.67	0.39
OCH <sub>3</sub>	-0.02	-0.47	0.45
OC <sub>6</sub> H <sub>5</sub>	2.08	1.61	0.47
N(CH <sub>3</sub> ) <sub>2</sub>	0.18	-0.30	0.48
OH	-0.67	-1.16	0.49
NO <sub>2</sub>	-0.28	-0.85	0.57

aliphatic to aromatic positions is a complex one. The amino group stands out by showing the smallest change, this despite the fact that a large amount of evidence leaves no doubt about the delocalization of the nitrogen lone-pair electrons. The higher  $\pi$  value which should result from this effect is apparently offset by better hydrogen bonding of the two hydrogen atoms which increases affinity for the water phase. When the hydrogen atoms are removed, as in the N(CH<sub>3</sub>)<sub>2</sub> function, we see the expected  $\Delta\pi$  value, that is, one somewhat higher than  $\Delta\pi_{OCH_3}$ . With the more electronegative oxygen atom this effect is not observed. The largest  $\Delta\pi$  is for NO<sub>2</sub>, and it appeared possible that the acidity of the  $\alpha$ -hydrogen atoms might be playing a role in conferring unusual hydrophilic character to the aliphatic nitro solutes. However,  $\pi_{NO_2}$  was found to be essentially unchanged for the *tert*-nitro derivative, 2-methyl-2-nitropropane.

With the exception of NH<sub>2</sub>, transferring any function from an aliphatic to an aromatic position results in an increase in lipophilicity. Actually,  $\Delta\pi$  for NH<sub>2</sub> is so small that it can be considered to be 0.

Replacing a single bond with a double bond results in a constant  $\Delta\pi$  of about -0.3. This can be illustrated as follows by comparing  $\pi_{-CH_2CH_2-}$  (= 1.00) with  $\pi_{-CH=CH-}$  derived from five systems (Chart I). If, indeed,  $\log P$  or  $\pi$  is primarily

Chart I

$$\begin{aligned} \pi_{-CH=CH-} &= \log P_{CH_3COCH_2CH_2CH=CH_2} - \log P_{CH_3COCH_2CH_2CH_2} = 1.02 - 0.29 = 0.73 \\ \pi_{-CH=CH-} &= \frac{1}{3} \log P_{benzene} = \frac{1}{3}(2.13) = 0.71 \\ \pi_{-CH=CH-} &= \frac{1}{5} \log P_{naphthalene} = \frac{1}{5}(3.45) = 0.69 \\ \pi_{-CH=CH-} &= \log P_{C_6H_5OCH_2CH=CH_2} - \log P_{C_6H_5OCH_3} = 2.94 - 2.11 = 0.83 \\ \pi_{-CH=CH-} &= \frac{1}{2}(\log P_{diallyl} - 1.00) = \frac{1}{2}(2.45 - 1.00) = 0.72 \\ &Av = 0.73 \\ &\Delta\pi = -0.27 \end{aligned}$$

determined (in apolar functions) by the removal of an envelope of structured water molecules, then it is not surprising

that  $\pi_{-CH=CH-}$  is the same in one of the conjugated double bonds in naphthalene as in an isolated double bond in 5-hexen-2-one.

An acetylenic group has a somewhat lower  $\pi$  value.

$$\pi_{-C\equiv CH} = \log P_{1\text{-pentynyl}} - \log P_{C_5H_8} = 1.98 - 1.50 = 0.48$$

$$\pi_{-C\equiv CH} = \log P_{C_6H_5C\equiv CH} - \log P_{C_6H_6} = 2.53 - 2.13 = 0.40$$

Conjugation of  $\pi$ -electron systems does not appear to result in big changes in  $\pi$  values even when a heteroatom is included in the system. Table XII illustrates the amount of variance in

Table XII

Constancy of  $\pi$  for  $-CH=CHCH=CH-$ 

	$\pi_{-CH=CHCH=CH-}$
$\log P_{indole} - \log P_{pyrrole} = 2.14 - 0.75 =$	1.39
$\log P_{quinoline} - \log P_{pyridine} = 2.03 - 0.65 =$	1.38
$\log P_{isoquinoline} - \log P_{pyridine} = 2.08 - 0.65 =$	1.43
$\log P_{acridine} - \log P_{quinoline} = 3.40 - 2.03 =$	1.37
$\log P_{dibenzofuran} - \log P_{benzofuran} = 4.12 - 2.67 =$	1.45
$\log P_{benzothiophene} - \log P_{thiophene} = 3.12 - 1.81 =$	1.31
$\log P_{naphthalene} - \log P_{benzene} = 3.45 - 2.13 =$	1.32
$\frac{2}{3} \log P_{benzene} = \frac{2}{3}(2.13) =$	1.42
$\log P_{\beta\text{-naphthol}} - \log P_{phenol} = 2.84 - 1.46 =$	1.38
$\log P_{\beta\text{-naphthoxyacetic acid}} - \log P_{phenoxyacetic acid} =$	
$2.54 - 1.21 =$	1.33
Av =	1.38 $\pm$ 0.036

$\pi_{-CH=CHCH=CH-}$  in a variety of different aromatic systems. The mean value and standard deviation for the 10 systems is 1.38  $\pm$  0.036.

## 3. Steric Effect

Steric effects can be quite varied in nature. The shielding of lone-pair electrons by inert alkyl groups produces a significant increase in  $\pi$  values.

$$\pi_{CH_3} = \log P_{2\text{-methylphenoxyacetic acid}} - \log P_{POA} = 2.10 - 1.26 = 0.84$$

$$\pi_{CH_3} = \log P_{3\text{-methylphenoxyacetic acid}} - \log P_{POA} = 1.78 - 1.26 = 0.52$$

Shielding a hydroxyl function by inert groups such as 2,6-substituted phenols reduces hydrogen bonding and results in a positive  $\Delta\pi$ . This is most pronounced in the case of a nonpolar solvent system such as cyclohexane.<sup>132,133</sup>

Crowding of functions may also reduce hydrophobic bonding with the opposite effect on  $\Delta\pi$ . For example, pentachlorophenol has a measured  $\log P$  of 5.01, while its calculated value would be

$$\log P = \log P_{phenol} + 2\pi_{o-Cl} + 2\pi_{m-Cl} + \pi_{p-Cl} = 1.46 + 1.38 + 2.08 + 0.93 = 5.85$$

Assuming electronic effects of each Cl atom to be contained in the corresponding  $\pi_{Cl}$  value,  $\Delta\pi_{steric} = 5.01 - 5.85 = 0.84$ . Presumably, this would be the result of fewer water

(132) C. Golumbic, M. Orchin, and S. Weller, *J. Amer. Chem. Soc.*, **71**, 2624 (1949).

(133) J. Fritz and C. Hedrick, *Anal. Chem.*, **37**, 1015 (1965).

molecules clustered around each chlorine atom in the pentachloro derivative than in the monochloro derivatives.

1,2,3-Trimethoxybenzene is an interesting example of how the steric effect can operate to inhibit resonance and thus decrease  $\pi$ .

$$\log P_{C_6H_3(OCH_3)_3} = \log P_{C_6H_6} + 3\pi_{OCH_3} = 2.13 - 0.06 = 2.07$$

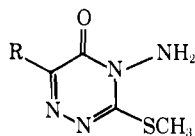
The measured value is 1.53, indicating greater than expected affinity for the water phase. If we assumed that only the central  $OCH_3$  is perturbed and that it is twisted out of the plane of the ring so that resonance between the oxygen lone pair electrons and the  $\pi$  electrons of the benzene ring is prevented, then the central  $OCH_3$  might be expected to have the  $\pi$  value of an aliphatic function. This can be tested as follows.

$$\pi_{OCH_3} = \log P_{1,2,3\text{-trimethoxybenzene}} - \log P_{1,3\text{-dimethoxybenzene}} = 1.53 - 2.09 = -0.56$$

The  $\pi$  value for the "twisted  $-OCH_3$ " ( $-0.56$ ) is much closer to that of an aliphatic  $OCH_3$  ( $-0.47$ ) than it is to an ordinary aromatic  $-OCH_3$  ( $-0.02$ ).

Sometimes the steric effects of alkyl functions on the solubility characteristics of an adjacent carbonyl function can be quantitatively correlated with the Taft  $E_s$  parameter. The partition coefficients of a series of 2-alkyltriazinones are listed in Table XIII along with  $E_s$  values. The calculated  $\log P$  values

Table XIII  
Steric Effect in Triazinones



No.	R	Calcd $\log P^a$	$E_s$	Obsd $\log P$	Log P pred by eq 54	Obsd - pred
1.	CH <sub>3</sub>	-0.16	0.00	-0.16	-0.14	-0.02
2.	C <sub>2</sub> H <sub>5</sub>	0.34	-0.07	0.46	0.41	0.05
3.	<i>n</i> -C <sub>3</sub> H <sub>7</sub>	0.84	-0.36	0.93	1.04	-0.11
4.	<i>i</i> -C <sub>3</sub> H <sub>7</sub>	0.64	-0.47	1.01	0.88	0.13
5.	<i>i</i> -C <sub>4</sub> H <sub>9</sub>	1.14	-0.93	1.39	1.57	-0.18
6.	<i>tert</i> -C <sub>4</sub> H <sub>9</sub>	0.94	-1.54	1.70	1.60	0.10
7.	<i>i</i> -C <sub>5</sub> H <sub>11</sub>	1.65	-0.35	1.85	1.85	0.00
8.	<i>c</i> -C <sub>6</sub> H <sub>11</sub>	1.81	-0.79	2.14	2.19	-0.05
9.	<i>n</i> -C <sub>6</sub> H <sub>13</sub>	2.35	-0.40	2.68	2.59	0.08

<sup>a</sup> The methyl derivative used as the "parent" compound and  $\pi_{alk}$  from either the phenoxyacetic acid or benzene systems used to calculate the "normal"  $\log P$  values of the remaining compounds.

are those expected from the addition of  $\pi_{alkyl}$  to unsubstituted triazinone. It is apparent that the observed values of Draber, Büchel, *et al.*,<sup>134</sup> are higher. Equation 54 rationalizes this difference in terms of  $E_s$ .

$$\log P_{obsd} = 1.026 \log P_{calcd} - 0.392E_s + 0.024 \quad (54)$$

$$\begin{matrix} n & r & s \\ 9 & 0.993 & 0.018 \end{matrix}$$

Another instance in which chain branching results in hydrophilic shielding and increases  $\log P$  (contrary to an expected negative  $\Delta\pi$  as explained in the following section) has been reported<sup>135</sup> in the study of a series of dialkylphosphorodithioteic acids. Branching apparently also increases the acid dissociation constant, an effect which would not be expected from electronic forces alone.

Steric shielding of a tertiary nitrogen apparently explains the difference in the partition coefficients between the allo (planar and hindered access to N) and epiallo (N exposed at "bend") isomers of corynantheidine-type alkaloids.<sup>136</sup> In the heptane-water system, the  $\Delta\pi$  for the allo-epiallo transition is +1.07 in one instance and +0.76 in another. However, it is not clear from the proposed structural formulas why there should be a much lower  $\Delta\pi$  comparing the normal (planar) with the pseudo (nonplanar) in two other examples [ $\Delta\pi(\text{speciogynine} - \text{mitrociliatine}) = +0.11$ ;  $\Delta\pi(\text{dihydrocorynanthine} - \text{hirsutine}) = +0.11$ ].

Some care must be exercised in deciding whether a difference in observed partition coefficients between stereoisomers is truly the result of the balance of hydrophilic-lipophilic forces. For example,  $P$  values have been measured<sup>137</sup> in benzene-water for the exo ( $P = 2.37$ ) and endo ( $P = 4.23$ ) epimers of an analog of meperidine. However, the aqueous phase was buffered at 7.4 and, since the exo form is more basic ( $pK_a = 8.35$  vs. 8.19), there is a lower percentage in the un-ionized form. The corrected  $P$  values are exo = 29 and endo = 30. The observed lower biological activity of the exo epimer stems from its  $pK_a$ .

#### 4. Branching

A normal aliphatic chain usually has a higher  $\pi$  value than a branched chain. For example,  $\pi_{3-Pt} = 1.45$  and  $\pi_{3-i-Pt} = 1.33$  in the phenoxyacetic acid system. When branching occurs at the functional group, the effect appears to be slightly greater; *e.g.*, *tert*-BuOH = 0.37, 2-BuOH = 0.61, and 1-BuOH = 0.88. Similarly,  $\log P_{i-Pt,NE_2} = 0.03$  while  $\log P_{Pt,NE_2} = 0.31$ . In contrast to this, however, there seems to be no difference between  $\log P$  for isopropylbenzene and propylbenzene. Also, there appears to be no lowering of  $\log P$  in *tert*-butylbenzene. The observed value of 4.11 is what would be expected for the *n*-butyl derivative if calculated from the value of 3.68 for propylbenzene. Accepting the fact that some discrepancies remain to be resolved, we have, for the purpose of calculating  $\log P$  values, tentatively used the value of  $-0.20$  for branching.

#### 5. Conformational Effects

Another problem which must be taken into account in the additive-constitutive character of  $\log P$  is the conformation of organic compounds in solution. It might be expected that when aliphatic chains become long enough, they would tend to coil up in solution with the formation of molecular oil droplets. With simple molecules such as monofunctional straight-chain aliphatic compounds, clear-cut evidence seems to be lacking for such "balling-up" of chains. In fact, it ap-

(135) R. Zucal, J. Dean, and T. Handley, *Anal. Chem.*, **35**, 988 (1963).

(136) A. Beckett and D. Dwuma-Badu, *J. Pharm. Pharmacol.*, **21**, 162S (1969).

(137) P. Portoghese, A. Mikhail, and H. Kupferberg, *J. Med. Chem.*, **11**, 219 (1968).

(134) W. Draber, K. Büchel, K. Dickore, A. Trebst, and E. Pistorius, *Progr. Photosyn. Res.*, **3**, 1789 (1969).

pears that it will be quite difficult to disentangle this phenomenon from that of premicellar interactions.

If "balling-up" of an aliphatic chain occurred, one would expect the number of water molecules held in the flickering cluster around such a ball to be much less than the number held around the extended chain. This would mean a lower desolvation energy on phase transfer and, hence, a lesser increment in partition coefficient—possibly an abrupt discontinuity in  $\Delta \log P$  as one ascends a homologous series.

A clear example of such changes in partition coefficient as one ascends a homologous series is lacking. In the RCOOH series, normal behavior occurs up to decanoic acid.

$$\Delta \log P / \text{CH}_2 = 1/8(\log P_{\text{C}_9\text{H}_{19}\text{COOH}} - \log P_{\text{C}_8\text{H}_{17}\text{COOH}}) = 0.53$$

However,  $\Delta \pi$  between decanoic and dodecanoic acid is much smaller than the 1.0 unit expected in terms of simple additivity. The  $\log P$  values for dodecanoic acid were determined using  $^{14}\text{C}$ -labeled material. Great difficulty was experienced in obtaining reproducible results, and considerable uncertainty surrounds the value of 4.20 for dodecanoic acid. Whether this unexpectedly low value is due to a folding up of the aliphatic chain or a premicellar tail-to-tail dimerization remains an open question. Other solvent systems also produce a constant increment in  $\log P$  per  $-\text{CH}_2-$  group for fatty acid homologs.<sup>138</sup> This increment is about 0.6 in the heptane-water system for valeric through myristic acids.<sup>139</sup>

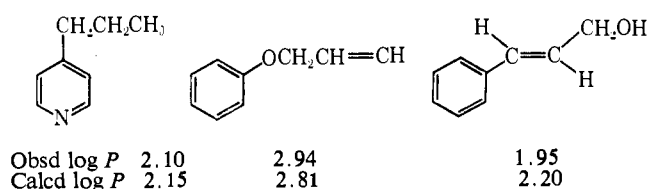
The alcohol homologous series also shows the expected increase in  $\log P$  with the addition of each  $\text{CH}_2$  unit. In this series

$$\Delta \log P / \text{CH}_2 = 1/11(\log P_{\text{dodecanol}} - \log P_{\text{methanol}}) = 0.52$$

there was some difficulty in obtaining constant  $\log P$  values over a wide concentration range for alcohols of greater chain length than  $\text{C}_{12}$ .

In summary, it would seem that "molecular oil droplet" formation does not occur with simple aliphatic compounds before  $\text{C}_{14}$ . If folding does not occur up to  $\text{C}_{14}$ , it would imply that there is an inherent stability in the aqueous phase of the aliphatic chain caused, perhaps, by a restriction of rotation around each C-C bond as Aranow and Witten proposed.<sup>79</sup>

The situation is of course much different when more than one reactive center is present per molecule. It appears that folded conformations of many organic compounds in aqueous solution can be detected through partitioning studies. This is well illustrated by a study of derivatives of the type  $\text{C}_6\text{H}_5\text{-CH}_2\text{CH}_2\text{CH}_2\text{X}$ . When  $\text{X} = \text{H}$ ,  $\log P$  was found to be 3.68 which is quite close to the calculated value:  $\log P_{\text{benzene}} + 3\pi_{\text{CH}_2} = 2.13 + 3(0.50) = 3.63$ . Other mixed aliphatic-aromatic compounds also give good agreement between calculated and observed values. However, in comparing  $\pi$  values



between  $\text{RX}$  and  $\text{C}_6\text{H}_5(\text{CH}_2)_3\text{X}$ , a constant discrepancy was observed as shown in Table XIV. The phenylpropyl functions

Table XIV

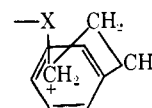
Effect upon  $\pi$  of Folding of Alkyl Chains

Function	$\pi_1^a$	$\pi_2^b$	$\pi_1 - \pi_2$
OH	-1.80	-1.16	0.64
F	-0.73	-0.17	0.56
Cl	-0.13	0.39	0.52
Br	0.04	0.60	0.56
I	0.22	1.00	0.78
COOH	-1.26	-0.67	0.59
COOCH <sub>3</sub>	-0.91	-0.27	0.64
COCH <sub>3</sub>	-1.26	-0.71	0.55
NH <sub>2</sub>	-1.85	-1.19	0.66
CN	-1.47	-0.84	0.63
OCH <sub>3</sub>	-0.98	-0.47	0.51
CONH <sub>2</sub>	-2.28	-1.71	0.57

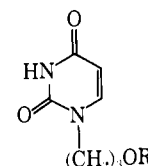
$$\Delta \log P / \text{CH}_2 = 0.60 \pm 0.05$$

<sup>a</sup>  $\log P_{\text{C}_6\text{H}_5(\text{CH}_2)_3\text{X}} - \log P_{\text{C}_6\text{H}_5(\text{CH}_2)_3\text{H}}$ . <sup>b</sup>  $\log P_{\text{RX}} - \log P_{\text{R}}$ . R is a normal alkyl group of four carbon atoms or less.

turn out to have a greater affinity for the aqueous phase than one would expect from the corresponding aliphatic functions. Most surprising was the fact that  $\Delta \pi$  for the two systems was essentially constant regardless of the kind of function compared. It was suggested that this greater than expected aqueous solubility of phenylpropyl derivatives is due to folding of the side chain onto the phenyl ring. Such folding could be caused by the interaction of the dipole of the side chain with the  $\pi$  electrons of the ring. It would also be promoted by intramolecular hydrophobic bonding. However, the dipolar interaction would appear to be critical in overcoming the small forces which tend to keep the chain extended since propylbenzene, lacking such a dipole, has the expected  $\log P$  value. This compact form of the phenylpropyl derivative means a smaller apolar surface for solvation and, hence, a lower entropy change in the desolvation process of partitioning. Since the size or kind of polar function has little to do with  $\Delta \pi$ , it seems likely that this function projects away from the ring side-chain complex.



Nmr evidence has been gathered<sup>140</sup> to show that similar folding occurs in compounds having the following structure.



It has also been suggested<sup>141</sup> that such folding results in a lower than expected  $\log P$  for vitamin K. Folding is included as one of the possible group interaction parameters for a  $\pi$ -additivity scheme developed for the cyclohexane-water system.<sup>141</sup>

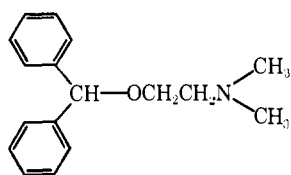
(138) A. Beckett and A. Moffat, *J. Pharm. Pharmacol.*, **21**, 144s (1969).

(139) D. Goodman, *J. Amer. Chem. Soc.*, **80**, 3887 (1958).

(140) B. Baker, M. Kawazu, D. Santi, and T. Schwan, *J. Med. Chem.*, **10**, 304 (1967).

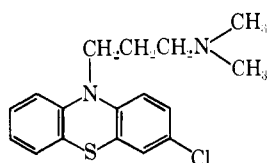
(141) D. Currie, C. Lough, R. Silver, and H. Holmes, *Can. J. Chem.*, **44**, 1035 (1966).

Certainly folding must be considered whenever a calculated log  $P$  must be used. The following two examples indicate how the problem can be treated in a straightforward manner.



diphenhydramine

Log  $P$  for diphenhydramine =  $4.26 + 0.30 - 0.73 + 0.50 - 0.95 = 3.38$ , which would be adequate for most purposes, considering that the observed log  $P$  is 3.27. In the above example, 4.26 is  $2(\log P_{C_6H_5})$ . The value of 0.30 is for a  $CH_2$  on which branching occurs. The value of (-0.73) for the  $OCH_2$  moiety is obtained by subtracting 1.50 from 0.77, the value for log  $P_{EtOEt}$ . For the  $-N(CH_3)_2$  unit we have used the value of -0.95 obtained for the solute,  $C_6H_5(CH_2)_3N(CH_3)_2$ . It is assumed that folding of diphenylhydramine occurs in aqueous solution, just as it did in the amine model system used in the calculations.



chlorpromazine

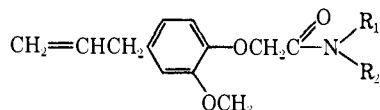
As another example log  $P$  for chlorpromazine can be calculated as  $4.15 + 0.70 + 0.60 = 5.45$ , which is in satisfactory agreement with the observed log  $P = 5.35$ .

The value of 4.15 is log  $P$  for phenothiazine. To this is added  $\pi_{Cl}$  of 0.70 and 0.60 for  $\pi_{(CH_2)_3N(CH_3)_2}$ . For the side chain,  $\pi$  was calculated from a model in which the opportunity for folding was the same as for chlorpromazine.

$$\pi_{(CH_2)_3N(CH_3)_2} = \log P_{C_6H_5(CH_2)_3N(CH_3)_2} - \log P_{C_6H_5} = 2.73 - 2.13 = 0.60$$

The oleyl alcohol-water partition coefficients of a series of phenoxyacetamide derivatives<sup>142</sup> appear to provide further examples of folding over a benzene ring. In this case, the deviations from additivity in  $\pi$  values appear to be maximized when folding over the ring brings together hydrophobic portions of two para ring substituents.

The basic structure investigated can be depicted as

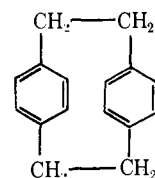


When  $R_1 = R_2 =$  methyl, log  $P = 1.53$ ; ethyl, 2.51;  $n$ -butyl, 1.80.

Folding of the phenoxyacetamide side chain over the benzene ring might be expected to show a constant  $\Delta\pi$  as was indicated in the examples in Table XIV. But after the expected increase in log  $P$  in ascending the series from dimethyl to diethyl, a sudden decrease in lipophilic character is noted with the substituent chains of greater length. This observation

can be explained if it is postulated that folding will occur in all cases, but if the alkyl chains,  $R_1$  and  $R_2$ , are sufficiently long, they will be placed in such close proximity to the  $p$ -allyl group that cancellation of some hydrophobic character due to overlapping occurs.

Evidence that hydrophobic overlap can, indeed, lower the partition coefficient can be seen in molecules that are constrained to take an overlapped position. An example would be paracyclophane, whose log  $P$  would be expected to be close to twice that of xylene, if the entire hydrophobic area were exposed.



paracyclophane

The observed value as shown in Table XVII is even lower than that of xylene itself, and thus it appears that only one-half the potential hydrophobic area is "exposed."

Of course, we must assume that in all these determinations of  $P$  values care was taken to work below cmc. It is conceivable that if a constant solute concentration were employed throughout a homologous series, the cmc would be exceeded with the higher members, giving falsely low log  $P$  values for them. While part of the effect noted in the phenoxyacetamide series could have arisen from this cause, it is highly unlikely that all of it can be explained in this fashion, especially since the biological response of the series so closely follows the measured log  $P$  values.

Although an actual conformational change which brings a polar group on a side chain in close proximity with the  $\pi$  electron cloud on the ring seems the best way to explain these negative  $\Delta\pi$ 's (observed - calculated), nevertheless, there are some apparent weaknesses in this hypothesis. First of all, it seems entirely possible that the close approach of the polar group and the ring, which causes the hydrophobic chain to fold on itself, might eliminate a corresponding amount of polar bonding with water, and the loss in hydrophilic bonding might cancel the loss in hydrophobic bonding. Furthermore, the folding must occur in the aqueous phase to cause the unexpectedly low log  $P$ , but it is difficult to imagine any induced polar force or charge-transfer condition which would be effective in a medium as polar as water. Finally, once the initial  $\pi$  lowering is encountered in several homologous series, no additional effect is seen as the chain length is increased, even though a larger hydrophobic area is presumed to be coming into close contact. This is very apparent in a series of 3-substituted 2-hydroxynaphthoquinones<sup>143</sup> where the same  $-\Delta\pi$  is noted whether the polar group and ring are separated by three methylene units or nine. Of course, in a chain longer than three carbon atoms, the entropy gained through hydrophobic overlap might be exactly cancelled by the energy needed to overlap the hydrogen atoms as each C-C bond is rotated in the manner needed for folding the chain.

It is to be expected that solutes which can readily form intramolecular hydrogen bonds will adopt this favored con-

(142) T. Irikura, *Yakugaku Zasshi*, 82, 356 (1962).

(143) L. Fieser, M. Ettliger, and G. Fawaz, *J. Amer. Chem. Soc.*, 70, 3228 (1948).

figuration during partitioning and that  $\pi$  additivity will certainly be affected. Salicylic acid provides a typical example.

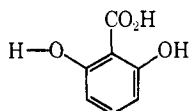
$$\log P_{o\text{-hydroxybenzoic acid}} - \log P_{p\text{-hydroxybenzoic acid}} = \Delta\pi$$

2.21	1.58	0.63
------	------	------



The  $\Delta\pi$  for a six-membered H-bonded ring is positive, as expected, because intramolecular H-bonding would reduce the affinity for the aqueous phase.

An even further reduction in hydrophobicity is possible when two ortho groups are involved:



$$\log P \text{ (calcd)} = \log P_{p\text{-hydroxybenzoic acid}} + \pi(\text{OH para to CO}_2\text{H})$$

$$= 1.58 + (-0.30) = 1.28$$

$$\log P \text{ (obsd)} = 2.20$$

$$\Delta\pi = +0.92$$

An intramolecular H bond of the type ( $-\text{N}-\text{H}\cdots\text{O}$ ) in a six-membered ring is not expected to be as strong, and the  $\Delta\pi$  is found to be smaller.

$$\log P_{\text{anthranilic acid}} - \log P_{p\text{-aminobenzoic acid}} = \Delta\pi$$

1.21	0.68	= +0.53
------	------	---------

## VI. Uses of Partition Measurements

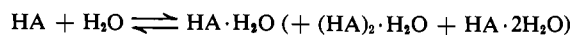
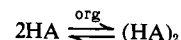
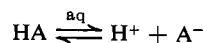
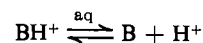
### A. COUNTERCURRENT DISTRIBUTION

The relationship between the partition coefficient of a particular solute and the number of transfers necessary to properly characterize the distribution curve or to separate it from closely allied impurities is adequately covered in the literature.<sup>22,106,144-147</sup> It is a common practice to make a number of separate preliminary runs with both solute and suspected impurity in several solvent systems to attempt to optimize the two solvents used for the final distribution. Following the calculation procedures presented in section V and using the values listed in Table XVII as "parent" molecules, it may be possible to obtain reliable estimates of partition coefficients of a great number of solutes for many systems in which measurements have not yet been made. This procedure might considerably shorten the time required to find optimal extraction conditions. Furthermore, as more knowledge is gained on the effect of different solvents upon solute conformation (section V.D), better advantage could be taken in enhancing selectivity by providing an environment with precisely the right balance of conformational averages.<sup>23</sup> This knowledge might also prove helpful in predicting the possibility of metastable conformational forms which can cause an apparent shift in the partition ratio during fractionation.

### B. MEASUREMENT OF EQUILIBRIA

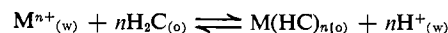
The use of partitioning measurements to determine the equilibrium constants for the reactions

- (144) L. Craig, C. Golumbic, H. Mighton, and E. Titus, *J. Biol. Chem.*, **161**, 321 (1945).  
 (145) R. Priore and R. Kirdani, *Anal. Biochem.*, **24**, 360 (1968).  
 (146) L. Craig, *J. Biol. Chem.*, **155**, 519 (1944).  
 (147) B. Williamson and L. Craig, *ibid.*, **168**, 687 (1947).



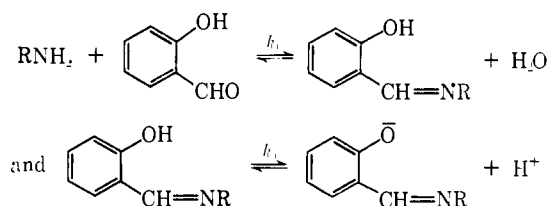
has been discussed in section II.B.

Many of the partition coefficient values reported in Table XVII for solutes which are metal ion complexing agents<sup>50,148,149</sup> have been measured in order to determine the equilibrium constant for the reaction of the type



where M is the metal of valence  $n$ ,  $\text{H}_2\text{C}$  is the neutral complexing agent (e.g., dithiazone), and (w) and (o) refer to the water and organic phases, respectively.

Another type of equilibrium studied by partitioning methods is that between an aldehyde and amine in forming a Schiff base. With salicylaldehyde<sup>150,151</sup> a study of the distribution as a function of pH must take into consideration a second equilibrium



The shape of the curves depicting this relationship are seen in Figures 3 and 4. In each figure, section 1 of the curve represents the  $P$  value for free aldehyde, section 2 that of the Schiff base, and section 3 that of the phenoxide ion of the Schiff base. From separate evaluation of the dissociation constants of the components of the Schiff base, the log of the formation constant,  $\log K_f$ , is calculated to be 4.75 for the  $n$ -butylsalicylideneimine and 4.57 for the methyl analog.

### C. RELATIONSHIP TO HLB AND EMULSION SYSTEMS

The HLB (hydrophile-lipophile balance) system, which was established on a purely empirical basis,<sup>152</sup> has been a very potent tool in the hands of emulsion technologists, but it has been felt for some time that even more rapid strides could be made in this field if this system could be directly related to the partition coefficient which is in turn based firmly on thermodynamics. Experimental difficulties have made such a task very difficult,<sup>153</sup> but Davies, who studied the kinetics of coalescence in emulsion systems, has proposed an equation<sup>154</sup> which relates the two in simple fashion

$$(\text{HLB} - 7) = 0.36 \ln 1/P$$

From this relationship it appears possible to give extrathermodynamic significance to each structural element in deter-

(148) S. Balt and E. Vandalen, *Anal. Chim. Acta*, **30**, 434 (1964).

(149) B. Hok, *Svensk Kem. Tidskr.*, **65**, 182 (1953).

(150) R. Green and P. Alexander, *Aust. J. Chem.*, **18**, 329 (1965).

(151) R. Green and E. Meaurier, *ibid.*, **19**, 229 (1966).

(152) W. Griffin, *J. Soc. Cosmet. Chem.*, **1**, 311 (1949).

(153) W. Griffin, *ibid.*, **5**, 249 (1954).

(154) J. T. Davies, *Proc. Int. Congr. Surface Activ.*, **2nd**, **1**, 476 (1957).



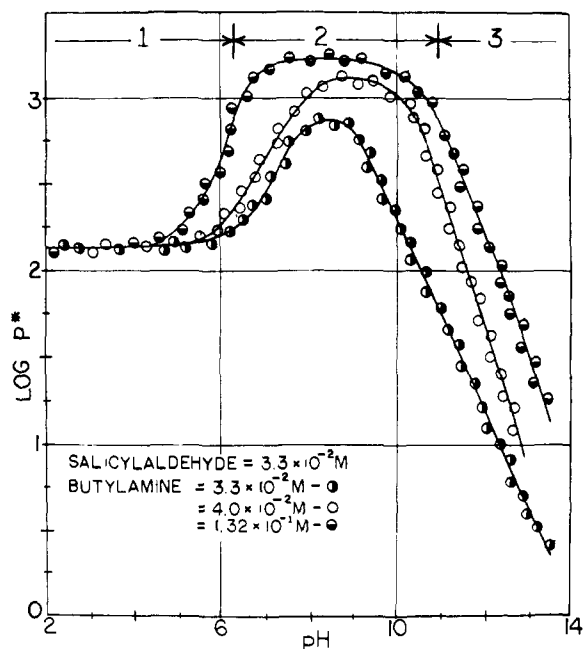


Figure 3. Formation of *n*-butylsalicylideneimine and partitioning between toluene and water.

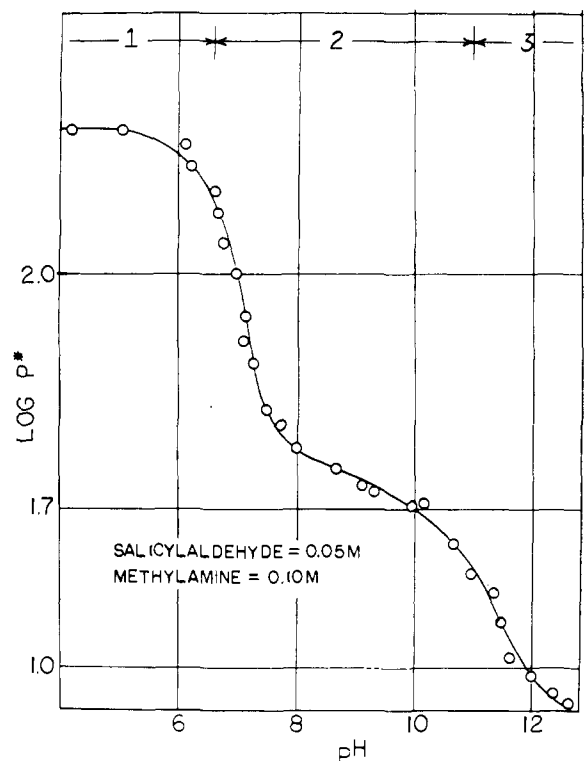


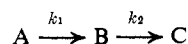
Figure 4. Formation of methylsalicylideneimine and partitioning between toluene and water.

mining the molecule's ability to function as a wetting agent, detergent, or defoamer.<sup>61, 155</sup>

### D. MEASUREMENT OF DISSOLUTION AND PARTITIONING RATE OF DRUGS

It is widely accepted that the dissolution rate of any drug given in solid form can have a marked influence upon the amount effectively absorbed. Since drug absorption is also affected by its effective partition coefficient, it is desirable to measure these properties simultaneously. This becomes more important in view of the observation that some surfactants are capable of increasing the rate of solution while simultaneously lowering the rate of partitioning.<sup>156</sup> With drugs that are poorly water soluble, the usual measurements of solubility rates require large volumes of water so that the drug concentration is far below the saturation level. Yet this often means that a separate extraction step must be carried out so that a sufficiently high concentration of drug is obtained for accurate analysis.

As a model system, hard, nondisintegrating tablets of salicylic acid of uniform surface areas were stirred under standard conditions in aqueous buffer (pH 2) with an upper octanol phase present.<sup>156</sup> The system can be described as follows.



*A* = weight of drug in tablet form, *B* = weight of drug in aqueous phase, *C* = weight of drug in octanol phase; then if *W<sub>s</sub>* = weight of drug needed to saturate the aqueous phase, and using equal volumes of the two phases, the kinetic equations are

$$-dA/dt = k_1(W_s - B)$$

$$dB/dt = k_1(W_s - B) - k_2B$$

$$dC/dt = k_2B$$

In the early stages of dissolution, *W<sub>s</sub>* ≫ *B* and

$$-dA/dt = k_1W_s \tag{55}$$

Furthermore, for lipophilic drugs, a steady-state concentration of *B* is quickly attained

$$dB/dt = 0 = k_1(W_s - B) - k_2B \tag{56}$$

and

$$dC/dt = k_2B = k_1(W_s - B) = -dA/dt \tag{57}$$

The rate of appearance of drug in the lipid phase is easily measured and becomes equal to the dissolution rate in the aqueous phase.

If partitioning between aqueous and organic phases is to serve as a model system of how a biologically interesting solute passes through membranes in living tissue, then the rate at which equilibrium is attained might be as important as the equilibrium value itself. For solutes of similar structure, the activation energies for phase transfer are often approximately equal, and therefore the transfer rate constants are proportional to the equilibrium constants, *P*.<sup>92</sup> However, an interesting exception was reported<sup>94</sup> when a more rapid rate of partitioning from water to butanol was found for KCl than for NaCl, even though their *P* values are approximately equal. The measured difference in activation energy between these salts was 0.8 kcal/mol, which probably was due to

(155) P. Becher, "Emulsions, Theory and Practice," Reinhold, New York, N. Y., 1966, p 233.

(156) P. J. Niebergall, M. Patil, and E. Sugita, *J. Pharm. Sci.*, **56**, 943 (1967).

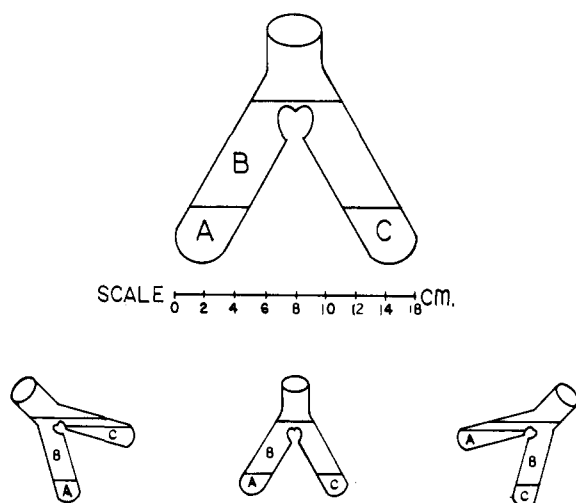


Figure 5. Effects of gentle rocking on the interfaces. Partitioning rate apparatus: Doluisio and Swintosky Y-tube.

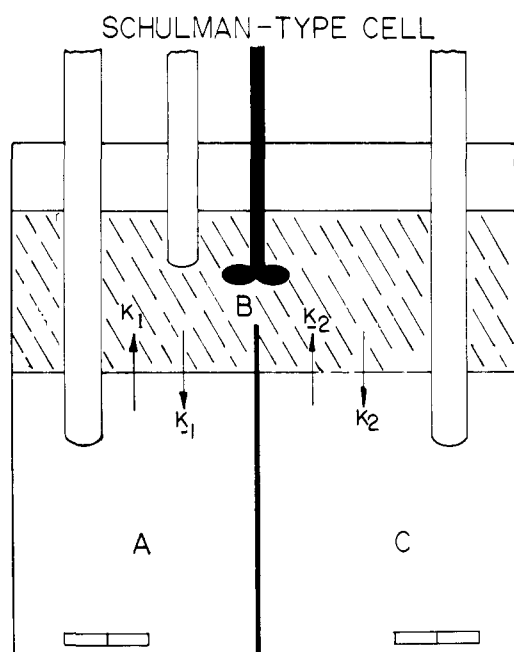


Figure 6. Magnetic stirrers used to study rate of transport across lipid barrier; A, B, and C have the same meaning as in Figure 5.

differences in the loss of hydration as the ions entered the butanol phase.

Two basically different types of apparatus have been designed for partitioning rate studies. Doluisio and Swintosky<sup>157</sup> employed an inverted Y tube in which the oil phase in the neck was the only connecting "link" between the separate aqueous phases in the arms (see Figure 5). A gentle rocking motion was applied which gradually expanded and contracted the interfaces. This accelerated solute transfer but normally was insufficient to cause emulsion problems.

Earlier, Schulman<sup>94</sup> devised a two-compartment cell in which the separated aqueous phases were independently stirred from below while the "connecting" oil phase was stirred from above (see Figure 6). This apparatus has the advantage that the interface area remains constant, and there-

fore partition studies can be made on various solutes in the presence of trace amounts of surfactants (e.g., phospholipids) at the oil-water interface.

Either type of apparatus is capable of providing useful information on the rate of transfer from one aqueous environment through an organic phase (simulating a membrane) to a second aqueous environment. If the solute is placed initially in compartment A at pH 2 and compartment C is at pH 7.4, one has a model for transport across the gastric membrane.

The basic importance of partitioning rate studies cannot be seriously questioned, but the interpretation of the results is still subject to some ambiguity. For example, Augustine and Swarbrick<sup>158</sup> used a Schulman-type cell to study the effect of lipid polarity on the rate of transport of salicylic acid. As the polarity of the lipid phase was increased (by increasing the mole fraction of isoamyl alcohol in cyclohexane), there was an increase in rate at which salicylic acid left the first aqueous phase. This is the expected result and confirms the work of Khalil and Martin<sup>121</sup> who used a Y-tube apparatus. However, this same increase in polarity also increased  $k_2$ , the rate at which salicylic acid left the lipid phase for the second aqueous phase. This is unexpected and contrary to Khalil and Martin's findings. Augustine and Swarbrick then found that, while keeping the surface to volume ratio constant, they could reverse the order of  $k_2$  if they increased the stirring rate in the aqueous compartments. Then  $k_2$  did decrease with increasing lipid polarity, and the value for  $k_1$  was essentially unchanged.

Other discrepancies between measurements using the Y-tube and the Schulman cells have been noted, and it appears that some of the conditions assumed in the theoretical development that are not being met under all experimental conditions. For instance, it is assumed that the rate-determining step is the actual crossing of the interface boundary. This should be the case if the diffusion layer is of the order of magnitude of  $30 \mu$  in thickness.<sup>94</sup> Some care is required to adjust the stirring rate between that which is so slow that *diffusion* becomes rate determining and a stirring rate which is so great that nonlaminar flow breaks up the interface.

## E. LIQUID ION-EXCHANGE MEDIA AND ION-SELECTIVE ELECTRODES

The application of partition coefficients to the study of liquid ion-selective electrodes has been discussed in section II.D. It should be emphasized that the selectivity is dependent upon the nature of the organic *solvent* and not on the nature of the site species (alkyl acid or amine).

## F. MEASUREMENT OF HYDROPHOBIC BONDING ABILITY. STRUCTURE-ACTIVITY PARAMETERS

In the introduction it was pointed out that in the past decade far more partition coefficients have been determined in connection with biological structure-activity relationship studies than for all other purposes combined. A large number of these studies have already been referred to,<sup>8,159</sup> and the usefulness of the octanol-water parameter to predict the binding of solutes to serum albumin and to purified enzymes has been convincingly established.

(158) M. Augustine and J. Swarbrick, *ibid.*, **59**, 314 (1970).

(159) W. Scholtan, K. Schlossman, and H. Rosenkranz, *Arzneim.-Forsch.*, **18**, 767 (1968).

(157) J. Doluisio and J. Swintosky, *J. Pharm. Sci.*, **53**, 597 (1964).

Table XV  
Improved  $\pi$  Values<sup>a</sup>

Function	Phenoxyacetic acids	Function	Phenylacetic acids	Function	Benzoic acids
3-F	0.22	3-Me	0.54	4-Cl	0.78
2-Cl	0.76	3-CF <sub>3</sub>	1.21	3-OCH <sub>2</sub> CO <sub>2</sub> H	-0.76
2-Br	0.84	3-CN	-0.23		<i>Phenols</i>
4-Br	1.19	3-OCH <sub>3</sub>	0.09	3-CN	0.22
4-I	1.43	3-CO <sub>2</sub> H	-0.27	4-NH <sub>2</sub>	-1.44
2-Me	0.84	3-SO <sub>2</sub> CH <sub>3</sub>	-1.35		<i>Anilines</i>
4-Me	0.60			4-OH	-0.86
2-Et	1.39				<i>Nitrobenzenes</i>
2-NO <sub>2</sub>	-0.04			4-OCH <sub>2</sub> CO <sub>2</sub> H	-0.37

<sup>a</sup> Differing by more than 0.05 from those listed in ref 10.

Evidence is rapidly accumulating which supports the postulate that simple, nonspecific bonding of solutes is capable not only of markedly affecting enzyme action through allosteric effects, but that it often produces biologically important modifications of membrane function by a similar mechanism. For example, it has been shown that the action of alkanols in the protection of red cells against hypotonic hemolysis is a linear function of their hydrophobic character as measured by partitioning experiments<sup>160</sup> and, furthermore, that the concentration which affords hemolytic protection is very nearly the same as that which causes anesthesia.<sup>161</sup> The partition coefficient of alcohols between red cell ghosts and water has been measured, and it was found that in going from water to membrane, the free energy of transfer per methylene group was the same as that between water and octanol, namely,  $\cong -690$  cal/mol.<sup>161</sup>

The usefulness of a "bonding" parameter based on partition values from a single reference system can be greatly extended if not every value required in every structure-activity study need be measured. The principles of additivity for the octanol-water system were covered in section V, and examples of how values in Table XVII can be systematically applied in this fashion are given in the following section.

## VII. The Use of Table XVII

The amount of partitioning data uncovered in the present study was great enough to warrant its storage, manipulation, and retrieval by computer. It will be noted that some of the log  $P_{\text{octanol}}$  values listed in Table XVII differ slightly from those published earlier from this laboratory. Generally, the differences resulted from the use of improved analytical techniques and the values in Table XVII should be considered more reliable. The significant changes in  $\pi$  constants from those contained in ref 10 appear in Table XV.

In Table XVII the data have been sorted in their most useful form; namely, the solutes are sorted first by empirical formula, then alphabetically by name, and finally by solvent system.<sup>162</sup>

The solute name appears in the right-hand column of Table XVII, and the reference from which the data were obtained appears in column 4. Column 6 lists the measured log  $P$  for the solute in the solvent system which appears in column 3. This value has been corrected for ionization, if any, and dimerization if measurements were reported over a sufficiently wide concentration range. The values are footnoted (column 5) as required. Column 7 lists the *calculated* log  $P$  for that solute in the octanol-water system. The regression equations used for this calculation appear in Table VIII together with the values for the standard deviation ( $s$ ), the correlation coefficient ( $r$ ), and the number of data points ( $n$ ) which were available to establish the relationship. While the standard deviations indicate that some of these "regression values" are not sufficiently reliable for some purposes, nevertheless, they are useful in providing the only common scale of lipophilicity since only 20% of the values in the entire table are from a single system.

Space limitations and the absence of small letters and italics in computer printing precluded the use of the *Chemical Abstracts* system of nomenclature. For convenience in computer alphabetizing, the following rules were followed.

- Aliphatic chains—branching: I = iso, S = secondary, and T = tertiary, as usual. "Normal" isomers are assumed if not specified; *i.e.*, BUTYRIC ACID = *n*-butanoic acid. N = nitrogen; *e.g.*, N-methylaniline.
- Aliphatic chains—location from primary functional group is designated by Greek letter: A =  $\alpha$ , B =  $\beta$ , G =  $\gamma$ , D =  $\delta$ , E =  $\epsilon$ , and W =  $\omega$ ; *e.g.*, A-BROMOPROPIONIC ACID.
- Position on benzene rings
  - if only two functional groups or substituents: O = ortho, M = meta, and P = para, and the letter precedes the name; *e.g.*, O-NITROPHENOL.
  - if three or more substituents, numbering is from primary functional group; *e.g.*, 3,4-DIMETHYLPHENOL.
- In all other ring systems, a numbering system is used regardless of the number of substituents; *e.g.*, 3-AMINOPYRIDINE, 2-NAPHTHOL.
- For sorting and retrieval purposes, many trivial names were relegated to a secondary position; *e.g.*, M-DIHYDROXYBENZENE/RESORCINOL/; O-DIHYDROXYBENZENE/CATECHOL/.

(160) H. Schneider, *Biochim. Biophys. Acta*, **163**, 451 (1968).

(161) P. Seeman, S. Roth, and H. Schneider, *ibid.*, **225**, 171 (1971).

(162) As stored in the computer, each solute has also been given a unique Wiswesser line notation ("The Wiswesser Line-Formula Chemical Notation," E. G. Smith, Ed., McGraw-Hill, New York, N. Y., 1968). A comparison of  $\pi$  values by functional groups is greatly facilitated by referring to a printout sorted by a permuted alphabetic listing by WLN notation.

6. In the empirical formula, the subscript 1 is expressed and not assumed.

It is unlikely that, for the foreseeable future, there will be measured  $\log P$  values for more than a small fraction of the interesting molecules which might be needed in structure-activity work. One of the aims of this present article is to make it possible to calculate, with a reasonable degree of confidence, the  $\log P$  values in one common system (octanol-water) for a wide variety of molecules for which values have not, or perhaps cannot, be determined. The present section will explain how the calculation procedures given in section V can be combined with the regression equations of Table VIII and the data in Table XVII to yield calculated values of the highest possible confidence level.

It was evident in section V that there are often several "routes" by which one can calculate a  $P_{\text{octanol}}$  value, depending upon the choice of "parent" molecule and how substructures are pieced together. If the computed values by all the "routes" agree within  $\pm 0.1$  log unit and also agree with any  $\log P_{\text{octanol}}$  for that solute appearing in Table XVII as calculated from another solvent system, then one can accept an average value with some confidence. If there are some widely divergent values, however, then one must choose the "route" which has the greatest likelihood of yielding an accurate value. In order to help make such a choice, we have assigned "uncertainty units" (uu) to each type of calculation step so that the route with the lowest sum is the one which can be used with greatest confidence. Although these "u" units have been assigned by considering the average deviation in  $\log P$  values of solutes with the required structural differences, and even though they can be directly added to the standard deviations of the regression equation values (see Table VIII), they are *not* to be considered as standard deviations in the strict sense. They are listed in Table XVI. The standard deviations of the observed  $\log P_{\text{octanol}}$  values are used if given in the reference; otherwise, an arbitrary uu of 0.05 is taken.

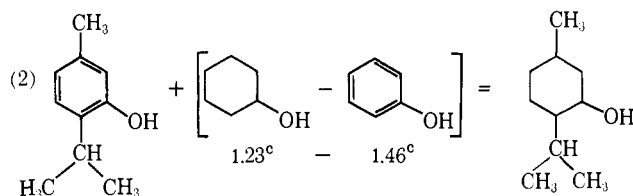
The following examples illustrate this procedure [the superscripts mean that the values were obtained from (a) Table VIII, standard deviation; (b) Table XVI; (c) Table XVII].

(A) Menthol: no  $\log P_{\text{oct}}$  measured

(1) Regression from oil-water system

$$\log P_{\text{oct}} = (3.25^{\text{c}} \text{ and } 3.37^{\text{c}}) = \text{av } 3.31$$

$$\text{uu} = 0.28^{\text{a}}$$



$$\log P_{\text{oct}} = 3.30^{\text{c}} + (-0.23) = 3.07$$

$$\text{uu} = 0.02^{\text{b}} + 0.04^{\text{b}} = 0.06$$

(3)  $\text{C}_6\text{H}_5\text{OH} + (\text{CH}_3)_2\text{CH}- + -\text{CH}_3$

$$1.23 \quad (1.50 - 0.20) \quad 0.52$$

$$\log P_{\text{oct}} = 1.23^{\text{c}} + 1.30^{\text{b}} + 0.50^{\text{b}} = 3.03$$

Table XVI  
"Uncertainty Units"

Calculation step or group	$\pi$ per step or group	Uncertainty units (uu)	Comments and exceptions
1. $-\text{CH}_2-$	0.50	0.02	(a) $\pi$ lower if between two very polar groups, e.g., malonic acid (b) $\pi$ lower if folding interaction possible (section V.D)
2. Branching			
(a) in C chain	-0.20	0.02	(a) Sign of $\pi$ changes if steric blocking of polar group possible
(b) of functional group	-0.20	0.05	
(c) ring closure	-0.09	0.02	
3. Double bond	-0.30	0.03	
4. Folding	-0.60	0.05	(a) See unusual case of phenoxyacetamides (section V.D)
5. Intramolecular H-bonding	0.65	0.10	
6. Equivalence of aliphatic OH and $\text{NH}_2$	0.00	0.05	
7. Aliphatic groups			
(a) $-\text{COOH}$	-0.65	0.03	
(b) $-\text{OH}$	-1.16	0.03	
(c) $-\text{NH}_2$	-1.16	0.03	
(d) $-\text{C}=\text{O}$	-1.21	0.03	
(e) $-\text{CN}$	-0.84	0.04	
(f) $-\text{O}-$	-0.98	0.05	
(g) $-\text{CONH}_2$	-1.71	0.05	
(h) $-\text{F}$	-0.17	0.03	
(i) $-\text{Cl}$	0.39	0.04	
(j) $-\text{Br}$	0.60	0.04	
(k) $-\text{I}$	1.00	0.05	

For aromatic substituents, use  $\pi$  values and standard deviations (as uu) appearing in T. Fujita, *et al.*, *J. Am. Chem. Soc.*, **86**, 5175 (1964).

$$\text{uu} = 0.02^{\text{b}} + 0.08^{\text{b}} + 0.02^{\text{b}} = 0.12$$

Route 2 should be chosen for several reasons. It has the lowest uu value. The electronic effect on  $\pi$  of the difference between an aliphatic and aromatic OH group is precisely allowed for. Adding the isopropyl group adjacent to the OH in route 3 may involve a steric blocking of its hydrophilic character.

(B) *n*-Propylamine: no  $\log P_{\text{oct}}$  measured

(1) Equivalence of OH and  $\text{NH}_2$

$$\log P_{\text{oct}} (\text{propanol}) = 0.34^{\text{c}}$$

$$\text{uu} = 0.07^{\text{b}}$$

(2)  $(\text{CH}_3\text{CHNH}_2\text{CH}_3) -$  (branch)

$$\log P_{\text{oct}} = -0.03^{\text{c}} - (-0.20)^{\text{b}} = 0.17$$

$$\text{uu} = 0.02^{\text{b}} + 0.05^{\text{b}} = 0.07$$

(3) *n*-Propylamine

$$\log P_{\text{oct}} \text{ (regression from ether-water)} = 0.37$$

$$uu = 0.27^a$$

 (4) *n*-Butylamine - methyl

$$\log P_{\text{oct}} = 0.81^c - 0.50^b = 0.31$$

$$uu = 0.02^b + 0.02^b = 0.04$$

Since route 4 has the lowest *uu* and is reinforced by (1) and (3), it is preferred over (2).

 (C) Lactic acid:  $\log P_{\text{oct}} = -0.62^c$ 

 (1) Hydroxyacetic acid + methyl + branch =  $\text{CH}_3\text{CHOHCO}_2\text{H}$ 

$$\log P_{\text{oct}} = -1.11^c + 0.50^b + (-0.20)^b = -0.81$$

$$uu = 0.05^c + 0.02^b + 0.05^b = 0.12$$

## (2) Regression from ether-water

$$\log P_{\text{oct}} \text{ (av of 5)} = -0.80$$

$$uu = 0.19^a$$

 (3)  $(\text{CH}_3)_2\text{C}(\text{OH})\text{CO}_2\text{H}$  - methyl - branch = lactic acid

$$\log P_{\text{oct}} = -0.36^c - 0.50^b - (-0.20)^b = -0.68$$

$$uu = 0.05^c + 0.02^b + 0.02^b = 0.09$$

The measured  $\log P_{\text{oct}}$  agrees quite well with that arrived at by route 3. The values arrived at by routes 1 and 2 should not be totally disregarded, however, because the presence of an appreciable amount of polylactic acid impurity in the sample measured by Collander could be responsible for an observed value which was 0.1 to 0.2 unit too high.

 (D) Acetylacetone:  $\log P_{\text{oct}}$  not measured

	log P	uu
(1) Regression from ether-water	-0.19	0.19 <sup>a</sup>
(2) Log $P_{\text{oct}}$ (acetone) <sup>c</sup> × 2	-0.48	0.10
(3) 2-Butanone + acetone - methyl =		
$\text{CH}_3\text{COCH}_2\text{CH}_2\text{COCH}_3$		
$\log P_{\text{oct}} = 0.29^c + (-0.24)^c - 0.50^b = -0.45$		
$uu = 0.02^c + 0.05^c + 0.02^b = 0.09$		

The choice clearly favors the range -0.45 to -0.48.

 (E) Levulinic acid:  $\log P_{\text{oct}}$  not measured

 (1)  $\text{CH}_3\text{COCH}_3 + \text{CH}_3\text{CO}_2\text{H} = \text{CH}_3\text{COCH}_2\text{CH}_2\text{CO}_2\text{H}$ 

$$\log P_{\text{oct}} = -0.24^c + (-0.17)^c = -0.41$$

$$uu = 0.05^c + 0.02^c = 0.07$$

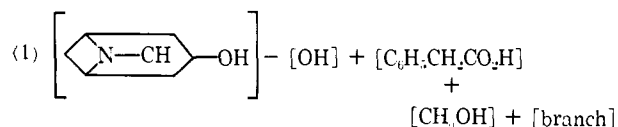
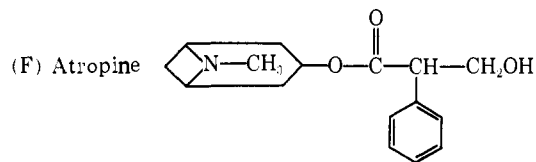
 (2) 2-Butanone + aliphatic -CO<sub>2</sub>H

$$\log P_{\text{oct}} = 0.29^c + (-0.65)^b = -0.36$$

$$uu = 0.02^c + 0.03^b = 0.05$$

	log P	uu
(3) Regression from ether-water	-0.40	0.19 <sup>a</sup>
(av 3)		

Clearly the value by route 5 is eliminated from consideration and a value in the range of -0.36 to -0.40 is preferred.



$$\log P_{\text{oct}} = -0.28^c - (-1.16)^b + 1.30^c + (-0.66)^c + -0.20^b = 1.32$$

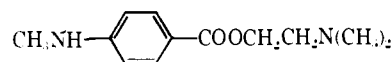
$$uu = 0.27^a + 0.05^b + 0.02^c + 0.02^c + 0.02^c = 0.38$$

 (2) As (1) but  $\log P$  tropine regr. from *i*-BuOH-water

$$\log P_{i\text{-BuOH}} = 0.21^c - (-1.16)^b + 1.30^c + (-0.66)^c + (-0.20)^b = 1.81$$

$$uu = 0.15^a + 0.05^b + 0.02^c + 0.02^c + 0.02^c = 0.26$$

The measured  $\log P_{\text{oct}}$  for atropine is 1.81 which is in agreement with route 2. The uncertainty of route 1 is not that much worse than (2), but the measured value for tropine in ether-water appears very doubtful.

 (G) *p*-*N*-Methylaminobenzoic acid, *N,N*-dimethylaminoethyl ester

 (1)  $\text{CH}_3\text{NH}- + (\text{C}_6\text{H}_5\text{COOCH}_2-) + (-\text{CH}_2\text{N}(\text{CH}_3)_2)$ 

$$\log P = (0.50^b - 1.23^*) + 2.12^c + 0.27^c = (1.66)$$

$$uu = 0.01^b + 0.02^b + 0.02^b + 0.05^d = (0.10)$$

$$\log P_{\text{(corr)}}^{163} = 2.03$$

$$uu = 0.18$$

## (2) Regression from oil-water

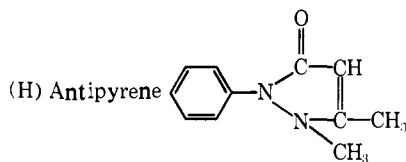
$$\log P_{\text{oct}} = 2.01^c$$

$$uu = 0.29^a$$

 (3)  $\log P_{\text{oct}}$  (measured) = 1.95<sup>c</sup>

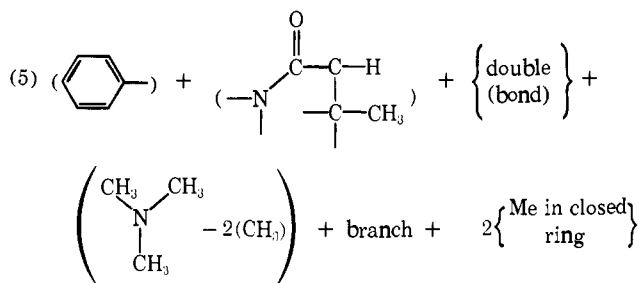
In these first examples, the amount of interaction between the component parts used in the calculations was either small or it could be taken into consideration (as in G). In the following example this is not the case, and it can be seen that it is possible to use the proposed method of calculation to support an erroneous measured value.

(163)  $\pi_{\text{NE}_2} = -1.23$  uses benzene as the "parent." Correcting for electronic effects (ref 10) using  $\sigma$  (-COCH<sub>3</sub>) = 0.39, we correct  $\pi$  by 0.37 and add to the *uu* by 0.08.



	$\log P$	uu
(1) Log $P_{\text{oct}}$ regression from ether-water	$-0.06^{\circ}$	$0.27^{\text{a}}$
(2) Log $P_{\text{oct}}$ regression from $\text{CHCl}_3$ -water	$0.53^{\circ}$	$0.27^{\text{a}}$
(3) Log $P_{\text{oct}}$ regression from oil-water	$-0.12^{\circ}$	$0.28^{\text{a}}$
	$0.15^{\circ}$	$0.28^{\text{a}}$
(4) Log $P_{\text{Oct}}$ regression from <i>i</i> -BuOH-water	$0.21^{\circ}$	$0.15^{\text{a}}$

The value of 0.21 should be favored because it has the lowest uu value, but one could attempt to verify it by calculation.



$$\log P = 2.13^{\circ} + (-0.21)^{\circ} + (-0.30)^{\text{b}} + (0.27^{\circ} - 1.0)^{\text{b}} + (-0.20)^{\text{b}} + (-0.18)^{\text{b}} = 0.53$$

$$\text{uu} = 0.02^{\circ} + 0.02^{\circ} + 0.03^{\text{b}} + 0.05^{\circ} + 0.04^{\text{b}} + 0.02^{\text{b}} + 0.04^{\text{b}} = 0.22$$

Without any allowance for an interaction between the amide and amine nitrogen atoms, route 5 would support route 2. With such a variety of values to choose from and no clear preference indicated by uu values, the only safe course is to measure the  $P$  value directly. In this case  $\log P_{\text{oct}}$  turned out to be 0.23 and the route 4 was vindicated.

*Acknowledgment.* This work was supported under Research Grant CA 11110 and Contract No. 70-4115, both from the National Institutes of Health.

### VIII. Glossary of Terms

$\text{A}^-$	anionic form of acidic solute
$\alpha$	degree of ionization
B	neutral form of basic solute
$\text{BH}^+$	protonated form of basic solute
C	molar concentration

cmc	critical micelle concentration (molar)
$E_s$	steric parameter as defined by Taft
$\langle \epsilon \rangle_j$	average energy level of $j$ th group
$G$	free energy
$H$	enthalpy
HA	neutral form of acidic solute
$\text{H}_2\text{C}$	dihydric complexing agent
HLB	hydrophile-lipophile balance
$K_A$	dissociation constant of single molecules into ions in aqueous phase
$K_{\text{assoc}}$	association constant of single into double molecules in lipid phase; equals $1/K_D$
$K_D$	dissociation constant of double into single molecules in lipid phase
$K_{\text{HB}}$	association constant between hydrogen bond donor and acceptor
$K_f$	association constant for formation of complex or imine
$k$	Boltzman constant
$L$	milliliters of lipid extracting phase
$M^{n+}$	metal ion carrying charge of $n^+$
$N$	(in counter-current distribution) position of peak
$N$	(in partition calculation) concentration of un-ionized solute in water at first concentration level (in mol/l.)
$n$	(in counter-current distribution) total number of tubes
$n$	(in partition calculation) concentration of un-ionized solute at second concentration level (in mol/l.)
$n$	(in regression equations) number of data points treated
(o)	organic (or oil) phase
$P$	partition coefficient; nonpolar/polar phase; refers to concentration of neutral solute unless specified (only exception is in eq 19 and 20 where $P$ refers to pressure)
$P^*$	apparent partition coefficient (total solute measured, regardless of form)
$P'$	thermodynamic partition coefficient = ratio of mole fractions in nonpolar/polar phases.
$\text{p}K_a$	negative logarithm of acid ionization constant
$\pi$	hydrophobic substituent constant; $\pi_x = \log P_x - \log P_H$
$R$	gas constant
$r$	(in regression equations) correlation coefficient
$r$	(in counter-current distribution) specific tube number
$s$	standard deviation
$S$	entropy
$\sigma$	electronic parameter as defined by Hammett
$T$	(in counter-current distribution) fraction of total solute
$T$	absolute temperature
$\mu$	chemical potential (per mole)
$\bar{V}_s$	molar volume of solvent
$W$	ml of aqueous solution being extracted
(w)	water phase
$X$	mole fraction
$Z$	particle partition function (quantum mechanics)
$\psi$	state function (quantum mechanics)

Table XVII. SORTED BY EMPIRICAL FORMULA, THEN NAME, THEN SOLVENT NUMBER, THEN REFERENCE.  
MEASURED "LOGP OCT" FOLLOWED BY "==="; OTHERS CALC FROM SPECIFIED EQ IN TABLE XVII

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1	OILS	164	22	0.60	0.94	B AR1	ARGON
2	NITROBENZENE	92	46	-5.04		BR1K1	POTASSIUM BROMIOE
3	CCL4	165		1.35		BR2	BROMINE
4	CS2	165		1.89		BR2	BROMINE
5	BROMOFORM	166		1.80		BR2	BROMINE
6	N-BUTANOL	91	46	-1.82	-3.03	CL1CS1	CESIUM CHLORIOE
7	N-BUTANOL	91	46	-1.74	-2.92	CL1K1	POTASSIUM CHLORIOE
8	N-BUTANOL	94	46	-1.74	-2.94	CL1K1	POTASSIUM CHLORIOE
9	NITROBENZENE	92	46	-5.36		CL1K1	POTASSIUM CHLORIOE
10	N-BUTANOL	91	46	-1.55	-2.66	CL1L11	LITHIUM CHLORIOE
11	N-BUTANOL	91	46	-1.76	-2.96	CL1NA1	SODIUM CHLORIOE
12	N-BUTANOL	94	46	-1.74	-2.94	CL1NA1	SODIUM CHLORIOE
13	SEC-BUTANOL	94	46	-1.19		CL1NA1	SODIUM CHLORIOE
14	N-BUTANOL	91	46	-1.74	-2.92	CL1RB1	RUBIDIUM CHLORIOE
15	CCL4	167	51	1.29		CL2	CHLORINE
16	OILS	168	46	-0.46	0.06	B CL2HG1	MERCURIC CHLORIOE
17	DIETHYL ETHER	2		-1.74	-1.42	A O2O1	DEUTERIUM OXIOE
18	OILS	2		-3.15	-1.64	A O2O1	DEUTERIUM OXIOE
19	OILS	164	22	0.23	0.66	B HE1	HELIUM
20	CCL4	169		0.54		I1BR1	IODINE MONOBROMIOE
21	CCL4	169		-0.70		I1CL1	IODINE MONOCHLORIOE
22	NITROBENZENE	92	46	-3.74		I1K1	POTASSIUM IODIOE
23	NITROBENZENE	92	46	-5.00		I1L11	LITHIUM IODIOE
24	NITROBENZENE	92	46	-4.59		I1NA1	SODIUM IODIOE
25	NITROBENZENE	92	46	-3.60		I1RB1	RUBIDIUM IODIOE
26	CHCL3	165		2.12		I2	IODINE
27	BENZENE	170		2.59		I2	IODINE
28	NITROBENZENE	170		2.29		I2	IODINE
29	PRIM. PENTANOLS	47		-1.66		I2	IODINE
30	CCL4	166		1.93		I2	IODINE
31	CS2	166		2.77		I2	IODINE
32	DDDECANE	165		1.87		I2	IODINE
33	HEXADECANE	165		1.59		I2	IODINE
34	BROMOFORM	166		2.62		I2	IODINE
35	OILS	164	22	0.88	1.16	B KRI	KRYPTON
36	OILS	164	22	0.55	0.92	B N2	NITROGEN
37	CCL4	171		1.15		O4OS1	OSMIUM TETROXIOE
38	CCL4	172		1.09		O4OS1	OSMIUM TETROXIOE
39	OILS	164	22	2.04	2.05	B RO1	RACON
40	OILS	164	22	1.16	1.37	B XE1	XENON
41	OILS	173		-1.04	0.25	A H1CL1	HYDROGEN CHLORIOE
42	DIETHYL ETHER	174		-0.64	-0.44	A H1F1	HYDROFLUORIC ACIO
43	CHCL3	174	12	-2.92	-1.43	A H1F1	HYDROFLUORIC ACIO
44	DIETHYL ETHER	175	26	0.84	0.86	A H1N3	HYDROGEN AZIOE
45	DIETHYL ETHER	174		0.86	0.88	A H1N3	HYDROGEN AZIOE
46	CHCL3	174		-0.16	1.07	A H1N3	HYDROGEN AZIOE
47	SEC-BUTANOL	84		-0.44	-1.15	H2O1	WATER
48	DIETHYL ETHER	176		-1.18	-0.92	A H2O2	HYDROGEN PEROXIOE
49	DIETHYL ETHER	177		-1.36	-1.08	A H2O2	HYDROGEN PEROXIOE
50	DIETHYL ETHER	178		-0.94	-0.70	H2O2	HYDROGEN PEROXIOE
51	DIETHYL ETHER	174		-1.19	-0.92	A H2O2	HYDROGEN PEROXIOE
52	CHCL3	179	26	-2.78	-1.29	A H2O2	HYDROGEN PEROXIOE
53	CHCL3	174	12	-3.34	-1.82	A H2O2	HYDROGEN PEROXIOE
54	BENZENE	179	26	-2.30	-0.89	A H2O2	HYDROGEN PEROXIOE
55	1-BUTANOL	179	26	-0.48	-1.19	H2O2	HYDROGEN PEROXIOE
56	1-BUTANOL	178		-0.41	-1.09	H2O2	HYDROGEN PEROXIOE
57	NITROBENZENE	179	26	-2.30	-1.03	H2O2	HYDROGEN PEROXIOE
58	PRIM. PENTANOLS	177		-0.85	-1.38	H2O2	HYDROGEN PEROXIOE
59	PRIM. PENTANOLS	180		-0.85	-1.37	H2O2	HYDROGEN PEROXIOE
60	ETHYL ACETATE	178		-0.60	-0.70	H2O2	HYDROGEN PEROXIOE
61	1-PENT. ACETATE	178		-1.11	-1.33	H2O2	HYDROGEN PEROXIOE
62	N-BUTANOL	181	10	-1.00		H2O4P1	ORTHOPHOSPHATE ANION
63	HEXANOL	181	18	-0.52		H2O4P1	ORTHOPHOSPHATE ANION
64	N-BUTANOL	181	10	0.30		H2O7P2	PYROPHOSPHATE ANION
65	HEXANOL	181	18	0.73		H2O7P2	PYROPHOSPHATE ANION
66	DIETHYL ETHER	174		0.95	0.96	A H2S1	HYDROGEN SULFIOE
67	CHCL3	174		0.89	1.44	N H2S1	HYDROGEN SULFIOE
68	DIETHYL ETHER	174		-1.96	-0.90	B H3N1	AMMONIA
69	CHCL3	174		-1.35	-1.37	B H3N1	AMMONIA
70	SEC-BUTANOL	84	19	-1.09	-2.04	B H3N1	AMMONIA
71	TOLUENE	68		-1.40	-0.35	B H3N1	AMMONIA
72	PRIM. PENTANOLS	182		-0.85	-1.49	B H3N1	AMMONIA
73	CCL4	7		-2.35	-1.56	B H3N1	AMMONIA
74	DIETHYL ETHER	174		-2.28	-1.87	A H3N1O1	HYDROXYLAMINE
75	CHCL3	174		-2.58	-1.13	A H3N1O1	HYDROXYLAMINE
76	DIETHYL ETHER	174		-2.34	-1.23	B H4N2	HYDRAZINE
77	CHCL3	174		-1.35	-1.37	B H4N2	HYDRAZINE
78	BENZENE	183		-1.65	-0.60	B H4N2	HYDRAZINE
79	1-BUTANOL	184		-0.66		H5N1O1	AMMONIUM HYDROXIOE
80	PRIM. PENTANOLS	184		-0.87		H5N1O1	AMMONIUM HYDROXIOE
81	OILS	173		0.20	0.64	B CL1CL1N1	CYANOGEN CHLORIOE
82	OILS	173		2.42	2.44	B CL1CL3N1O2	CHLOROPICRIN
83	OILS	173		2.66	2.64	B CL1CL4	CARBON TETRACHLORIOE
84	CCL4	185		-0.75		CL1I1N1	IODINE CYANIOE
85	OILS	173		2.08	2.16	B CLS2	CARBON DISULFIOE
86	OILS	82		1.70	1.84	B CLS2	CARBON DISULFIOE
87	OCTANOL	186		1.97	1.97	= C1H1CL3	CHLOROFORM
88	OILS	173		1.86	1.98	B C1H1CL3	CHLOROFORM
89	DIETHYL ETHER	187		0.38	0.45	A C1H1N1	HYDROCYANIC ACIO
90	DIETHYL ETHER	174		0.26	0.35	A C1H1N1	HYDROCYANIC ACIO
91	CHCL3	187		-0.67		C1H1N1	HYDROCYANIC ACIO
92	CHCL3	174		-0.66	0.62	A C1H1N1	HYDROCYANIC ACIO
93	BENZENE	187		-0.35	1.07	A C1H1N1	HYDROCYANIC ACIO
94	BENZENE	188	12	-0.57	0.81	A C1H1N1	HYDROCYANIC ACIO
95	CCL4	187		-1.38		C1H1N1	HYDROCYANIC ACIO
96	ETHYL BROMIDE	187		-0.45		C1H1N1	HYDROCYANIC ACIO
97	BROMOETHANE	187		-0.45		C1H1N1	HYDROCYANIC ACIO
98	DIETHYL ETHER	3		-0.96	-0.72	A C1H2N2	CYANAMIOE
99	OILS	2		-2.35	-0.91	A C1H2N2	CYANAMIOE
100	PRIM. PENTANOLS	189		-0.30	-0.68	C1H2N2	CYANAMIOE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
101	ETHYL ACETATE	189	12	-0.19	-0.26	C1H2N2	CYANAMIOE
102	OI-I-PR. ETHER	189	12	-0.71	-0.28	C1H2N2	CYANAMIOE
103	ME-I-BUT.KETONE	189		-0.23	-0.27	C1H2N2	CYANAMIOE
104	OIETHYL ETHER	188	12	-0.96	0.00 B	C1H2O1	FORMALOEHYOE
105	OCTANOL	5		-0.54	-0.54 =	C1H2O2	FORMIC ACIO
106	OIETHYL ETHER	190		-0.52	-0.34 A	C1H2O2	FORMIC ACIO
107	OIETHYL ETHER	191		-0.40	-0.31 A	C1H2O2	FORMIC ACIO
108	OIETHYL ETHER	192		-0.45	-0.28 A	C1H2O2	FORMIC ACIO
109	OIETHYL ETHER	46		-0.40	-0.23 A	C1H2O2	FORMIC ACIO
110	OIETHYL ETHER	36		-0.43	-0.25 A	C1H2O2	FORMIC ACIO
111	CHCL3	45	12	-2.50	-1.03 A	C1H2O2	FORMIC ACIO
112	CHCL3	36		-2.12	-0.69 A	C1H2O2	FORMIC ACIO
113	OILS	193		-1.84	-0.44 A	C1H2O2	FORMIC ACIO
114	BENZENE	45		-2.95	-1.55 A	C1H2O2	FORMIC ACIO
115	BENZENE	44		-2.70	-1.28 A	C1H2O2	FORMIC ACIO
116	BENZENE	193		-2.57	-1.15 A	C1H2O2	FORMIC ACIO
117	N-BUTANOL	190		-0.08	-0.62	C1H2O2	FORMIC ACIO
118	SEC-BUTANOL	190		0.03	-0.47	C1H2O2	FORMIC ACIO
119	XYLENE	193		-2.38	-0.97 A	C1H2O2	FORMIC ACIO
120	TOLUENE	193		-2.58		C1H2O2	FORMIC ACIO
121	TOLUENE	41		-2.66	-0.73 A	C1H2O2	FORMIC ACIO
122	NITROBENZENE	48		-1.67	-0.51	C1H2O2	FORMIC ACIO
123	PRIM. PENTANOLS	190		-0.26	-0.73	C1H2O2	FORMIC ACIO
124	ETHYL ACETATE	194		-0.23	-0.30	C1H2O2	FORMIC ACIO
125	CCL4	45	26	-3.12		C1H2O2	FORMIC ACIO
126	OI-I-PR. ETHER	190		-0.84	-0.42	C1H2O2	FORMIC ACIO
127	2-BUTANONE	190		0.12	0.39	C1H2O2	FORMIC ACIO
128	ME-I-BUT.KETONE	195		-0.34	-0.37	C1H2O2	FORMIC ACIO
129	ME-I-BUT.KETONE	196		-0.38	-0.40	C1H2O2	FORMIC ACIO
130	OLEYL ALCOHOL	5		-0.92	-0.35	C1H2O2	FORMIC ACIO
131	O-NITROTOLUENE	48		-1.81		C1H2O2	FORMIC ACIO
132	S-PENTANOLS	190	12	0.07	-0.22	C1H2O2	FORMIC ACIO
133	S-PENTANOLS	195		-0.22	-0.56	C1H2O2	FORMIC ACIO
134	CS2	193		-3.23		C1H2O2	FORMIC ACIO
135	PARAFFINS	197		-2.90		C1H2O2	FORMIC ACIO
136	OCTANOL	5		1.69	1.69 =	C1H3I1	METHYL 1001OE
137	OIETHYL ETHER	3		1.92	1.80 A	C1H3I1	METHYL 1001OE
138	OIETHYL ETHER	3		-2.85	-1.67 B	C1H3N1O1	FORMAMIOE
139	OILS	2		-3.12	-1.61 A	C1H3N1O1	FORMAMIOE
140	OCTANOL	186		-0.33	-0.33 =	C1H3N1O2	NITROMETHANE
141	OCTANOL	5		0.08	0.08 =	C1H3N1O2	NITROMETHANE
142	CYCLOHEXANE	141		-0.93		C1H3N1O2	NITROMETHANE
143	OILS	173		-0.32	0.17 B	C1H3N1O2	NITROMETHANE
144	OIETHYL ETHER	3		-3.33	-2.79 A	C1H4N2O1	UREA
145	OIETHYL ETHER	112		-3.52	-2.96 A	C1H4N2O1	UREA
146	OIETHYL ETHER	198		-3.30	-2.76 A	C1H4N2O1	UREA
147	CHCL3	112		-3.85	-2.97 N	C1H4N2O1	UREA
148	OILS	2		-3.82	-2.26 A	C1H4N2O1	UREA
149	OCTANOL	9		-1.14	-1.14 =	C1H4N2S1	THIOUREA
150	OIETHYL ETHER	3		-2.20	-1.80 A	C1H4N2S1	THIOUREA
151	OIETHYL ETHER	112		-2.10	-1.70 A	C1H4N2S1	THIOUREA
152	OIETHYL ETHER	198		-2.14	-0.95 A	C1H4N2S1	THIOUREA
153	CHCL3	112	12	-3.10	-2.38 N	C1H4N2S1	THIOUREA
154	OILS	2		-2.92	-1.43 A	C1H4N2S1	THIOUREA
155	OCTANOL	186		-0.66	-0.66 =	C1H4O1	METHANOL
156	OCTANOL	5		-0.82	-0.82 =	C1H4O1	METHANOL
157	OIETHYL ETHER	3		-0.85	-0.63 A	C1H4O1	METHANOL
158	OIETHYL ETHER	174		-1.29	-1.00 A	C1H4O1	METHANOL
159	CYCLOHEXANE	199		-1.84		C1H4O1	METHANOL
160	CHCL3	174		-1.36	-0.66 N	C1H4O1	METHANOL
161	OILS	173		-1.96	-0.55 A	C1H4O1	METHANOL
162	OILS	101		-2.01	-0.63 A	C1H4O1	METHANOL
163	OILS	200		-2.11	-0.73 A	C1H4O1	METHANOL
164	OILS	201		-2.02	-0.65 A	C1H4O1	METHANOL
165	NITROBENZENE	202		-1.60	-0.46	C1H4O1	METHANOL
166	OCTANOL	5		-0.57	-0.57 =	C1H5N1	METHYL AMINE
167	OIETHYL ETHER	3		-1.64	-0.60 B	C1H5N1	METHYL AMINE
168	CHCL3	203	12	-0.56	-0.71 B	C1H5N1	METHYL AMINE
169	CHCL3	68		-0.90	-1.00 B	C1H5N1	METHYL AMINE
170	CHCL3	204		-1.09	-1.15 B	C1H5N1	METHYL AMINE
171	BENZENE	205		-1.34	0.37 B	C1H5N1	METHYL AMINE
172	1-BUTANOL	184		0.00	-0.52	C1H5N1	METHYL AMINE
173	XYLENE	46		-1.00	-0.43 B	C1H5N1	METHYL AMINE
174	TOLUENE	205		-1.40	-0.35 B	C1H5N1	METHYL AMINE
175	PRIM. PENTANOLS	182		-0.45	-0.98	C1H5N1	METHYL AMINE
176	OCTANOL	206		2.44	2.44 =	C2H18R2N3	1,2,3-TRIAZOLE,4,5-DIBROMO
177	OCTANOL	206		2.24	2.24 =	C2H18R2N3	1,2,4-TRIAZOLE,3,5-DIBROMO
178	OIETHYL ETHER	3		1.57	1.49 A	C2H1CL3O2	TRICHLOROACETIC ACIO
179	OIETHYL ETHER	207		1.21	1.18 A	C2H1CL3O2	TRICHLOROACETIC ACIO
180	OIETHYL ETHER	113		1.63	1.54 A	C2H1CL3O2	TRICHLOROACETIC ACIO
181	OIETHYL ETHER	46		1.78	1.68 A	C2H1CL3O2	TRICHLOROACETIC ACIO
182	CHCL3	43		-0.69	0.61 A	C2H1CL3O2	TRICHLOROACETIC ACIO
183	BENZENE	208		-1.30	0.10 A	C2H1CL3O2	TRICHLOROACETIC ACIO
184	TOLUENE	43		-0.98	0.72 A	C2H1CL3O2	TRICHLOROACETIC ACIO
185	NITROBENZENE	43		0.04	0.91	C2H1CL3O2	TRICHLOROACETIC ACIO
186	PRIM. PENTANOLS	43		1.79	1.96	C2H1CL3O2	TRICHLOROACETIC ACIO
187	BROMOETHANE	43		-0.26		C2H1CL3O2	TRICHLOROACETIC ACIO
188	IODOMETHANE	41		-1.06		C2H1CL3O2	TRICHLOROACETIC ACIO
189	OIETHYL ETHER	192		1.24	1.20 A	C2H2CL2O2	OICHLOROACETIC ACIO
190	OIETHYL ETHER	113		1.46	1.39 A	C2H2CL2O2	OICHLOROACETIC ACIO
191	OIETHYL ETHER	46		1.31	1.27 A	C2H2CL2O2	OICHLOROACETIC ACIO
192	CHCL3	113		-0.89	0.41 A	C2H2CL2O2	OICHLOROACETIC ACIO
193	OILS	209		-0.30	0.94 A	C2H2CL2O2	OICHLOROACETIC ACIO
194	BENZENE	208		-1.40	0.00 A	C2H2CL2O2	OICHLOROACETIC ACIO
195	TOLUENE	43		-1.42	0.33 A	C2H2CL2O2	OICHLOROACETIC ACIO
196	NITROBENZENE	43		-0.10	0.79	C2H2CL2O2	OICHLOROACETIC ACIO
197	CCL4	43	12	-2.31	-0.14 A	C2H2CL2O2	OICHLOROACETIC ACIO
198	IODOMETHANE	41		-1.15		C2H2CL2O2	OICHLOROACETIC ACIO
199	OCTANOL	56		1.04	1.04 =	C2H2CL3N1O1	TRICHLOROACETAMIOE
200	OIETHYL ETHER	113		1.08	1.06 A	C2H2CL3N1O1	TRICHLOROACETAMIOE



NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
201	CHCL3	113		0.31	0.87	N C2H2CL3N101	TRICHLOROACETAMIOE
202	OCTANOL	210		0.12	0.12	= C2H2F3N101	TRIFLUOROACETAMIOE
203	DIETHYL ETHER	211		-1.02	-0.78	A C2H2O4	OXALIC ACIO
204	DIETHYL ETHER	212		-0.94	-0.71	A C2H2O4	OXALIC ACIO
205	DIETHYL ETHER	3		-0.92	-0.69	A C2H2O4	OXALIC ACIO
206	DIETHYL ETHER	46		-0.72	-0.51	A C2H2O4	OXALIC ACIO
207	DIETHYL ETHER	213		-0.91	-0.67	A C2H2O4	OXALIC ACIO
208	DIETHYL ETHER	36		-0.87	-0.64	A C2H2O4	OXALIC ACIO
209	N-BUTANOL	194		-0.76	-0.53	C2H2O4	OXALIC ACIO
210	PRIM. PENTANOLS	182		-0.30	-0.78	C2H2O4	OXALIC ACIO
211	ETHYL ACETATE	194		-0.34	-0.43	C2H2O4	OXALIC ACIO
212	HEXANOL	74		-0.48		C2H2O4	OXALIC ACIO
213	ME-1-BUT.KETONE	195		-0.69	-0.64	C2H2O4	OXALIC ACIO
214	S-PENTANOLS	195		-0.44	-0.81	C2H2O4	OXALIC ACIO
215	OCTANOL	5		0.41	0.41	= C2H3BR102	BROMOACETIC ACIO
216	DIETHYL ETHER	192		0.64	0.68	A C2H3BR102	BROMOACETIC ACIO
217	CHCL3	46		-1.14	0.18	A C2H3BR102	BROMOACETIC ACIO
218	OILS	209		-0.72	0.56	A C2H3BR102'	BROMOACETIC ACIO
219	BENZENE	29		-1.41	-0.01	A C2H3BR102	BROMOACETIC ACIO
220	XYLENE	46		-1.37	0.29	A C2H3BR102	BROMOACETIC ACIO
221	TOLUENE	29		-1.55	0.24	A C2H3BR102	BROMOACETIC ACIO
222	OILS	214		-0.18	1.06	A C2H3BR302	2,2,2-TRIBROMO-1,1-ETHANEOIOL /BROMALHYDRATE/
223	DIETHYL ETHER	192		0.41	0.47	A C2H3CL102	CHLOROACETIC ACIO
224	DIETHYL ETHER	113		0.42	0.48	A C2H3CL102	CHLOROACETIC ACIO
225	DIETHYL ETHER	46		0.39	0.47	A C2H3CL102	CHLOROACETIC ACIO
226	DIETHYL ETHER	40		0.02	0.14	A C2H3CL102	CHLOROACETIC ACIO
227	DIETHYL ETHER	188		0.37	0.45	A C2H3CL102	CHLOROACETIC ACIO
228	CHCL3	43		-1.67	-0.28	A C2H3CL102	CHLOROACETIC ACIO
229	CHCL3	113		-1.35	-0.01	A C2H3CL102	CHLOROACETIC ACIO
230	CHCL3	46		-1.92	-0.53	A C2H3CL102	CHLOROACETIC ACIO
231	OILS	209		-1.10	0.24	A C2H3CL102	CHLOROACETIC ACIO
232	BENZENE	215		-1.45	-0.05	A C2H3CL102	CHLOROACETIC ACIO
233	BENZENE	42		-1.60	-0.19	A C2H3CL102	CHLOROACETIC ACIO
234	TOLUENE	43		-2.00	-0.17	A C2H3CL102	CHLOROACETIC ACIO
235	TOLUENE	40		-2.12	-0.28	A C2H3CL102	CHLOROACETIC ACIO
236	TOLUENE	42		-1.74	0.05	A C2H3CL102	CHLOROACETIC ACIO
237	TOLUENE	42		-1.74	0.06	A C2H3CL102	CHLOROACETIC ACIO
238	NITROBENZENE	43		-0.85	0.17	C2H3CL102	CHLOROACETIC ACIO
239	NITROBENZENE	42	12	1.15	1.83	A C2H3CL102	CHLOROACETIC ACIO
240	CCL4	43		-2.56	-0.33	A C2H3CL102	CHLOROACETIC ACIO
241	IODOMETHANE	41		-1.36		C2H3CL102	CHLOROACETIC ACIO
242	DIETHYL ETHER	3		0.63	0.67	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
243	DIETHYL ETHER	188		0.63	0.67	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
244	DIETHYL ETHER	174		0.60	0.65	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
245	CHCL3	174		-0.96	0.34	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
246	OILS	214		-0.66	0.62	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
247	OILS	70		-0.75	0.42	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
248	TOLUENE	188	12	-1.76	0.04	A C2H3CL302	2,2,2-TRICHLORO-1,1-ETHANEOIOL /CHLORALHYDRATE/
249	DIETHYL ETHER	112		-0.27	-0.12	A C2H3F102	FLUOROACETIC ACIO
250	CHCL3	112		-1.96	-0.57	A C2H3F102	FLUOROACETIC ACIO
251	OCTANOL	9		0.41	0.41	= C2H3F301	ETHANOL, 2,2,2-TRIFLUORO
252	OCTANOL	216		0.32	0.32	= C2H3F301	2,2,2-TRIFLUOROETHANOL
253	DIETHYL ETHER	3		0.86	0.87	A C2H3I102	IODOACETIC ACIO
254	DIETHYL ETHER	112		0.83	0.84	A C2H3I102	IODOACETIC ACIO
255	CHCL3	112		-0.82	0.47	A C2H3I102	IODOACETIC ACIO
256	CHCL3	29		-0.79	0.50	A C2H3I102	IODOACETIC ACIO
257	OILS	209		-0.46	0.83	A C2H3I102	IODOACETIC ACIO
258	BENZENE	29		-1.08	0.31	A C2H3I102	IODOACETIC ACIO
259	TOLUENE	29		-1.22	0.50	A C2H3I102	IODOACETIC ACIO
260	OCTANOL	186		-0.34	-0.34	= C2H3N1	ACETONITRILE
261	DIETHYL ETHER	3		-0.22	-0.08	A C2H3N1	ACETONITRILE
262	DIETHYL ETHER	207		-1.49	-1.19	A C2H3N103	OXAMIC ACIO
263	OCTANOL	210		-0.52	-0.52	= C2H4BR1N101	BROMOACETAMIOE
264	OCTANOL	56		-0.53	-0.53	= C2H4CL1N101	CHLOROACETAMIOE
265	DIETHYL ETHER	3		-1.02	-0.78	A C2H4CL1N101	CHLOROACETAMIOE
266	DIETHYL ETHER	113		-1.03	-0.79	A C2H4CL1N101	CHLOROACETAMIOE
267	CHCL3	113		-0.96	-0.29	N C2H4CL1N101	CHLOROACETAMIOE
268	OCTANOL	210		-1.05	-1.05	= C2H4FIN101	FLUOROACETAMIOE
269	OCTANOL	210		-0.19	-0.19	= C2H4I1N101	IODOACETAMIOE
270	DIETHYL ETHER	112		1.23	1.20	A C2H4N2S2	OXAMIOE, OITHIO
271	CHCL3	112		-0.20	0.42	N C2H4N2S2	OXAMIOE, OITHIO
272	DIETHYL ETHER	2		-2.54	-1.41	B C2H4N4	CYANO GUANIDINE /OICYANO IAMIOE /
273	DIETHYL ETHER	3		-2.54	-1.41	B C2H4N4	CYANO GUANIDINE /OICYANO IAMIOE /
274	OILS	2		-3.33	-1.81	A C2H4N4	CYANO GUANIDINE /OICYANO IAMIOE /
275	OCTANOL	217	32	-0.90	-0.90	= C2H4N4O2S2	2-AMINO-1,3,4-THIAOIAZOLE-5-SULFONAMIOE
276	CHCL3	217	32	-3.79		C2H4N4O2S2	2-AMINO-1,3,4-THIAOIAZOLE-5-SULFONAMIOE
277	DIETHYL ETHER	174		-0.48	0.43	B C2H4O1	ACETALDEHYOE
278	CHCL3	174		0.11		C2H4O1	ACETALDEHYOE
279	DIETHYL ETHER	112		0.74	0.76	A C2H4O1S1	THIOACETIC ACIO
280	DIETHYL ETHER	46		0.18	0.28	A C2H4O1S1	THIOACETIC ACIO
281	CHCL3	112		0.87	1.41	N C2H4O1S1	THIOACETIC ACIO
282	OCTANOL	218		-0.17	-0.17	= C2H4O2	ACETIC ACIO
283	OCTANOL	5		-0.31	-0.31	= C2H4O2	ACETIC ACIO
284	DIETHYL ETHER	190		-0.35	-0.19	A C2H4O2	ACETIC ACIO
285	DIETHYL ETHER	3		-0.30	-0.15	A C2H4O2	ACETIC ACIO
286	DIETHYL ETHER	177		-0.33	-0.18	A C2H4O2	ACETIC ACIO
287	DIETHYL ETHER	112		-0.36	-0.20	A C2H4O2	ACETIC ACIO
288	DIETHYL ETHER	46		-0.30	-0.15	A C2H4O2	ACETIC ACIO
289	DIETHYL ETHER	40		-0.34	-0.18	A C2H4O2	ACETIC ACIO
290	DIETHYL ETHER	66		-0.34	-0.17	A C2H4O2	ACETIC ACIO
291	DIETHYL ETHER	36		-0.34	-0.18	A C2H4O2	ACETIC ACIO
292	CHCL3	51		-1.19	0.15	A C2H4O2	ACETIC ACIO
293	CHCL3	45		-1.54	-0.09	A C2H4O2	ACETIC ACIO
294	CHCL3	112		-1.52	-0.16	A C2H4O2	ACETIC ACIO
295	CHCL3	46		-1.60	-0.24	A C2H4O2	ACETIC ACIO
296	CHCL3	40		-1.70	-0.31	A C2H4O2	ACETIC ACIO
297	CHCL3	219		-1.58	-0.20	A C2H4O2	ACETIC ACIO
298	OILS	209		-1.30	0.06	A C2H4O2	ACETIC ACIO
299	OILS	220		-1.52	0.19	A C2H4O2	ACETIC ACIO
300	OILS	193		-1.57	-0.25	A C2H4O2	ACETIC ACIO

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
301	BENZENE	51		-1.97	-0.56 A	C2H4O2	ACETIC ACID
302	BENZENE	45		-1.80	-0.32 A	C2H4O2	ACETIC ACID
303	BENZENE	14		-2.00	-0.59 A	C2H4O2	ACETIC ACID
304	BENZENE	40	12	-2.20	-0.79 A	C2H4O2	ACETIC ACID
305	BENZENE	16		-2.05	-0.64 A	C2H4O2	ACETIC ACID
306	BENZENE	66		-1.74	-0.33 A	C2H4O2	ACETIC ACID
307	N-BUTANOL	190		0.09	-0.40	C2H4O2	ACETIC ACID
308	I-BUTANOL	184		0.07	-0.42 A	C2H4O2	ACETIC ACID
309	SEC-BUTANOL	190		0.08	0.40	C2H4O2	ACETIC ACID
310	XYLENE	42		-1.92	-0.29 A	C2H4O2	ACETIC ACID
311	TOLUENE	42		-1.90	-0.09 A	C2H4O2	ACETIC ACID
312	NITROBENZENE	14		-1.44	-0.32	C2H4O2	ACETIC ACID
313	NITROBENZENE	48		-1.42	-0.32	C2H4O2	ACETIC ACID
314	PRIM. PENTANOLS	190		-0.02	-0.42	C2H4O2	ACETIC ACID
315	PRIM. PENTANOLS	184		-0.03	-0.34	C2H4O2	ACETIC ACID
316	PRIM. PENTANOLS	182		-0.03	-0.44	C2H4O2	ACETIC ACID
317	PRIM. PENTANOLS	177		-0.04	-0.35	C2H4O2	ACETIC ACID
318	ETHYL ACETATE	194		-0.18	-0.24	C2H4O2	ACETIC ACID
319	CCL4	45		-1.92	0.22 A	C2H4O2	ACETIC ACID
320	CCL4	14		-2.45	-0.23 A	C2H4O2	ACETIC ACID
321	OI-1-PR. ETHER	190		-0.73	-0.31	C2H4O2	ACETIC ACID
322	OI-1-PR. ETHER	221		-0.77	-0.31 A	C2H4O2	ACETIC ACID
323	OI-1-PR. ETHER	40		-0.77	-0.35	C2H4O2	ACETIC ACID
324	OI-1-PR. ETHER	222		-0.61	-0.17	C2H4O2	ACETIC ACID
325	HEXANE	14		-2.84		C2H4O2	ACETIC ACID
326	2-BUTANONE	190		0.08	0.47	C2H4O2	ACETIC ACID
327	ME-1-BUT.KETONE	195		-0.32	-0.35	C2H4O2	ACETIC ACID
328	OLEYL ALCOHOL	5		-0.66	-0.09	C2H4O2	ACETIC ACID
329	O-NITROTOLUENE	48		-1.48		C2H4O2	ACETIC ACID
330	CYCLOHEXANOL	223	12	-0.06	-1.18	C2H4O2	ACETIC ACID
331	S-PENTANOLS	190		0.16	-0.11	C2H4O2	ACETIC ACID
332	S-PENTANOLS	195		-0.03	-0.34	C2H4O2	ACETIC ACID
333	CS2	14		-2.83		C2H4O2	ACETIC ACID
334	CS2	165		-2.62		C2H4O2	ACETIC ACID
335	PARAFFINS	197	12	-1.32		C2H4O2	ACETIC ACID
336	BROMOFORM	47		-1.58		C2H4O2	ACETIC ACID
337	OCTANOL	5		-1.11	-1.11 =	C2H4O3	HYDROXYACETIC ACID/GLYCOLIC ACID/
338	DIETHYL ETHER	192		-1.55	-1.23 A	C2H4O3	HYDROXYACETIC ACID/GLYCOLIC ACID/
339	OLEYL ALCOHOL	5		-1.70	-1.13	C2H4O3	HYDROXYACETIC ACID /GLYCOLIC ACID/
340	OILS	224		1.57	1.74 B	C2H5BR1	ETHYL BROMIDE
341	OILS	224		1.38	1.54 B	C2H5CL1	ETHYL CHLORIDE
342	OCTANOL	186		2.00	2.00 =	C2H5I1	ETHYL IODIDE
343	DIETHYL ETHER	3	50	2.45	2.27 A	C2H5I1	ETHYL IODIDE
344	OCTANOL	56		-0.13	-0.13 =	C2H5N1O1	ACETALDOXIME
345	DIETHYL ETHER	3		-2.60	-1.46 B	C2H5N1O1	ACETAMIDE
346	DIETHYL ETHER	112		-2.60	-1.46 B	C2H5N1O1	ACETAMIDE
347	CHCL3	112		-2.00	-1.26 N	C2H5N1O1	ACETAMIDE
348	OILS	2		-3.08	-1.58 A	C2H5N1O1	ACETAMIDE
349	DIETHYL ETHER	192	12	-2.08	-1.71 A	C2H5N1O2	AMINOACETIC ACID/GLYCINE/
350	N-BUTANOL	225		-1.81	-3.03	C2H5N1O2	AMINOACETIC ACID/GLYCINE/
351	SEC-BUTANOL	84	19	-1.01	-1.92	C2H5N1O2	AMINOACETIC ACID/GLYCINE/
352	S-PENTANOLS	195		-1.82	-2.39	C2H5N1O2	AMINOACETIC ACID/GLYCINE/
353	DIETHYL ETHER	3		-0.85	-0.63 A	C2H5N1O2	O-METHYL CARBAMATE
354	OILS	2		-1.60	-0.26 A	C2H5N1O2	O-METHYL CARBAMATE
355	OILS	224		-1.40	-0.04 A	C2H5N1O2	O-METHYL CARBAMATE
356	OILS	214		-1.40	-0.04 A	C2H5N1O2	O-METHYL CARBAMATE
357	OCTANOL	186		0.18	0.18 =	C2H5N1O2	NITROETHANE
358	DIETHYL ETHER	112		-0.55	0.36 B	C2H5N1S1	THIOACETAMIDE
359	CHCL3	112		-1.14	-0.46 N	C2H5N1S1	THIOACETAMIDE
360	OCTANOL	226		-0.16	-0.16 =	C2H5N3O2	1-METHYL-1-NITROUREA (23909)
361	OCTANOL	227		-0.03	-0.03 =	C2H5N3O2	1-METHYL-1-NITROUREA (23909)
362	CCL4	228		-0.04	-0.09 B	C2H6F1O3P1	OIMETHYLFLUOROPHOSPHATE
363	DIETHYL ETHER	3		-2.92	-1.75 A	C2H6N2O1	METHYL UREA
364	OILS	2		-3.36	-1.84 A	C2H6N2O1	METHYL UREA
365	DIETHYL ETHER	3		-3.55	-2.98 A	C2H6N2O2	METHYLLOUREA
366	DIETHYL ETHER	198		-1.64	-1.31 A	C2H6N2S1	METHYLTHIOUREA
367	OCTANOL	5		-0.32	-0.32 =	C2H6O1	ETHANOL
368	DIETHYL ETHER	3		-0.58	-0.39 A	C2H6O1	ETHANOL
369	DIETHYL ETHER	198	12	0.28	0.37 A	C2H6O1	ETHANOL
370	DIETHYL ETHER	174		-0.57	-0.38 A	C2H6O1	ETHANOL
371	CYCLOHEXANE	82		-2.37		C2H6O1	ETHANOL
372	CYCLOHEXANE	229		-1.96		C2H6O1	ETHANOL
373	CHCL3	174		-0.85	-0.18 N	C2H6O1	ETHANOL
374	OILS	230		-1.52	-0.19 A	C2H6O1	ETHANOL
375	OILS	173		-1.45	-0.13 A	C2H6O1	ETHANOL
376	OILS	101		-1.45	-0.11 A	C2H6O1	ETHANOL
377	OILS	200		-1.49	-0.17 A	C2H6O1	ETHANOL
378	OILS	70		-1.33	0.00 A	C2H6O1	ETHANOL
379	BENZENE	82		-1.58	-0.18 A	C2H6O1	ETHANOL
380	BENZENE	231		-1.49	-0.09	C2H6O1	ETHANOL
381	BENZENE	232		-0.01	1.37 A	C2H6O1	ETHANOL
382	CCL4	233	12	-1.61	0.47 A	C2H6O1	ETHANOL
383	HEXANE	82		-2.26		C2H6O1	ETHANOL
384	OLEYL ALCOHOL	82		-1.00	-0.43	C2H6O1	ETHANOL
385	CS2	233		-1.84		C2H6O1	ETHANOL
386	OCTANOL	9		-2.03	-2.03 =	C2H6O1S1	OIMETHYLSULFOXIDE
387	CCL4	234	12	-1.51		C2H6O1S1	OIMETHYLSULFOXIDE
388	OCTANOL	9		-1.93	-1.93 =	C2H6O2	ETHANE-1,2-DIOL/ETHYLENE GLYCOL/
389	DIETHYL ETHER	3		-2.27	-1.88 A	C2H6O2	ETHANE-1,2-DIOL/ETHYLENE GLYCOL/
390	OILS	2		-3.31	-1.79 A	C2H6O2	ETHANE-1,2-DIOL/ETHYLENE GLYCOL/
391	OCTANOL	235		1.77	1.77 =	C2H6S2	OIMETHYLOISULFIDE
392	DIETHYL ETHER	3		-1.22	-0.23 B	C2H7N1	OIMETHYLAMINE
393	BENZENE	205		-0.82	-0.02	C2H7N1	OIMETHYLAMINE
394	1-BUTANOL	184		0.10	-0.38	C2H7N1	OIMETHYLAMINE
395	XYLENE	46		-0.68	-0.10 B	C2H7N1	OIMETHYLAMINE
396	TOLUENE	205		-1.08	-0.12 B	C2H7N1	OIMETHYLAMINE
397	TOLUENE	68		-1.28	-0.27 B	C2H7N1	OIMETHYLAMINE
398	DIETHYL ETHER	3		-1.18	-0.19 B	C2H7N1	ETHYLAMINE
399	XYLENE	46		-0.66	-0.08 B	C2H7N1	ETHYLAMINE
400	TOLUENE	68		-1.28	-0.27 B	C2H7N1	ETHYLAMINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME	
401	OCTANOL	5		-1.31	=	C2H7N101	ETHANOLAMINE	
402	DIETHYL ETHER	3	50	-2.89	-1.71	8	C2H7N101	ETHANOLAMINE
403	PRIM. PENTANOLS	236	17	-0.18	-0.53		C2H7O4P1	PHOSPHATE, MONOETHYL
404	OCTANOL	206		1.96	1.96	=	C3H18R3N2	IMIDAZOLE, 2,4,5-TRIBROMO
405	OCTANOL	206		1.18	1.18	=	C3H1CL3N2	IMIDAZOLE, 2,4,5-TRICHLORO
406	OCTANOL	206		2.78	2.78	=	C3H1I3N2	IMIDAZOLE, 2,4,5-TRIIODO
407	DIETHYL ETHER	237		0.04	0.15	A	C3H2N2	MALONONITRILE
408	CHCL3	237		-0.53	0.11	N	C3H2N2	MALONONITRILE
409	DIETHYL ETHER	112		0.40	0.46	A	C3H2O2	ACETYLENE CARBOXYLIC ACID/PROPIOLIC ACID/
410	CHCL3	112		-1.85	-0.46	A	C3H2O2	ACETYLENE CARBOXYLIC ACID/PROPIOLIC ACID/
411	OCTANOL	9		1.23	1.23	=	C3H3F5O1	PROPANOL, 2,2,3,3,3-PENTAFLUORO
412	OCTANOL	5		-0.92	-0.92	=	C3H3N1	ACRYLONITRILE
413	OCTANOL	56		0.08	0.08	=	C3H3N1O1	ISOXAZOLE
414	DIETHYL ETHER	207		-0.52	-0.33	A	C3H3N1O2	CYANOACETIC ACID
415	DIETHYL ETHER	112		-0.43	-0.26	A	C3H3N1O2	CYANOACETIC ACID
416	DIETHYL ETHER	66		-0.44	-0.26	A	C3H3N1O2	CYANOACETIC ACID
417	CHCL3	112		-2.17	-0.75	A	C3H3N1O2	CYANOACETIC ACID
418	BENZENE	66	12	-0.76	0.63	A	C3H3N1O2	CYANOACETIC ACID
419	OCTANOL	218		0.44	0.44	=	C3H3N1S1	THIAZOLE
420	OCTANOL	218		0.22	0.22	=	C3H3N3O2	AZAUACIL
421	DIETHYL ETHER	207		0.68	0.72	A	C3H48R2O2	A,8-DIBROMOPROPIONIC ACID
422	DIETHYL ETHER	46	12	1.79	1.69	A	C3H48R2O2	A,8-DIBROMOPROPIONIC ACID
423	CHCL3	46		-0.42	0.84	A	C3H48R2O2	A,8-DIBROMOPROPIONIC ACID
424	XYLENE	46		-0.60	1.13	A	C3H48R2O2	A,8-DIBROMOPROPIONIC ACID
425	OILS	173		-0.28	0.21	8	C3H4CL2O1	1,3-DICHLOROACETONE
426	OCTANOL	238		0.13	0.13	=	C3H4N2	PYRAZOLE
427	OCTANOL	56		-1.69	-1.69	=	C3H4N2O2	HYDANTOIN
428	DIETHYL ETHER	192		0.36	0.43	A	C3H4O2	ACRYLIC ACID
429	ME-I-BUT.KETONE	195		0.40	0.31	A	C3H4O2	ACRYLIC ACID
430	DIETHYL ETHER	112		-0.62	-0.43	A	C3H4O3	A-KETOPROPIONIC ACID/PYRUVIC ACID/
431	DIETHYL ETHER	46		-0.41	-0.24	A	C3H4O3	A-KETOPROPIONIC ACID/PYRUVIC ACID/
432	CHCL3	112		-2.18	-0.75	A	C3H4O3	A-KETOPROPIONIC ACID/PYRUVIC ACID/
433	CHCL3	46		-1.02	0.29	A	C3H4O3	A-KETOPROPIONIC ACID/PYRUVIC ACID/
434	XYLENE	46		-1.52	0.13	A	C3H4O3	A-KETOPROPIONIC ACID/PYRUVIC ACID/
435	OLEYL ALCOHOL	5		-0.92	-0.35	A	C3H4O3	A-KETOPROPIONIC ACID/PYRUVIC ACID/
436	DIETHYL ETHER	212		-0.99	-0.75	A	C3H4O4	MALONIC ACID
437	DIETHYL ETHER	207		-1.08	-0.81	A	C3H4O4	MALONIC ACID
438	DIETHYL ETHER	194		-0.91	-0.68	A	C3H4O4	MALONIC ACID
439	DIETHYL ETHER	46		-0.34	-0.18	A	C3H4O4	MALONIC ACID
440	DIETHYL ETHER	64		-0.89	-0.66	A	C3H4O4	MALONIC ACID
441	N-BUTANOL	194		-0.28	-0.91		C3H4O4	MALONIC ACID
442	1-BUTANOL	48		-0.11	-0.66		C3H4O4	MALONIC ACID
443	PRIM. PENTANOLS	48		-0.22	-0.58		C3H4O4	MALONIC ACID
444	ETHYL ACETATE	194		-0.65	-0.75		C3H4O4	MALONIC ACID
445	HEXANOL	74		-0.51			C3H4O4	MALONIC ACID
446	ME-I-BUT.KETONE	195		-0.73	-0.68		C3H4O4	MALONIC ACID
447	OLEYL ALCOHOL	5		-1.28	-0.70		C3H4O4	MALONIC ACID
448	S-PENTANOLS	195		-0.43	-0.80		C3H4O4	MALONIC ACID
449	N-BUTANOL	181	10	-0.40			C3H4O7P1	PHOSPHOGLYCERATE ANION
450	PRIM. PENTANOLS	181	10	0.11			C3H4O7P1	PHOSPHOGLYCERATE ANION
451	HEXANOL	181	18	-0.52			C3H4O7P1	PHOSPHOGLYCERATE ANION
452	OCTANOL	5		0.92	0.92	=	C3H58R1O2	A-BROMOPROPIONIC ACID
453	DIETHYL ETHER	3		1.18	1.15	A	C3H58R1O2	A-BROMOPROPIONIC ACID
454	DIETHYL ETHER	207		1.04	1.03	A	C3H58R1O2	A-BROMOPROPIONIC ACID
455	DIETHYL ETHER	46		1.50	1.44	A	C3H58R1O2	A-BROMOPROPIONIC ACID
456	CHCL3	29		-0.44	0.82	A	C3H58R1O2	A-BROMOPROPIONIC ACID
457	OILS	209		-0.18	1.08	A	C3H58R1O2	A-BROMOPROPIONIC ACID
458	BENZENE	29		-0.62	0.76	A	C3H58R1O2	A-BROMOPROPIONIC ACID
459	XYLENE	46		-1.01	0.69	A	C3H58R1O2	A-BROMOPROPIONIC ACID
460	TOLUENE	29		-0.80	0.86	A	C3H58R1O2	A-BROMOPROPIONIC ACID
461	CHCL3	29		-0.61	0.65	A	C3H58R1O2	8-BROMOPROPIONIC ACID
462	OILS	209		-0.34	0.91	A	C3H58R1O2	8-BROMOPROPIONIC ACID
463	BENZENE	29		-0.85	0.54	A	C3H58R1O2	8-BROMOPROPIONIC ACID
464	TOLUENE	29		-0.97	0.71	A	C3H58R1O2	8-BROMOPROPIONIC ACID
465	OILS	239		2.16	2.14	8	C3H5CL1N2O6	2,3-PROPANEDIOL DINITRATE, 1-CHLORO
466	OILS	173		0.03	0.28	8	C3H5CL1O1	CHLOROACETONE
467	DIETHYL ETHER	207		0.95	0.96	A	C3H5CL1O2	A-CHLOROPROPIONIC ACID
468	DIETHYL ETHER	207		0.62	0.66	A	C3H5CL1O2	8-CHLOROPROPIONIC ACID
469	CHCL3	29		-0.86	0.44	A	C3H5CL1O2	8-CHLOROPROPIONIC ACID
470	OILS	209		-0.53	0.76	A	C3H5CL1O2	8-CHLOROPROPIONIC ACID
471	BENZENE	29		-1.06	0.33	A	C3H5CL1O2	8-CHLOROPROPIONIC ACID
472	TOLUENE	29		-1.23	0.49	A	C3H5CL1O2	8-CHLOROPROPIONIC ACID
473	CHCL3	29		-0.40	0.85	A	C3H5I1O2	8-IODOPROPIONIC ACID
474	CHCL3	46		-0.32	0.93	A	C3H5I1O2	8-IODOPROPIONIC ACID
475	BENZENE	29		-0.52	0.86	A	C3H5I1O2	8-IODOPROPIONIC ACID
476	XYLENE	46		-0.82	0.89	A	C3H5I1O2	8-IODOPROPIONIC ACID
477	TOLUENE	29		-0.68	0.95	A	C3H5I1O2	8-IODOPROPIONIC ACID
478	DIETHYL ETHER	46		1.15	1.13	A	C3H5I1O2	8-IODOPROPIONIC ACID
479	OCTANOL	186		0.16	0.16	=	C3H5N1	PROPIONITRILE
480	OCTANOL	5		0.04	0.04	=	C3H5N1	PROPIONITRILE
481	OILS	239		2.04	2.05	8	C3H5N3O9	GLYCERYL TRINITRATE
482	OILS	240		2.06	2.35	8	C3H5N3O9	GLYCERYL TRINITRATE
483	OCTANOL	227		0.57	0.57	=	C3H6CL1N3O2	1-(2-CHLOROETHYL)-1-NITROUREA (NCS 47547)
484	DIETHYL ETHER	2		-0.34	-0.18	A	C3H6N2	DIMETHYL CYANAMIDE
485	OILS	2		-1.14	-0.50	8	C3H6N2	DIMETHYL CYANAMIDE
486	DIETHYL ETHER	3	12	-3.52	-2.87	A	C3H6N2O2	MALONDIAMIDE
487	1-BUTANOL	4		-1.06	-1.99		C3H6N2O2	MALONDIAMIDE
488	OCTANOL	238		-0.66	-0.66	=	C3H6N2S1	IMIDAZOLONE, 2-THIO/ETHYLENETHIOUREA/
489	PARAFFINS	241		-1.79			C3H6N2S1	IMIDAZOLONE, 2-THIO/ETHYLENETHIOUREA/
490	OCTANOL	5		-0.24	-0.24	=	C3H6O1	ACETONE
491	DIETHYL ETHER	3	50	-0.21	-0.06	A	C3H6O1	ACETONE
492	CYCLOHEXANE	242		-0.96			C3H6O1	ACETONE
493	CHCL3	243	12	0.72	0.39	8	C3H6O1	ACETONE
494	OILS	230		-0.70	-0.14	8	C3H6O1	ACETONE
495	OILS	173		-1.10	-0.47	8	C3H6O1	ACETONE
496	OILS	70		-0.64	-0.09	8	C3H6O1	ACETONE
497	BENZENE	51	12	-0.04	0.52	8	C3H6O1	ACETONE
498	BENZENE	182	12	-0.03	0.51	8	C3H6O1	ACETONE
499	BENZENE	244	12	-0.04	0.52	8	C3H6O1	ACETONE
500	BENZENE	42	12	0.00	0.55	8	C3H6O1	ACETONE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME	
501	TOLUENE	188	12	-0.31	0.43	8	C3H6O1	ACETONE
502	CCL4	51	12	-0.37			C3H6O1	ACETONE
503	CCL4	243		-0.35	-0.25	8	C3H6O1	ACETONE
504	CCL4	37		-0.34	-0.36	8	C3H6O1	ACETONE
505	HEXANE	242		-0.92			C3H6O1	ACETONE
506	CS2	242		-0.52			C3H6O1	ACETONE
507	CL3CCCHCL2	243		0.22			C3H6O1	ACETONE
508	CL2CHCHCL2	243		0.63			C3H6O1	ACETONE
509	CL2C=CCL2	243		-0.55			C3H6O1	ACETONE
510	CL2C=CHCL	243		0.05			C3H6O1	ACETONE
511	OCTANOL	56		0.17	0.17	=	C3H6O1	ALLYL ALCOHOL
512	DIETHYL ETHER	174		-0.12	0.02	A	C3H6O1	ALLYL ALCOHOL
513	CHCL3	174		-0.51	0.13	N	C3H6O1	ALLYL ALCOHOL
514	DIETHYL ETHER	3		0.30	0.38	A	C3H6O1	PROPIONALOEHYOE
515	OCTANOL	5		0.18	0.18	=	C3H6O2	ACETIC ACID, METHYL ESTER
516	DIETHYL ETHER	3	50	0.43	0.49	A	C3H6O2	ACETIC ACID, METHYL ESTER
517	OILS	2		-0.37	0.20	8	C3H6O2	ACETIC ACID, METHYL ESTER
518	BENZENE	245	12	0.47	0.87	8	C3H6O2	ACETIC ACID, METHYL ESTER
519	CCL4	245		0.41	0.32	8	C3H6O2	ACETIC ACID, METHYL ESTER
520	CS2	245		0.26			C3H6O2	ACETIC ACID, METHYL ESTER
521	OCTANOL	218		0.33	0.33	=	C3H6O2	PROPIONIC ACID
522	OCTANOL	5		0.25	0.25	=	C3H6O2	PROPIONIC ACID
523	DIETHYL ETHER	190		0.13	0.23	A	C3H6O2	PROPIONIC ACID
524	DIETHYL ETHER	207		0.20	0.29	A	C3H6O2	PROPIONIC ACID
525	DIETHYL ETHER	112		0.23	0.31	A	C3H6O2	PROPIONIC ACID
526	DIETHYL ETHER	46		0.18	0.27	A	C3H6O2	PROPIONIC ACID
527	DIETHYL ETHER	49		0.23	0.33	A	C3H6O2	PROPIONIC ACID
528	DIETHYL ETHER	36		0.27	0.35	A	C3H6O2	PROPIONIC ACID
529	CHCL3	51		-0.78	0.52	A	C3H6O2	PROPIONIC ACID
530	CHCL3	14		-0.79	0.51	A	C3H6O2	PROPIONIC ACID
531	CHCL3	48		-0.79	0.50	A	C3H6O2	PROPIONIC ACID
532	CHCL3	112		-0.85	0.45	A	C3H6O2	PROPIONIC ACID
533	CHCL3	29		-0.80	0.49	A	C3H6O2	PROPIONIC ACID
534	OILS	209		-0.80	0.51	A	C3H6O2	PROPIONIC ACID
535	OILS	193		-0.85	0.42	A	C3H6O2	PROPIONIC ACID
536	BENZENE	51		-1.20	0.25	A	C3H6O2	PROPIONIC ACID
537	BENZENE	44		-1.16	0.24	A	C3H6O2	PROPIONIC ACID
538	BENZENE	14		-1.37	0.03	A	C3H6O2	PROPIONIC ACID
539	BENZENE	29		-1.22	0.18	A	C3H6O2	PROPIONIC ACID
540	N-BUTANOL	190		0.51	0.19		C3H6O2	PROPIONIC ACID
541	I-BUTANOL	184		0.51	0.22		C3H6O2	PROPIONIC ACID
542	1-BUTANOL	48		0.43	0.10		C3H6O2	PROPIONIC ACID
543	SEC-BUTANOL	190		0.39	0.44		C3H6O2	PROPIONIC ACID
544	XYLENE	48		-1.32			C3H6O2	PROPIONIC ACID
545	XYLENE	46		-1.24	0.44	A	C3H6O2	PROPIONIC ACID
546	TOLUENE	51		-1.34	0.39	A	C3H6O2	PROPIONIC ACID
547	TOLUENE	29		-1.33	0.40	A	C3H6O2	PROPIONIC ACID
548	NITROBENZENE	14		-0.80	0.21		C3H6O2	PROPIONIC ACID
549	NITROBENZENE	48		-0.75	0.28		C3H6O2	PROPIONIC ACID
550	PRIM. PENTANOLS	190		0.54	0.30		C3H6O2	PROPIONIC ACID
551	PRIM. PENTANOLS	48		0.37	0.16		C3H6O2	PROPIONIC ACID
552	ETHYL ACETATE	194		0.35	0.32		C3H6O2	PROPIONIC ACID
553	CCL4	14		-1.79	0.33	A	C3H6O2	PROPIONIC ACID
554	CCL4	48		-1.62	0.46	A	C3H6O2	PROPIONIC ACID
555	OI-I-PR. ETHER	190		-0.09	0.44		C3H6O2	PROPIONIC ACID
556	OI-I-PR. ETHER	221		-0.09	0.41		C3H6O2	PROPIONIC ACID
557	OI-I-PR. ETHER	222		-0.01	0.47		C3H6O2	PROPIONIC ACID
558	2-BUTANONE	190		0.40	0.14		C3H6O2	PROPIONIC ACID
559	ME-I-BUT.KETONE	195		0.21	0.14		C3H6O2	PROPIONIC ACID
560	OLEYL ALCOHOL	5		-0.09	0.46		C3H6O2	PROPIONIC ACID
561	ETHYL BROMIDE	48		-0.70			C3H6O2	PROPIONIC ACID
562	O-NITROTOLUENE	48		-0.86			C3H6O2	PROPIONIC ACID
563	DECALIN	48		-1.44			C3H6O2	PROPIONIC ACID
564	S-PENTANOLS	190		0.58	0.36		C3H6O2	PROPIONIC ACID
565	S-PENTANOLS	195		0.49	0.25		C3H6O2	PROPIONIC ACID
566	PARAFFINS	14		-2.15			C3H6O2	PROPIONIC ACID
567	PARAFFINS	197	12	-1.28			C3H6O2	PROPIONIC ACID
568	DECALIN	246		-1.56			C3H6O2	PROPIONIC ACID
569	OCTANOL	5		-0.62	-0.62	=	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
570	DIETHYL ETHER	51		-1.09	-0.84	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
571	DIETHYL ETHER	247		-0.99	-0.74	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
572	DIETHYL ETHER	112		-0.96	-0.73	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
573	DIETHYL ETHER	46		-0.64	-0.44	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
574	DIETHYL ETHER	49		-1.09	-0.84	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
575	DIETHYL ETHER	213		-1.07	-0.82	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
576	CHCL3	112		-2.23	-0.81	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
577	CHCL3	46		-1.81	-0.43	A	C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
578	I-BUTANOL	184		-0.10	-0.65		C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
579	PRIM. PENTANOLS	247		-0.32	-0.81		C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
580	PRIM. PENTANOLS	48		-0.40	-0.81		C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
581	ME-I-BUT.KETONE	195		-0.80	-0.74		C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
582	OLEYL ALCOHOL	5		-1.21	-0.64		C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
583	S-PENTANOLS	195		-0.31	-0.66		C3H6O3	A-HYDROXYPROPIONIC ACID/LACTIC ACID/
584	DIETHYL ETHER	207		-0.76	-0.55	A	C3H6O3	METHOXYACETIC ACID
585	DIETHYL ETHER	112		-0.62	-0.43	A	C3H6O3	METHOXYACETIC ACID
586	CHCL3	112	12	-1.30	0.04	A	C3H6O3	METHOXYACETIC ACID
587	ME-I-BUT.KETONE	195		-0.57	-0.58		C3H6O3	METHOXYACETIC ACID
588	S-PENTANOLS	195		-0.30	-0.65		C3H6O3	METHOXYACETIC ACID
589	DIETHYL ETHER	3		-2.05	-1.68	A	C3H6O4	A, B-OIHYDROXYPROPIONIC ACID/GLYCERIC ACID/
590	OCTANOL	186		2.10	2.10	=	C3H78R1	1-BROMOPROPANE
591	DIETHYL ETHER	2		-1.10	-0.85	A	C3H7CL102	GLYCEROL MONOCHLOROHYDRIN
592	OILS	2		-1.92	-0.55	A	C3H7CL102	GLYCEROL MONOCHLOROHYDRIN
593	DIETHYL ETHER	3		-1.10	-0.85	A	C3H7CL102	GLYCEROL-A-MONOCHLOROHYDRIN
594	DIETHYL ETHER	2		-1.62	-0.59	8	C3H7N101	OIMETHYLFORMAMIOE
595	OILS	2		-2.31	-0.87	A	C3H7N101	OIMETHYLFORMAMIOE
596	OCTANOL	235		-1.05	-1.05	=	C3H7N101	N-METHYLACETAMIOE
597	DIETHYL ETHER	3		-1.89	-0.81	8	C3H7N101	PROPIONAMIOE
598	CHCL3	248		-1.40	-0.70	N	C3H7N101	PROPIONAMIOE
599	OILS	2		-2.44	-0.99	A	C3H7N101	PROPIONAMIOE
600	DIETHYL ETHER	3	50	-1.14	-0.88	A	C3H7N102	AMINOACETIC ACID, METHYL ESTER

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
601	OCTANOL	56		-2.94	-2.94 =	C3H7N1O2	A-AMINOPROPIONIC ACID/ALANINE/
602	DIETHYL ETHER	3	12	-5.85	-5.00 A	C3H7N1O2	A-AMINOPROPIONIC ACID/ALANINE/
603	N-BUTANOL	225		-1.60	-2.74	C3H7N1O2	A-AMINOPROPIONIC ACID /ALANINE/
604	SEC-BUTANOL	84	19	-0.94	-1.82	C3H7N1O2	A-AMINOPROPIONIC ACID /ALANINE/
605	OCTANOL	218		-0.15	-0.15 =	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
606	DIETHYL ETHER	3		-0.19	-0.04 A	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
607	OILS	2		-1.12	0.22 A	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
608	OILS	173		-0.92	0.38 A	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
609	OILS	82		-1.52	-0.15 A	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
610	OILS	214		-0.85	0.44 A	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
611	OILS	249		-1.00	0.30 A	C3H7N1O2	O-ETHYL CARBAMATE/URETHANE/
612	DIETHYL ETHER	3		-2.74	-2.28 A	C3H7N1O2	A-HYDROXYPROPIONAMIDE/LACTAMIDE/
613	OCTANOL	186		0.65	0.65 =	C3H7N1O2	1-NITROPROPANE
614	CYCLOHEXANE	250		0.53		C3H7N1O2	1-NITROPROPANE
615	CHCL3	250	12	1.91	2.41 N	C3H7N1O2	1-NITROPROPANE
616	TOLUENE	250		1.40	1.67 B	C3H7N1O2	1-NITROPROPANE
617	CCL4	250		0.99		C3H7N1O2	1-NITROPROPANE
618	OCTANE	250		0.45		C3H7N1O2	1-NITROPROPANE
619	CS2	250		0.85		C3H7N1O2	1-NITROPROPANE
620	OILS	240		0.45	1.46 A	C3H7N1O5	GLYCERYL MONONITRATE
621	OCTANOL	181	10	0.28	0.28 =	C3H7O6P1	8-GLYCEROPHOSPHATE ANION
622	N-BUTANOL	181	10	-0.70		C3H7O6P1	8-GLYCEROPHOSPHATE ANION
623	PRIM. PENTANOLS	181	10	0.04		C3H7O6P1	8-GLYCEROPHOSPHATE ANION
624	HEXANOL	181	18	-0.04		C3H7O6P1	8-GLYCEROPHOSPHATE ANION
625	OCTANOL	181	10	0.43	0.43 =	C3H7O6P1	L-A-GLYCEROPHOSPHATE ANION
626	N-BUTANOL	181	10	-0.70		C3H7O6P1	L-A-GLYCEROPHOSPHATE ANION
627	PRIM. PENTANOLS	181	10	0.21		C3H7O6P1	L-A-GLYCEROPHOSPHATE ANION
628	HEXANOL	181	18	0.18		C3H7O6P1	L-A-GLYCEROPHOSPHATE ANION
629	PRIM. PENTANOLS	181	10	-0.22		C3H8N1O6P1	SERINE PHOSPHATE
630	OILS	2		-2.64	-1.17 A	C3H8N2O1	N,N-DIMETHYLUREA
631	DIETHYL ETHER	3		-2.51	-2.07 A	C3H8N2O1	DMETHYLUREA, SYM.
632	DIETHYL ETHER	3		-2.54	-2.10 A	C3H8N2O1	DMETHYLUREA, UNSYM
633	DIETHYL ETHER	3		-2.39	-1.97 A	C3H8N2O1	ETHYLUREA
634	OILS	2		-2.77	-1.29 A	C3H8N2O1	ETHYLUREA
635	DIETHYL ETHER	198		-1.35	-1.06 A	C3H8N2S1	ETHYLTHIOUREA
636	OCTANOL	186		0.34	0.34 =	C3H8O1	PROPANOL
637	DIETHYL ETHER	3		0.28	0.36 A	C3H8O1	PROPANOL
638	DIETHYL ETHER	174		-0.03	0.10 A	C3H8O1	PROPANOL
639	CYCLOHEXANE	82		-1.49		C3H8O1	PROPANOL
640	CHCL3	174		-0.21	0.41 N	C3H8O1	PROPANOL
641	OILS	173		-0.85	0.42 A	C3H8O1	PROPANOL
642	OILS	101		-0.81	0.45 A	C3H8O1	PROPANOL
643	OILS	200		-0.89	0.38 A	C3H8O1	PROPANOL
644	OILS	201		-0.81	0.45 A	C3H8O1	PROPANOL
645	BENZENE	82		-0.87	0.48 A	C3H8O1	PROPANOL
646	BENZENE	231		-0.65	0.74	C3H8O1	PROPANOL
647	HEXANE	82		-1.48		C3H8O1	PROPANOL
648	OLEYL ALCOHOL	82		-0.45	0.12	C3H8O1	PROPANOL
649	DIETHYL ETHER	2		-0.19	-0.04 A	C3H8O1	1-PROPANOL
650	DIETHYL ETHER	174		-0.33	-0.16 A	C3H8O1	I-PROPANOL
651	CHCL3	174		-0.35	0.28 N	C3H8O1	I-PROPANOL
652	OILS	2		-1.32	0.00 A	C3H8O1	1-PROPANOL
653	OILS	201		-1.05	0.24 A	C3H8O1	I-PROPANOL
654	OCTANOL	5		0.00	0.00 =	C3H8O2	DMETHOXYMETHANE
655	DIETHYL ETHER	3		-0.82	-0.60 A	C3H8O2	METHOXYETHANOL
656	OILS	2		-2.25	-0.82 A	C3H8O2	METHOXYETHANOL
657	DIETHYL ETHER	3		-1.74	-1.41 A	C3H8O2	1,2-PROPANEDIOL
658	OILS	2		-2.77	-1.30 A	C3H8O2	1,2-PROPANEDIOL
659	DIETHYL ETHER	3		-2.00	-1.64 A	C3H8O2	TRIMETHYLENE GLYCOL
660	DIETHYL ETHER	3		-3.18	-2.66 A	C3H8O3	GLYCEROL
661	DIETHYL ETHER	198		-2.96	-2.47 A	C3H8O3	GLYCEROL
662	OILS	2		-4.15	-2.56 A	C3H8O3	GLYCEROL
663	OCTANOL	218		-0.03	-0.03 =	C3H9N1	ISOPROPYLAMINE
664	DIETHYL ETHER	3		-0.54	0.37 B	C3H9N1	PROPYLAMINE
665	XYLENE	46		-0.36	0.21 B	C3H9N1	PROPYLAMINE
666	TOLUENE	68		-0.65	0.15 B	C3H9N1	PROPYLAMINE
667	OCTANOL	251		0.27	0.27 =	C3H9N1	TRIMETHYLAMINE
668	DIETHYL ETHER	3		-0.34	0.54 B	C3H9N1	TRIMETHYLAMINE
669	DIETHYL ETHER	251		-0.26	0.61 B	C3H9N1	TRIMETHYLAMINE
670	DIETHYL ETHER	188		-0.38	0.52 B	C3H9N1	TRIMETHYLAMINE
671	CYCLOHEXANE	251		-0.44		C3H9N1	TRIMETHYLAMINE
672	CHCL3	251		0.54	0.23 B	C3H9N1	TRIMETHYLAMINE
673	CHCL3	46		0.59	0.27 B	C3H9N1	TRIMETHYLAMINE
674	BENZENE	205		-0.33	0.31 B	C3H9N1	TRIMETHYLAMINE
675	BENZENE	251		-0.29	0.35 B	C3H9N1	TRIMETHYLAMINE
676	1-BUTANOL	184		0.49	0.18	C3H9N1	TRIMETHYLAMINE
677	XYLENE	205		-0.44	1.45 B	C3H9N1	TRIMETHYLAMINE
678	TOLUENE	205		-0.36	0.40 B	C3H9N1	TRIMETHYLAMINE
679	TOLUENE	68		-0.36	0.40 B	C3H9N1	TRIMETHYLAMINE
680	TOLUENE	188		-0.34	0.42 B	C3H9N1	TRIMETHYLAMINE
681	CCL4	251		-0.09	0.66 N	C3H9N1	TRIMETHYLAMINE
682	O-I-PR. ETHER	251		-0.36	0.10	C3H9N1	TRIMETHYLAMINE
683	OCTANOL	5		-0.96	-0.96 =	C3H9N1O1	2-PROPANOL, 1-AMINO
684	DIETHYL ETHER	3	50	-2.37	-1.22 B	C3H9N1O1	2-PROPANOL, 1-AMINO
685	PRIM. PENTANOLS	236	17	-0.06	-0.38	C3H9O4P1	PHOSPHATE, MONO-N-PROPYL
686	OCTANOL	56		-0.52	-0.52 =	C3H10N2O1	PHOSPHORIC ACID, TRIMETHYL ESTER
687	DIETHYL ETHER	3		-2.94	-1.77 B	C3H10N2	1,2-PROPYLENEDIAMINE
688	1-BUTANOL	4		-0.92	-1.80	C3H10N2O1	1,3-DIAMINOPROPANOL-2
689	DIETHYL ETHER	3		-3.70	-2.44 B	C3H10N2O3	1,3-DIAMINO-PROPANOL-2
690	OCTANOL	226		-0.95	-0.95 =	C4H3F1N2O2	5-FLUOROURACIL (19893)
691	OCTANOL	9		1.81	1.81 =	C4H3F7O1	BUTANOL, 2,2,3,3,4,4,4-HEPTAFLUORO
692	N-BUTANOL	252	38	0.04	-0.46	C4H3N5O2	AZAXANTHINE
693	DIETHYL ETHER	212		1.73	1.63 A	C4H4BR2O4	1,2-DIBROMOSUCCINIC ACID
694	OCTANOL	238		-0.40	-0.40 =	C4H4N2	PYRIMIDINE
695	CHCL3	188		-0.23	0.35 N	C4H4N2	SUCCINODINITRILE
696	OCTANOL	235	70	-0.28	-0.28 =	C4H4N2O1S1	2-THIOURACIL
697	N-BUTANOL	253	36	-0.40	-1.07	C4H4N2O2	URACIL
698	OCTANOL	218		-1.47	-1.47 =	C4H4N2O3	BARBITURIC ACID
699	DIETHYL ETHER	192		-1.63	-1.32 A	C4H4N2O3	BARBITURIC ACID
700	CHCL3	254		-2.10	-1.32 N	C4H4N2O3	BARBITURIC ACID

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
701	N-BUTANOL	253	36	-1.16	-2.12	C4H4N2O3	BARBITURIC ACIO
702	OCTANOL	65		-1.66	-1.66 =	C4H4N2O4	3-CARBOXYMETHYL SYONONE
703	OCTANOL	227		-0.71	-0.71 =	C4H4N6O1	8-AZAGUANINE (NCS 749) (PKA= 6.43)
704	DIETHYL ETHER	212		0.19	0.28 A	C4H4O4	FUMARIC ACIO
705	DIETHYL ETHER	207		0.10	0.20 A	C4H4O4	FUMARIC ACIO
706	DIETHYL ETHER	46		0.07	0.18 A	C4H4O4	FUMARIC ACIO
707	1-BUTANOL	4		0.76	0.56	C4H4O4	FUMARIC ACIO
708	ETHYL ACETATE	194		0.23	0.23	C4H4O4	FUMARIC ACIO
709	CYCLOHEXANONE	194		0.54		C4H4O4	FUMARIC ACIO
710	2-BUTANONE	194		0.53	0.41	C4H4O4	FUMARIC ACIO
711	ME-I-BUT.KETONE	194		0.08	0.07	C4H4O4	FUMARIC ACIO
712	ME-I-BUT.KETONE	195		0.22	0.20	C4H4O4	FUMARIC ACIO
713	S-PENTANOLS	195		0.60	0.38	C4H4O4	FUMARIC ACIO
714	DIETHYL ETHER	212		-0.82	-0.61 A	C4H4O4	MALEIC ACIO
715	DIETHYL ETHER	207		-1.04	-0.79 A	C4H4O4	MALEIC ACIO
716	DIETHYL ETHER	46		-0.50	-0.32 A	C4H4O4	MALEIC ACIO
717	1-BUTANOL	4		0.11	-0.35	C4H4O4	MALEIC ACIO
718	ME-I-BUT.KETONE	195		-0.66	-0.66	C4H4O4	MALEIC ACIO
719	OLEYL ALCOHOL	5		-0.89	-0.32	C4H4O4	MALEIC ACIO
720	S-PENTANOLS	195		-0.32	-0.67	C4H4O4	MALEIC ACIO
721	OCTANOL	255		1.81	1.81 =	C4H4S1	THIOPHENE
722	DIETHYL ETHER	212		0.46	0.52 A	C4H5BR1O4	BROMOSUCCINIC ACIO
723	DIETHYL ETHER	46		0.84	0.86 A	C4H5BR1O4	BROMOSUCCINIC ACIO
724	1-BUTANOL	4		0.75	0.55	C4H5BR1O4	BROMOSUCCINIC ACIO
725	XYLENE	46		-1.44	0.22 A	C4H5BR1O4	BROMOSUCCINIC ACIO
726	OCTANOL	218		1.18	1.18 =	C4H5F3O2	ACETIC ACIO, TRIFLUORO-ETHYL ESTER
727	OCTANOL	186		0.75	0.75 =	C4H5N1	PYRROLE
728	DIETHYL ETHER	3		-1.51	-1.21 A	C4H5N1O2	SUCCINIMIOE
729	DIETHYL ETHER	113		-1.42	-1.13 A	C4H5N1O2	SUCCINIMIOE
730	CHCL3	113		-1.27	-0.58	C4H5N1O2	SUCCINIMIOE
731	OILS	2		-2.31	-0.91 A	C4H5N1O2	SUCCINIMIOE
732	OILS	173		2.02	2.11 B	C4H5N1S1	ISOTHIOCYANATE, ALLYL
733	OCTANOL	218		-0.22	-0.22 =	C4H5N3	PYRIMIOINE, 2-AMINO
734	N-BUTANOL	253	36	-0.68	-1.46	C4H5N3O1	CYTOSINE
735	OCTANE	256		-1.47		C4H5N3O2	2-METHYL-5-NITROIMIDAZOLE
736	OCTANE	256		-1.60		C4H5N3O2	4-METHYL-5-NITROIMIDAZOLE
737	N-BUTANOL	253	36	-1.54	-2.65	C4H5N3O3	URAMIL
738	OCTANOL	134		0.38	0.38 =	C4H6N4O1S1	3-METHYLTHIO-4-AMINO-1,2,4-TRIAZINE-5-ONE
739	OCTANOL	217	07	-0.25	-0.25 =	C4H6N4O3S2	2-ACETYLAMINO-1,3,4-THIAOIAZOLE-5-SULFONAMIOE
740	CHCL3	217	07	-2.39		C4H6N4O3S2	2-ACETYLAMINO-1,3,4-THIAOIAZOLE-5-SULFONAMIOE
741	OCTANOL	218		-0.26	-0.26 =	C4H6N4O3S2	1,3,4-THIAOIAZOLE-2-SULFONAMIOE, 5-ACETAMIOO
742	OILS	240		2.51	2.76 B	C4H6O1	ERYTHRITOL TETRAMTRATE
743	OILS	257	12	1.66	1.81 B	C4H6O1	OIVINYL ETHER
744	OILS	258		0.40	0.77 B	C4H6O1	OIVINYL ETHER
745	OILS	259		1.61	1.77 B	C4H6O1	OIVINYL ETHER
746	OCTANOL	260		0.60	0.60 =	C4H6O1S1	G-THIOBUTYROLACTONE
747	OCTANOL	261		0.72	0.72 =	C4H6O2	CROTONIC ACIO
748	DIETHYL ETHER	192		0.72	0.74 A	C4H6O2	CROTONIC ACIO
749	DIETHYL ETHER	46		0.55	0.61 A	C4H6O2	CROTONIC ACIO
750	CHCL3	29		-0.50	0.76 A	C4H6O2	CROTONIC ACIO
751	CHCL3	46		-0.56	0.71 A	C4H6O2	CROTONIC ACIO
752	BENZENE	29		-0.91	0.48 A	C4H6O2	CROTONIC ACIO
753	XYLENE	46		-1.05	0.64 A	C4H6O2	CROTONIC ACIO
754	TOLUENE	29		-1.05	0.64 A	C4H6O2	CROTONIC ACIO
755	OCTANOL	5		-0.59	-0.59 =	C4H6O4	SUCCINIC ACIO
756	DIETHYL ETHER	212		-0.87	-0.64 A	C4H6O4	SUCCINIC ACIO
757	DIETHYL ETHER	3		-0.82	-0.60 A	C4H6O4	SUCCINIC ACIO
758	DIETHYL ETHER	192		-0.89	-0.66 A	C4H6O4	SUCCINIC ACIO
759	DIETHYL ETHER	194		-0.90	-0.67 A	C4H6O4	SUCCINIC ACIO
760	DIETHYL ETHER	46		-0.65	-0.45 A	C4H6O4	SUCCINIC ACIO
761	DIETHYL ETHER	62		-0.83	-0.61 A	C4H6O4	SUCCINIC ACIO
762	DIETHYL ETHER	213		-0.84	-0.62 A	C4H6O4	SUCCINIC ACIO
763	DIETHYL ETHER	36		-0.86	-0.63 A	C4H6O4	SUCCINIC ACIO
764	CHCL3	46		-1.92	-0.53 A	C4H6O4	SUCCINIC ACIO
765	N-BUTANOL	194		0.00	-0.51	C4H6O4	SUCCINIC ACIO
766	1-BUTANOL	4		-0.02	-0.53	C4H6O4	SUCCINIC ACIO
767	PRIM. PENTANOLS	182		-0.15	-0.59	C4H6O4	SUCCINIC ACIO
768	PRIM. PENTANOLS	48		-0.19	-0.54	C4H6O4	SUCCINIC ACIO
769	ETHYL ACETATE	194		-0.63	-0.77	C4H6O4	SUCCINIC ACIO
770	CYCLOHEXANONE	194		0.04	-0.80	C4H6O4	SUCCINIC ACIO
771	HEXANOL	74		-0.34		C4H6O4	SUCCINIC ACIO
772	2-BUTANONE	194		0.00	-0.68	C4H6O4	SUCCINIC ACIO
773	ME-I-BUT.KETONE	194		-0.73	-2.14	C4H6O4	SUCCINIC ACIO
774	ME-I-BUT.KETONE	195		-0.69	-0.69	C4H6O4	SUCCINIC ACIO
775	S-PENTANOLS	195		-0.23	-0.57	C4H6O4	SUCCINIC ACIO
776	DIETHYL ETHER	3		-1.52	-1.22 A	C4H6O5	OIGLYCOLIC ACIO
777	DIETHYL ETHER	207		-1.54	-1.24 A	C4H6O5	OIGLYCOLIC ACIO
778	1-BUTANOL	4		-0.31	-0.94	C4H6O5	OIGLYCOLIC ACIO
779	ME-I-BUT.KETONE	195		-1.27	-1.18	C4H6O5	OIGLYCOLIC ACIO
780	S-PENTANOLS	195		-0.62	-1.02	C4H6O5	OIGLYCOLIC ACIO
781	OCTANOL	5		-1.26	-1.26 =	C4H6O5	MALIC ACIO
782	DIETHYL ETHER	207		-1.88	-1.53 A	C4H6O5	MALIC ACIO
783	DIETHYL ETHER	213		-1.85	-1.49 A	C4H6O5	MALIC ACIO
784	1-BUTANOL	4		-0.63	-1.39	C4H6O5	MALIC ACIO
785	OLEYL ALCOHOL	5		-1.74	-1.16	C4H6O5	MALIC ACIO
786	S-PENTANOLS	195		-0.97	-1.42	C4H6O5	MALIC ACIO
787	ME-I-BUT.KETONE	195		-1.36	-1.27	C4H6O5	O-L-MALIC ACIO
788	DIETHYL ETHER	192		-2.43	-2.02 A	C4H6O6	TARTARIC ACIO
789	DIETHYL ETHER	46		-1.01	-0.76 A	C4H6O6	TARTARIC ACIO
790	DIETHYL ETHER	213		-2.42	-2.01 A	C4H6O6	TARTARIC ACIO
791	DIETHYL ETHER	36		-2.34	-1.93 A	C4H6O6	TARTARIC ACIO
792	1-BUTANOL	4		-0.78	-1.60	C4H6O6	TARTARIC ACIO
793	PRIM. PENTANOLS	48		-1.21	-1.84	C4H6O6	TARTARIC ACIO
794	S-PENTANOLS	195		-1.10	-1.56	C4H6O6	TARTARIC ACIO
795	ME-I-BUT.KETONE	195		-1.58	-1.47	C4H6O6	D-TARTARIC ACIO
796	OILS	173		1.12	1.35 B	C4H7BR1O2	BROMOACETIC ACIO, ETHYL ESTER
797	OCTANOL	5		1.42	1.42 =	C4H7BR1O2	A-BROMOBUTYRIC ACIO
798	CHCL3	29		0.08	1.29 A	C4H7BR1O2	A-BROMOBUTYRIC ACIO
799	OILS	209		0.14	1.12 A	C4H7BR1O2	A-BROMOBUTYRIC ACIO
800	BENZENE	29		-0.08	1.33 A	C4H7BR1O2	A-BROMOBUTYRIC ACIO

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
801	I-BUTANOL	4		1.46	1.55	C4H7BR102	A-BROMOBUTYRIC ACID
802	TOLUENE	29		-0.27	1.32 A	C4H7BR102	A-BROMOBUTYRIC ACID
803	OCTANOL	262		1.40	1.40 =	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
804	DIETHYL ETHER	262		1.36	2.06	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
805	CYCLOHEXANE	262		0.55		C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
806	CHCL3	262		1.43	1.93 N	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
807	BENZENE	262		1.46	1.56 B	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
808	N-BUTANOL	262		1.65	1.83	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
809	ETHYL ACETATE	262		1.48	1.53	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
810	N-BUTYL ACETATE	262		1.48	1.52	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
811	CCL4	262		0.92	2.06 N	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
812	N-HEPTANE	262		0.36		C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
813	2-BUTANONE	262		0.72	0.81	C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
814	OCTANE	262		0.30		C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
815	CS2	262		0.71		C4H7CL203P1	OICHLOROVINYLPHOSPHONATE,0,0-OIMETHYL
816	OCTANDL	218		2.03	2.03 =	C4H7CL301	8, 8, 8-TRICHLORO-T-BUTANOL
817	OILS	224		1.36	2.44 A	C4H7CL301	8, 8, 8-TRICHLORO-T-BUTANOL
818	OILS	214		0.20	1.37 A	C4H7CL302	A, A, 8-TRICL-N-BUTYRALOEHYOE HYORATE
819	OILS	173		1.53	1.68 B	C4H7I102	IODOACETIC ACID, ETHYL ESTER
820	DIETHYL ETHER	112		1.23	1.21 A	C4H7N102	DIACETYLMONOXIME
821	CHCL3	112		0.08	0.65 N	C4H7N102	DIACETYLMONOXIME
822	PRIM. PENTANOLS	263		2.38	2.70	C4H7N102	DIACETYLMONOXIME
823	DIETHYL ETHER	207		-2.18	-1.80 A	C4H7N103	ACETIC ACID, ACETYLAMINO/ACETYL GLYCINE/
824	CHCL3	67		-2.78		C4H7N103	ACETIC ACID, ACETYLAMINO/ACETYL GLYCINE/
825	ETHYL ACETATE	67	12	-1.56	-1.73	C4H7N103	ACETIC ACID, ACETYLAMINO/ACETYL GLYCINE/
826	ME-1-BUT.KETONE	195		-1.50	-1.40	C4H7N103	ACETIC ACID, ACETYLAMINO/ACETYL GLYCINE/
827	S-PENTANOLS	195		-0.88	-1.31	C4H7N103	ACETIC ACID, ACETYLAMINO/ACETYL GLYCINE/
828	OCTANOL	260		-0.05	-0.05 =	C4H7NIS1	2-AZACYCLOPENTANTHIONE
829	N-BUTANOL	253	36	-0.31	-0.95	C4H7N5	4, 5, 6-TRIAMINOPYRIMIDINE
830	OCTANOL	56		-3.20	-3.20 =	C4H7NA102	BUTYRIC ACID, SODIUM SALT
831	OILS	264	12	-0.15	1.05 A	C4H8BR1N101	A-BROMO-I-BUTYRAMIOE
832	OCTANOL	238		0.34	0.34 =	C4H8BR1N101	BROMOACETAMIOE, N-ETHYL
833	OCTANOL	262		0.51	0.51 =	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
834	DIETHYL ETHER	262		-0.29	0.59 B	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
835	CYCLOHEXANE	262		-1.70		C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
836	CHCL3	262		-0.10	0.51 N	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
837	BENZENE	262		-0.82	0.57 A	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
838	N-BUTANOL	262		0.93	0.81	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
839	ETHYL ACETATE	262		0.40	0.37	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
840	N-BUTYL ACETATE	262		0.45	0.85	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
841	CCL4	262		-1.40	0.67 A	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
842	N-HEPTANE	262		-2.00		C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
843	2-BUTANONE	262		0.08	-0.52	C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
844	OCTANE	262		-2.00		C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
845	CS2	262		-1.70		C4H8CL304P1	OIME-1-OH-2, 2, 2-TRICLETHYL PHOSPHONATE/OIPTEREX/
846	OCTANOL	238		0.52	0.52 =	C4H8N2	2-IMIDAZOLINE, 2-METHYL
847	CHCL3	265		-0.95	-0.29 N	C4H8N202	OIMETHYLGLYOXIME
848	N-BUTANOL	266		-1.08	-2.16	C4H8N202	OIMETHYLGLYOXIME
849	N-BUTANOL	253	36	-1.32	-2.35	C4H8N6	TETRAMINOPYRIMIDINE
850	OILS	267		0.61	0.94 B	C4H8O1	ALLYL METHYL ETHER
851	OCTANOL	186		0.29	0.29 =	C4H8O1	2-BUTANONE
852	OCTANOL	5		0.26	0.26 =	C4H8O1	2-BUTANONE
853	I-BUTANOL	4		1.20	1.18	C4H8O1	BUTYRALOEHYOE
854	OILS	259		0.83	1.20 B	C4H8O1	CYCLOPROPYL METHYL ETHER
855	OILS	267		0.70	1.02 B	C4H8O1	CYCLOPROPYL METHYL ETHER
856	OCTANOL	268		1.04	1.04 =	C4H8O1	ETHYL VINYL ETHER
857	OILS	258		-0.30	0.19 B	C4H8O1	ETHYL VINYL ETHER
858	OCTANOL	186		0.73	0.73 =	C4H8O2	ACETIC ACID, ETHYL ESTER
859	OCTANOL	5		0.66	0.66 =	C4H8O2	ACETIC ACID, ETHYL ESTER
860	DIETHYL ETHER	3	50	0.93	0.93 A	C4H8O2	ACETIC ACID, ETHYL ESTER
861	OILS	2		0.40	0.79 B	C4H8O2	ACETIC ACID, ETHYL ESTER
862	OILS	224		0.60	0.94 B	C4H8O2	ACETIC ACID, ETHYL ESTER
863	BENZENE	245	12	1.01	1.25 B	C4H8O2	ACETIC ACID, ETHYL ESTER
864	I-BUTANOL	4		0.86	0.70	C4H8O2	ACETIC ACID, ETHYL ESTER
865	CCL4	245		0.95	2.68 A	C4H8O2	ACETIC ACID, ETHYL ESTER
866	CS2	245		0.72		C4H8O2	ACETIC ACID, ETHYL ESTER
867	OCTANOL	5		0.79	0.79 =	C4H8O2	BUTYRIC ACID
868	DIETHYL ETHER	190		0.66	0.69 A	C4H8O2	BUTYRIC ACID
869	DIETHYL ETHER	207		0.68	0.71 A	C4H8O2	BUTYRIC ACID
870	DIETHYL ETHER	46		0.66	0.69 A	C4H8O2	BUTYRIC ACID
871	DIETHYL ETHER	49		0.81	0.82 A	C4H8O2	BUTYRIC ACID
872	CHCL3	29		-0.27	0.97 A	C4H8O2	BUTYRIC ACID
873	CHCL3	46		-0.27	0.97 A	C4H8O2	BUTYRIC ACID
874	OILS	209		-0.21	1.05 A	C4H8O2	BUTYRIC ACID
875	OILS	220		-0.35	0.87 A	C4H8O2	BUTYRIC ACID
876	OILS	193		-0.46	0.82 A	C4H8O2	BUTYRIC ACID
877	BENZENE	44		-0.65	0.74 A	C4H8O2	BUTYRIC ACID
878	BENZENE	29		-0.65	0.73 A	C4H8O2	BUTYRIC ACID
879	N-BUTANOL	190		0.95	0.85	C4H8O2	BUTYRIC ACID
880	I-BUTANOL	4		0.97	0.86	C4H8O2	BUTYRIC ACID
881	I-BUTANOL	184		0.96	0.85	C4H8O2	BUTYRIC ACID
882	I-BUTANOL	48		0.91	0.78	C4H8O2	BUTYRIC ACID
883	SEC-BUTANOL	190		0.72	0.48	C4H8O2	BUTYRIC ACID
884	XYLENE	46		-0.78	0.93 A	C4H8O2	BUTYRIC ACID
885	TOLUENE	29		-0.82	0.84 A	C4H8O2	BUTYRIC ACID
886	NITROBENZENE	48		-0.42	0.50	C4H8O2	BUTYRIC ACID
887	PRIM. PENTANOLS	190		1.05	0.95	C4H8O2	BUTYRIC ACID
888	PRIM. PENTANOLS	184		0.97	0.93	C4H8O2	BUTYRIC ACID
889	PRIM. PENTANOLS	48		1.03	1.00	C4H8O2	BUTYRIC ACID
890	ETHYL ACETATE	194		0.72	0.72	C4H8O2	BUTYRIC ACID
891	CCL4	48		-1.02	0.99 A	C4H8O2	BUTYRIC ACID
892	OI-1-PR. ETHER	221		0.24	0.83 A	C4H8O2	BUTYRIC ACID
893	2-BUTANONE	190		0.70	0.78	C4H8O2	BUTYRIC ACID
894	OCTANE	60	47	-1.76		C4H8O2	BUTYRIC ACID
895	DEYL ALCOHOL	5		0.46	1.02	C4H8O2	BUTYRIC ACID
896	O-NITROTOLUENE	48		-0.44		C4H8O2	BUTYRIC ACID
897	S-PENTANOLS	190		1.01	0.86	C4H8O2	BUTYRIC ACID
898	PARAFFINS	197		-1.15		C4H8O2	BUTYRIC ACID
899	DOECANE	60	47	-1.87		C4H8O2	BUTYRIC ACID
900	HEXADECANE	60	47	-1.92		C4H8O2	BUTYRIC ACID

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
901	CHCL3	51		-0.25	1.00 A	C4H8O2	I-BUTYRIC ACIO
902	CHCL3	29		-0.28	0.96 A	C4H8O2	I-BUTYRIC ACIO
903	OILS	209		-0.12	1.13 A	C4H8O2	I-BUTYRIC ACIO
904	BENZENE	51		-0.74	0.69 A	C4H8O2	I-BUTYRIC ACIO
905	BENZENE	29		-0.72	0.71 A	C4H8O2	I-BUTYRIC ACIO
906	BENZENE	46		-0.81	0.58 A	C4H8O2	I-BUTYRIC ACIO
907	XYLENE	46		-0.80	0.91 A	C4H8O2	I-BUTYRIC ACIO
908	TOLUENE	51		-0.86	0.88 A	C4H8O2	I-BUTYRIC ACIO
909	TOLUENE	29		-0.87	0.82 A	C4H8O2	I-BUTYRIC ACIO
910	NITROBENZENE	48		-0.42	0.50	C4H8O2	I-BUTYRIC ACIO
911	PRIM. PENTANOLS	48		0.99	0.95	C4H8O2	I-BUTYRIC ACIO
912	CCL4	37		-1.47	0.61 A	C4H8O2	I-BUTYRIC ACIO
913	OCTANOL	5		-0.42	-0.42 =	C4H8O2	DIOXANE
914	CCL4	234	12	-0.13		C4H8O2	DIOXANE
915	OCTANOL	56		0.83	0.83 =	C4H8O2	FORMIC ACIO, PROPYL ESTER
916	OIETHYL ETHER	46		-0.40	-0.23 A	C4H8O3	BUTYRIC ACIO, 8-HYOROXY
917	OIETHYL ETHER	207		-0.34	-0.18 A	C4H8O3	ETHOXYACETIC ACIO
918	OCTANOL	5		-0.36	-0.36 =	C4H8O3	A-HYOROXY-1-BUTYRIC ACIO
919	OIETHYL ETHER	192		-0.65	-0.45 A	C4H8O3	A-HYOROXY-1-BUTYRIC ACIO
920	1-BUTANOL	4		0.08	-0.38	C4H8O3	A-HYOROXY-1-BUTYRIC ACIO
921	OLEYL ALCOHOL	5		-0.85	-0.28	C4H8O3	A-HYOROXY-1-BUTYRIC ACIO
922	OIETHYL ETHER	269		-0.48	-0.31 A	C4H8O3	A-HYOROXYBUTYRIC ACIO
923	OIETHYL ETHER	46		-0.08	0.19 A	C4H8O3	A-HYOROXYBUTYRIC ACIO
924	PRIM. PENTANOLS	269		0.05	-0.32	C4H8O3	A-HYOROXYBUTYRIC ACIO
925	OIETHYL ETHER	3		-0.43	-0.26 A	C4H8O3	LACTIC ACIO, METHYL ESTER
926	OCTANOL	186		2.39	2.39 =	C4H9CL1	I-CHLOROBUTANE
927	OCTANOL	186		-0.21	-0.21 =	C4H9N1O1	BUTYRAMIOE
928	OIETHYL ETHER	3		-1.24	-0.24 B	C4H9N1O1	BUTYRAMIOE
929	OILS	2		-2.02	-0.65 A	C4H9N1O1	BUTYRAMIOE
930	1-BUTANOL	4		0.18	-0.25	C4H9N1O1	BUTYRAMIOE
931	OCTANOL	235		-0.77	-0.77 =	C4H9N1O1	N,N-OIMETHYLACETAMIOE
932	OCTANOL	218		-1.08	-1.08 =	C4H9N1O1	MORPHOLINE
933	OIETHYL ETHER	3	12	-5.58	-4.76 A	C4H9N1O2	A-AMINOBUTYRIC ACIO
934	N-BUTANOL	225		-1.34	-2.38	C4H9N1O2	A-AMINOBUTYRIC ACIO
935	I-BUTANOL	4		-1.79	-3.02	C4H9N1O2	A-AMINOBUTYRIC ACIO
936	SEC-BUTANOL	84	19	-0.79	-1.61	C4H9N1O2	A-AMINOBUTYRIC ACIO
937	OCTANOL	65		1.01	1.01 =	C4H9N1O2	2-METHYL-2-NITROPROPANE
938	OCTANOL	270		1.17		C4H9N1O2	2-METHYL-2-NITROPROPANE
939	OCTANOL	235		2.15	2.15 =	C4H9N1O3	BUTYL NITRATE
940	OILS	271		0.43	0.81 B	C4H10F1O3P1	OIETHYLFLUOROPHOSPHATE
941	CCL4	228		0.54	0.44 B	C4H10F1O3P1	OIETHYLFLUOROPHOSPHATE
942	CCL4	271		0.54	0.44 B	C4H10F1O3P1	DIETHYLFLUOROPHOSPHATE
943	OCTANOL	5		-1.17	-1.17 =	C4H10N2	PIPERAZINE
944	OIETHYL ETHER	3	12	-3.28	-2.03 B	C4H10N2	PIPERAZINE
945	1-BUTANOL	4		-0.60	-1.36	C4H10N2	PIPERAZINE
946	OIETHYL ETHER	198		-0.41	-0.24 A	C4H10N2S1	PROPYLTHIOUREA
947	OCTANOL	216		0.88	0.88 =	C4H10O1	BUTANOL
948	OIETHYL ETHER	3		0.89	0.89 A	C4H10O1	BUTANOL
949	OIETHYL ETHER	174		0.57	0.63 A	C4H10O1	BUTANOL
950	CYCLOHEXANE	272		-0.72		C4H10O1	BUTANOL
951	CYCLOHEXANE	82		-1.12		C4H10O1	BUTANOL
952	CHCL3	174		0.45	1.03 N	C4H10O1	BUTANOL
953	OILS	173		-0.28	0.94 A	C4H10O1	BUTANOL
954	OILS	201		-0.20	1.02 A	C4H10O1	BUTANOL
955	BENZENE	272		-0.19	1.19 A	C4H10O1	BUTANOL
956	BENZENE	82		-0.34	0.96 A	C4H10O1	BUTANOL
957	BENZENE	231		-0.38	1.00	C4H10O1	BUTANOL
958	CCL4	272		-0.44		C4H10O1	BUTANOL
959	HEXANE	82		-0.78		C4H10O1	BUTANOL
960	OCTANE	59		-0.81		C4H10O1	BUTANOL
961	OLEYL ALCOHOL	82	12	-0.19	0.38	C4H10O1	BUTANOL
962	ODDECANE	59		-0.96		C4H10O1	BUTANOL
963	HEXADECANE	59		-1.08		C4H10O1	BUTANOL
964	OCTANOL	5		0.83	0.83 =	C4H10O1	I-BUTANOL
965	OCTANOL	216		0.65	0.65 =	C4H10O1	I-BUTANOL
966	OIETHYL ETHER	3		0.84	0.85 A	C4H10O1	I-BUTANOL
967	OIETHYL ETHER	174		0.53	0.59 A	C4H10O1	I-BUTANOL
968	CHCL3	174		0.34	0.92 N	C4H10O1	I-BUTANOL
969	OILS	173		-0.36	0.86 A	C4H10O1	I-BUTANOL
970	OILS	101		-0.24	0.97 A	C4H10O1	I-BUTANOL
971	OILS	201		-0.26	0.96 A	C4H10O1	I-BUTANOL
972	1-BUTANOL	4		0.93	0.80	C4H10O1	I-BUTANOL
973	OCTANOL	186		0.61	0.61 =	C4H10O1	S-BUTANOL
974	OIETHYL ETHER	3		0.65	0.68 A	C4H10O1	S-BUTANOL
975	OIETHYL ETHER	174		0.28	0.12 A	C4H10O1	S-BUTANOL
976	CHCL3	174		0.30	0.89 N	C4H10O1	S-BUTANOL
977	OILS	2		-0.60	0.65 A	C4H10O1	S-BUTANOL
978	OILS	201		-0.42	0.81 A	C4H10O1	S-BUTANOL
979	OCTANOL	186		0.37	0.37 =	C4H10O1	T-BUTANOL
980	OIETHYL ETHER	3		0.34	0.41 A	C4H10O1	T-BUTANOL
981	OIETHYL ETHER	174		-0.08	0.06 A	C4H10O1	T-BUTANOL
982	CHCL3	174		-0.04	0.57 N	C4H10O1	T-BUTANOL
983	OILS	173		-0.64	0.61 A	C4H10O1	T-BUTANOL
984	OILS	224		-0.74	0.52 A	C4H10O1	T-BUTANOL
985	OILS	201		-0.66	0.59 A	C4H10O1	T-BUTANOL
986	OCTANOL	218		0.77	0.77 =	C4H10O1	ETHYL ETHER
987	OCTANOL	5		0.83	0.83 =	C4H10O1	ETHYL ETHER
988	OIETHYL ETHER	3	50	1.00	0.99 A	C4H10O1	ETHYL ETHER
989	OILS	173		0.58	0.93 B	C4H10O1	ETHYL ETHER
990	OILS	82		0.38	0.78 B	C4H10O1	ETHYL ETHER
991	OILS	258		0.36	0.74 B	C4H10O1	ETHYL ETHER
992	OILS	259		0.60	0.93 B	C4H10O1	ETHYL ETHER
993	OIETHYL ETHER	2		-1.38	-1.10 A	C4H10O2	1,3-BUTANEDIOL
994	OILS	2		-2.37	-0.93 A	C4H10O2	1,3-BUTANEDIOL
995	OIETHYL ETHER	2		-1.72	-1.38 A	C4H10O2	1,4-BUTANEDIOL
996	OILS	2		-2.68	-1.22 A	C4H10O2	1,4-BUTANEDIOL
997	OCTANOL	5		-0.92	-0.92 =	C4H10O2	2,3-BUTANEDIOL
998	OIETHYL ETHER	3		-1.54	-1.25 A	C4H10O2	2,3-BUTANEDIOL
999	OILS	2		-2.47	-1.03 A	C4H10O2	2,3-BUTANEDIOL
1000	OCTANOL	5		-0.54	-0.54 =	C4H10O2	ETHOXYETHANOL



NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1001	DIETHYL ETHER	2		-0.70	-0.50 A	C4H10O2	ETHOXYETHANOL
1002	OILS	2		-1.72	-0.33 A	C4H10O2	ETHOXYETHANOL
1003	OILS	173	12	-1.15	0.15 A	C4H10O2	ETHOXYETHANOL
1004	DIETHYL ETHER	3	12	-2.36	-1.98 A	C4H10O3	OIETHYLENEGLYCOL
1005	OILS	2		-2.58	-1.12 A	C4H10O3	GLYCEROL MONOMETHYL ETHER
1006	DIETHYL ETHER	3		-1.72	-1.39 A	C4H10O3	GLYCEROL, MONOMETHYLEETHER
1007	1-BUTANOL	4		-1.43	-2.53	C4H10O4	ERYTHRITOL
1008	OCTANOL	235		2.28	2.28 =	C4H10S1	BUTANETHIOL
1009	OCTANOL	186		1.95	1.95 =	C4H10S1	OIETHYLSULFIOE
1010	OCTANOL	251		0.88	0.88 =	C4H11N1	BUTYLAMINE
1011	OCTANOL	218		0.81	0.81 =	C4H11N1	BUTYLAMINE
1012	OCTANOL	5		0.68	0.68 =	C4H11N1	BUTYLAMINE
1013	OIETHYL ETHER	251		0.11	0.94 B	C4H11N1	BUTYLAMINE
1014	CYCLOHEXANE	251		-0.29		C4H11N1	BUTYLAMINE
1015	CHCL3	251		0.99	0.62 B	C4H11N1	BUTYLAMINE
1016	BENZENE	251		0.14	0.65 B	C4H11N1	BUTYLAMINE
1017	1-BUTANOL	4		0.92	0.79	C4H11N1	BUTYLAMINE
1018	XYLENE	46		0.04	0.64 B	C4H11N1	BUTYLAMINE
1019	TOLUENE	150		0.30	1.84 A	C4H11N1	BUTYLAMINE
1020	CCL4	251		0.11	0.93 N	C4H11N1	BUTYLAMINE
1021	OI-1-PR. ETHER	251		-0.04	0.50	C4H11N1	BUTYLAMINE
1022	XYLENE	46		0.10	0.70 B	C4H11N1	I-BUTYLAMINE
1023	OCTANOL	218		0.40	0.40 =	C4H11N1	T-BUTYLAMINE
1024	OCTANOL	251		0.57	0.57 =	C4H11N1	OIETHYLAMINE
1025	OCTANOL	5		0.43	0.43 =	C4H11N1	OIETHYLAMINE
1026	DIETHYL ETHER	3		-0.28	0.68 B	C4H11N1	OIETHYLAMINE
1027	DIETHYL ETHER	251		-0.07	0.80 B	C4H11N1	OIETHYLAMINE
1028	CYCLOHEXANE	251		-0.34		C4H11N1	OIETHYLAMINE
1029	CHCL3	251		0.81	0.46 B	C4H11N1	OIETHYLAMINE
1030	CHCL3	46		0.89	0.53 B	C4H11N1	OIETHYLAMINE
1031	BENZENE	205		-0.02	0.54 B	C4H11N1	OIETHYLAMINE
1032	BENZENE	251		-0.05	0.52 B	C4H11N1	OIETHYLAMINE
1033	BENZENE	46		-0.05	0.52 B	C4H11N1	OIETHYLAMINE
1034	N-BUTANOL	37		0.43	0.08	C4H11N1	OIETHYLAMINE
1035	1-BUTANOL	4		0.74	0.53	C4H11N1	OIETHYLAMINE
1036	I-BUTANOL	37		0.42	0.07	C4H11N1	OIETHYLAMINE
1037	XYLENE	46		-0.10	0.50 B	C4H11N1	OIETHYLAMINE
1038	TOLUENE	205		-0.09	0.59 B	C4H11N1	OIETHYLAMINE
1039	TOLUENE	68		-0.20	0.51 B	C4H11N1	OIETHYLAMINE
1040	TOLUENE	273		-0.24	0.47 B	C4H11N1	OIETHYLAMINE
1041	PRIM. PENTANOLS	182		0.88	0.73	C4H11N1	OIETHYLAMINE
1042	CCL4	251		0.03	0.82 N	C4H11N1	OIETHYLAMINE
1043	CCL4	37		-0.10		C4H11N1	OIETHYLAMINE
1044	CLCH2CH2CL	37		-0.05		C4H11N1	OIETHYLAMINE
1045	OI-BUTYL ETHER	37		-0.20		C4H11N1	OIETHYLAMINE
1046	OI-1-PR. ETHER	251		-0.21	0.30	C4H11N1	OIETHYLAMINE
1047	OCTANOL	5		-1.43	-1.43 =	C4H11N1O2	OIETHANOLAMINE
1048	DIETHYL ETHER	3	50	-3.27	-2.02 B	C4H11N1O2	OIETHANOLAMINE
1049	1-BUTANOL	4		-0.70	-1.49	C4H11N1O2	OIETHANOLAMINE
1050	I-BUTANOL	184		-0.69	-1.48	C4H11N1O2	OIETHANOLAMINE
1051	CCL4	135		0.45	0.36 B	C4H11O2P1S2	PHOSPHORODITHIOTIC ACID, OIETHYL
1052	PRIM. PENTANOLS	236	17	0.46	0.28	C4H11O4P1	BUTYL PHOSPHATE
1053	OI-BUTYL ETHER	236	17	-0.18		C4H11O4P1	BUTYL PHOSPHATE
1054	OI-BUTYL ETHER	236	17	-0.27		C4H11O4P1	I-BUTYL PHOSPHATE
1055	CHCL3	274		-2.05	-0.65 A	C4H11O4P1	OIETHYL PHOSPHATE
1056	NITROBENZENE	274		-2.14	-0.90	C4H11O4P1	OIETHYL PHOSPHATE
1057	PRIM. PENTANOLS	236	17	0.23	0.00	C4H11O4P1	OIETHYL PHOSPHATE
1058	OI-1-PR. ETHER	274		-1.75	-1.50	C4H11O4P1	OIETHYL PHOSPHATE
1059	ME-I-BUT. KETONE	274		-0.56	-1.07	C4H11O4P1	OIETHYL PHOSPHATE
1060	S-PENTANOLS	274		0.35		C4H11O4P1	OIETHYL PHOSPHATE
1061	OIETHYL ETHER	3	12	-2.89	-1.69 B	C4H12N2	TETRAMETHYLENEOIAMINE
1062	I-BUTANOL	4		-0.12	-0.67	C4H12N2	TETRAMETHYLENEOIAMINE
1063	1-BUTANOL	184		-1.96		C4H13N1O1	TETRAMETHYLAMMONIUM HYDROXIOE
1064	OCTANOL	275	75	3.53	3.53 =	C5CL5N1	2,3,4,5,6 PENTACHLOROPYRIDINE (PKA= -1.00)
1065	OCTANOL	206	27	3.08	3.08 =	C5H18R3N4	PURINE, 2,6,8-TRIBROMO
1066	OCTANOL	206	27	3.90	3.90 =	C5H1CL3N4	PURINE, 2,6,8-TRICHLORO
1067	OCTANOL	275	75	3.32	3.32 =	C5H1CL4N1	2,3,5,6-TETRACHLOROPYRIDINE (PKA= -0.80)
1068	OCTANOL	275	75	2.68	2.68 =	C5H2CL3N1	2,4,6-TRICHLOROPYRIDINE (PKA= -0.30)
1069	OCTANOL	275	75	2.77	2.77 =	C5H2CL3N1	2,3,6-TRICHLOROPYRIDINE (PKA= -0.63)
1070	OCTANOL	275	75	3.11	3.11 =	C5H2CL3N1	2,3,5-TRICHLOROPYRIDINE (PKA= 0.78)
1071	OCTANOL	275	75	2.15	2.15 =	C5H3CL2N1	2,6-DICHLOROPYRIDINE (PKA= 0.36)
1072	OCTANOL	275	75	2.40	2.40 =	C5H3CL2N1	2,5-DICHLOROPYRIDINE (PKA= 2.62)
1073	OCTANOL	275	75	2.11	2.11 =	C5H3CL2N1	2,3-DICHLOROPYRIDINE (PKA= 2.79)
1074	OCTANOL	275	75	2.56	2.56 =	C5H3CL2N1	3,5-DICHLOROPYRIDINE (PKA= 3.20)
1075	OCTANOL	276		1.42	1.42 =	C5H4BR1N1	2-BROMOPYRIDINE
1076	OCTANOL	276		1.60	1.60 =	C5H4BR1N1	3-BROMOPYRIDINE /PKA= 2.84/
1077	OCTANOL	276		1.54	1.54 =	C5H4BR1N1	4-BROMOPYRIDINE
1078	OCTANOL	275	75	1.45	1.45 =	C5H4CL1N1	2-CHLOROPYRIDINE (PKA= 3.33)
1079	OCTANOL	275	75	1.43	1.43 =	C5H4CL1N1	3-CHLOROPYRIDINE (PKA= 4.28)
1080	OCTANOL	275	75	1.28	1.28 =	C5H4CL1N1	4-CHLOROPYRIDINE (PKA= 4.57)
1081	OCTANOL	276		1.27	1.27 =	C5H4CL1N1	2-CHLOROPYRIDINE
1082	OCTANOL	277	14	-1.11	-1.11 =	C5H4N4O1	HYPOXANTHINE
1083	N-BUTANOL	253	36	-0.27	-0.89	C5H4N4O1	HYPOXANTHINE
1084	N-BUTANOL	253	36	-0.34	-0.99	C5H4N4O2	XANTHINE
1085	OCTANOL	277	14	-2.92	-2.92 =	C5H4N4O3	URIC ACID
1086	N-BUTANOL	253	36	-0.96	-1.85	C5H4N4O3	URIC ACID
1087	OCTANOL	227		0.01	0.01 =	C5H4N4S1	MERCAPTOPYRIDINE/PURINE-6-THIOL/(755)
1088	OCTANOL	227		0.01	0.01 =	C5H4N4S1	6-PURINETHIOL HYDRATE (NCS755) (PKA= 7.80)
1089	DIETHYL ETHER	192		C.55	0.60 A	C5H4O3	FURANE-2-CARBOXYLIC ACID
1090	DIETHYL ETHER	112		0.58	0.64 A	C5H4O3	FURANE-2-CARBOXYLIC ACID
1091	CHCL3	112		-0.54	0.73 A	C5H4O3	FURANE-2-CARBOXYLIC ACID
1092	CHCL3	278		0.30	1.55 A	C5H5F3O2	TRIFLUOROACETYLACETONE
1093	CHCL3	279		0.29	1.48 A	C5H5F3O2	TRIFLUOROACETYLACETONE
1094	BENZENE	279		0.11	1.52 A	C5H5F3O2	TRIFLUOROACETYLACETONE
1095	CCL4	279		-0.14	0.60 N	C5H5F3O2	TRIFLUOROACETYLACETONE
1096	HEXANE	279		-0.50		C5H5F3O2	TRIFLUOROACETYLACETONE
1097	O-CICL. BENZENE	279		-0.05		C5H5F3O2	TRIFLUOROACETYLACETONE
1098	OCTANOL	218		2.12	2.12 =	C5H5F5O2	PENTAFLUOROPROPIONIC ACID, ETHYL ESTER
1099	OCTANOL	276		0.64	0.64 =	C5H5N1	PYRIDINE /PKA = 5.23/
1100	OCTANOL	255		0.65	0.65 =	C5H5N1	PYRIDINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1101	DIETHYL ETHER	3		0.08	0.92 B	C5H5N1	PYRIDINE
1102	CHCL3	280		1.43	0.81 B	C5H5N1	PYRIDINE
1103	OILS	173		-0.02	0.42 B	C5H5N1	PYRIDINE
1104	BENZENE	183		0.42	0.84 B	C5H5N1	PYRIDINE
1105	BENZENE	281		0.39	0.82 B	C5H5N1	PYRIDINE
1106	BENZENE	66		0.44	0.85 B	C5H5N1	PYRIDINE
1107	1-BUTANOL	4		0.86	0.70	C5H5N1	PYRIDINE
1108	XYLENE	46		0.31	0.92 B	C5H5N1	PYRIDINE
1109	TOLUENE	188		0.16	0.77 B	C5H5N1	PYRIDINE
1110	OCTANOL	275	75	1.04	1.04 =	C5H5N1	PYRIDINE (PKA= 4.90)
1111	DIETHYL ETHER	248		-1.82	-0.75 B	C5H5N101	2-HYDROXYPYRIDINE
1112	CHCL3	248		-1.21	0.12 A	C5H5N101	2-HYDROXYPYRIDINE
1113	DIETHYL ETHER	248		-0.32	-0.16 A	C5H5N101	3-HYDROXYPYRIDINE
1114	CHCL3	248		-1.40	-0.06 A	C5H5N101	3-HYDROXYPYRIDINE
1115	OCTANOL	218		-1.69	-1.69 =	C5H5N101	PYRIDINE, 1-OXIOE
1116	OCTANOL	277	14	-0.16	-0.16 =	C5H5N5	ADENINE
1117	N-BUTANOL	253	36	0.33	-0.07	C5H5N5	ADENINE
1118	N-BUTANOL	253	36	0.44	0.09	C5H5N5	ADENINE
1119	N-BUTANOL	253	36	-0.35	-1.00	C5H5N501	GUANINE
1120	N-BUTANOL	253	36	-0.55	-1.28	C5H5N501	150GUANINE
1121	N-BUTANOL	253	36	-0.32	-0.96	C5H5N5S1	2-THIOADENINE
1122	OCTANOL	227		-0.07	-0.07 =	C5H5N5S1	THIOGUANINE/2-AMINOPURINE-6-THIOL/(752)
1123	DIETHYL ETHER	3		-0.11	0.75 B	C5H6N2	2-AMINOPYRIDINE
1124	1-BUTANOL	4		0.65	0.41	C5H6N2	2-AMINOPYRIDINE
1125	OCTANOL	276		0.11	0.11 =	C5H6N2	3-AMINOPYRIDINE /PKA = 5.98/
1126	OCTANOL	276		0.28	0.28 =	C5H6N2	4-AMINOPYRIDINE /PKA = 9.17/
1127	CHCL3	282	12	-0.70	-0.97	C5H6N2	4-AMINOPYRIDINE
1128	OCTANOL	276		0.16	0.16 =	C5H6N2	4-METHYLPYRIDINE
1129	OCTANOL	235	70	0.22	0.22 =	C5H6N201S1	4-HYDROXY-2-METHYLTHIO-PYRIDINE/2-METHIURACIL/
1130	OCTANOL	283		-1.20	-1.20 =	C5H6N202	1-METHYLURACIL
1131	N-BUTANOL	253	36	0.05	-0.44	C5H6N202	THYMINE
1132	DIETHYL ETHER	3		-0.62	-0.43 A	C5H604	CITRACONIC ACID
1133	DIETHYL ETHER	212		-0.45	-0.28 A	C5H604	ITACONIC ACID
1134	DIETHYL ETHER	207		-0.48	-0.31 A	C5H604	ITACONIC ACID
1135	1-BUTANOL	4		0.28	-0.11	C5H604	ITACONIC ACID
1136	ME-1-BUT.KETONE	195		-0.26	-0.30	C5H604	ITACONIC ACID
1137	OILS	284		-0.32	0.53 B	C5H7N301	3,5-DIMETHYL-4-NITROSPYRAZOLE
1138	OCTANE	256		-0.39		C5H7N302	2-ETHYL-5-NITROIMIDAZOLE
1139	N-BUTANOL	253	36	-0.79	-1.61	C5H7N501	4,6-DIAMINO-5-FORMAMIDOPYRIMIDINE
1140	N-BUTANOL	253	36	-0.02	-0.54	C5H7N5S1	4,6-DIAMINO-5-THIOFORMAMIDOPYRIMIDINE
1141	OCTANOL	186		1.98	1.98 =	C5H8	1-PENTYNE
1142	OCTANOL	218		-0.68	-0.68 =	C5H8N203	UREA, 1,3-DIACETYL
1143	OCTANOL	134		-0.16	-0.16 =	C5H8N401S1	3-METHIO-4-AMINO-6-ME-1,2,4-TRIAZINE-5-ONE
1144	OCTANOL	217		0.13	0.13 =	C5H8N403S2	2-ACETYLIMINO-3-ME-1,3,4-THIAZOLE-5-SULFONAMIOE
1145	CHCL3	217		-1.40		C5H8N403S2	2-ACETYLIMINO-3-ME-1,3,4-THIAZOLE-5-SULFONAMIOE
1146	OILS	259		1.83	1.95 B	C5H801	CYCLOPROPYL VINYL ETHER
1147	OILS	259		1.94	2.04 B	C5H801	1-PROPENYL VINYL ETHER
1148	CHCL3	285		0.77	1.90 A	C5H802	ACETYLACETONE
1149	BENZENE	286	4	0.76	2.14 A	C5H802	ACETYLACETONE
1150	BENZENE	287		0.90	2.25 A	C5H802	ACETYLACETONE
1151	DIETHYL ETHER	3		-0.58	-0.39 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1152	DIETHYL ETHER	207		-0.64	-0.45 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1153	DIETHYL ETHER	112		-0.64	-0.45 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1154	DIETHYL ETHER	46		-0.49	-0.31 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1155	CHCL3	112		-1.19	0.14 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1156	CHCL3	46		-1.32	0.02 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1157	1-BUTANOL	4		0.08	-0.39	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1158	XYLENE	46		-1.90	-0.27 A	C5H803	LEVULINIC ACID/8-ACETYLPROPIONIC ACID/
1159	DIETHYL ETHER	288		0.44	0.50 A	C5H804	OIMETHYLMALONIC ACID
1160	1-BUTANOL	4		0.69	0.46	C5H804	OIMETHYLMALONIC ACID
1161	PRIM. PENTANOLS	48		0.71	0.60	C5H804	OIMETHYLMALONIC ACID
1162	OLEYL ALCOHOL	5		-0.31	0.26	C5H804	OIMETHYLMALONIC ACID
1163	DIETHYL ETHER	212		-0.55	-0.37 A	C5H804	GLUTARIC ACID
1164	DIETHYL ETHER	207		-0.57	-0.39 A	C5H804	GLUTARIC ACID
1165	DIETHYL ETHER	194		-0.60	-0.40 A	C5H804	GLUTARIC ACID
1166	DIETHYL ETHER	46		-0.47	-0.29 A	C5H804	GLUTARIC ACID
1167	CHCL3	46		-1.81	-0.43 A	C5H804	GLUTARIC ACID
1168	N-BUTANOL	194		0.21	-0.25	C5H804	GLUTARIC ACID
1169	1-BUTANOL	4		0.30	-0.08	C5H804	GLUTARIC ACID
1170	ETHYL ACETATE	194		-0.18	-0.24	C5H804	GLUTARIC ACID
1171	ME-1-BUT.KETONE	195		-0.45	-0.47	C5H804	GLUTARIC ACID
1172	OLEYL ALCOHOL	5		-0.96	-0.39	C5H804	GLUTARIC ACID
1173	S-PENTANOLS	195		0.16	-0.13	C5H804	GLUTARIC ACID
1174	OILS	264		-0.03	1.16 A	C5H9BR1N202	A-BROMO-1-BUTYRYLUREA
1175	OILS	264		-0.43	0.80 A	C5H9BR1N202	A-BROMOBUTYRYLUREA
1176	OILS	209		0.55	1.75 A	C5H9BR102	A-BROMOVALERIC ACID
1177	BENZENE	29		0.50	1.89 A	C5H9BR102	A-BROMOVALERIC ACID
1178	TOLUENE	29		0.38	1.88 A	C5H9BR102	A-BROMOVALERIC ACID
1179	OCTANOL	227		1.53	1.53 =	C5H9CL2N302	1,3-BIS(2-CHLOROETHYL)-1-NITROUREA (NCS 409962)
1180	OCTANOL	289		1.39		C5H9CL2N302	1,3-BIS(2-CHLOROETHYL)-1-NITROUREA(409962)
1181	CHCL3	67		-2.20		C5H9N103	A-AMINOPROPIONIC ACID, N-ACETYL
1182	ETHYL ACETATE	67		-1.25	-1.40	C5H9N103	A-AMINOPROPIONIC ACID, N-ACETYL
1183	OILS	290		-0.87	0.40 A	C5H9N103	O-ETHYL CARBAMATE, N-ACETYL
1184	OCTANOL	260		0.13	0.13 =	C5H9N1S1	2-AZACYCLOHEXANTHIONE
1185	OCTANOL	255		2.03	2.03 =	C5H9N1S1	THIOCYANIC ACID, BUTYL ESTER
1186	OILS	239		1.99	2.10 B	C5H9N309	1,2,3-PENTANETRIOL TRINITRATE
1187	OILS	240		1.38	2.44 A	C5H9N3010	PENTAERYTHRITOL TRINITRATE
1188	OILS	264		-0.20	1.00 A	C5H10BR1N101	A-BROMO-1-VALERAMIOE
1189	OILS	264		-0.62	0.63 A	C5H10BR1N101	A-BROMOVALERAMIOE
1190	PARAFFINS	241		-2.22		C5H10N2S1	IMIDAZOLIDIONE, N-ETHYL-2-THIO/N-ETHYLETHYLENETHIOUREA
1191	OILS	258		0.30	0.69 B	C5H1001	ALLYL ETHYL ETHER
1192	OILS	259		1.20	1.43 B	C5H1001	CYCLOPROPYL ETHYL ETHER
1193	OILS	258		-0.21	0.26 B	C5H1001	1-PROPENYL ETHYL ETHER
1194	BENZENE	245	12	1.52	1.60 B	C5H1002	ACETIC ACID, PROPYL ESTER
1195	CCL4	245		1.59	1.39 B	C5H1002	ACETIC ACID, PROPYL ESTER
1196	CS2	245		1.30		C5H1002	ACETIC ACID, PROPYL ESTER
1197	DIETHYL ETHER	3		1.51	1.44 A	C5H1002	ACETIC ACID, TRIMETHYL
1198	DIETHYL ETHER	207		1.11	1.09 A	C5H1002	ACETIC ACID, TRIMETHYL
1199	1-BUTANOL	4		1.50	1.60	C5H1002	ACETIC ACID, TRIMETHYL
1200	OCTANOL	186		1.21	1.21 =	C5H1002	PROPIONIC ACID, ETHYL ESTER

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP DCT	EMPIRICAL FORMULA	NAME
1201	DIETHYL ETHER	190		1.24	1.20 A	C5H10O2	VALERIC ACID
1202	DIETHYL ETHER	46		1.17	1.15 A	C5H10O2	VALERIC ACID
1203	DIETHYL ETHER	49		1.36	1.31 A	C5H10O2	VALERIC ACID
1204	CHCL3	29		0.34	1.53 A	C5H10O2	VALERIC ACID
1205	CHCL3	46		0.32	1.51 A	C5H10O2	VALERIC ACID
1206	OILS	209		0.48	1.69 A	C5H10O2	VALERIC ACID
1207	OILS	220		0.41	1.57 A	C5H10O2	VALERIC ACID
1208	BENZENE	44		-0.05	1.32 A	C5H10O2	VALERIC ACID
1209	BENZENE	29		-0.09	1.32 A	C5H10O2	VALERIC ACID
1210	N-BUTANOL	190		1.36	1.45	C5H10O2	VALERIC ACID
1211	I-BUTANOL	184		1.39	1.45	C5H10O2	VALERIC ACID
1212	SEC-BUTANOL	190		1.06	0.99	C5H10O2	VALERIC ACID
1213	XYLENE	46		-0.33	1.43 A	C5H10O2	VALERIC ACID
1214	TOLUENE	29		-0.20	1.37 A	C5H10O2	VALERIC ACID
1215	PRIM. PENTANOLS	190		1.55	1.60	C5H10O2	VALERIC ACID
1216	PRIM. PENTANOLS	184		1.40	1.50	C5H10O2	VALERIC ACID
1217	2-BUTANONE	190		1.01	1.40	C5H10O2	VALERIC ACID
1218	OCTANE	60	47	-1.18		C5H10O2	VALERIC ACID
1219	S-PENTANOLS	190		1.44	1.35	C5H10O2	VALERIC ACID
1220	PARAFFINS	291	12	-2.54		C5H10O2	VALERIC ACID
1221	ODOECANE	60	47	-1.25		C5H10O2	VALERIC ACID
1222	HEXADECANE	60	47	-1.31		C5H10O2	VALERIC ACID
1223	CHCL3	48		0.21	1.40 A	C5H10O2	I-VALERIC ACID
1224	CHCL3	29		0.17	1.37 A	C5H10O2	I-VALERIC ACID
1225	OILS	209		0.27	1.51 A	C5H10O2	I-VALERIC ACID
1226	BENZENE	29		-0.23	1.19 A	C5H10O2	I-VALERIC ACID
1227	I-BUTANOL	4		1.30	1.32	C5H10O2	I-VALERIC ACID
1228	I-BUTANOL	48		1.13	1.08	C5H10O2	I-VALERIC ACID
1229	XYLENE	48		-0.31	1.48 A	C5H10O2	I-VALERIC ACID
1230	TOLUENE	29		-0.35	1.24 A	C5H10O2	I-VALERIC ACID
1231	NITROBENZENE	48		0.07	0.93	C5H10O2	I-VALERIC ACID
1232	PRIM. PENTANOLS	48		1.13	1.13	C5H10O2	I-VALERIC ACID
1233	CCL4	48		-0.54		C5H10O2	I-VALERIC ACID
1234	O-NITROTOLUENE	48		-0.05		C5H10O2	I-VALERIC ACID
1235	XYLENE	46		-0.10	1.67 A	C5H10O2	I-VALERIC ACID
1236	DIETHYL ETHER	3		-1.39	-1.10 A	C5H10O4	GLYCEROL MONOACETATE/MONACETIN/
1237	OILS	214	12	-1.22	0.10 A	C5H10O4	GLYCEROL MONOACETATE/MONACETIN/
1238	OILS	70		-1.18	0.14 A	C5H10O4	GLYCEROL MONOACETATE/MONACETIN/
1239	I-BUTANOL	4		-1.72	-2.92	C5H10O5	ARABINOSE
1240	OCTANOL	277	14	-2.32	-2.32 =	C5H10O5	RIBOSE
1241	OCTANOL	186		2.33	2.33 =	C5H11F1	1-FLUOROPENTANE
1242	OCTANOL	218		0.85	0.85 =	C5H11N1	PIPERIDINE
1243	DIETHYL ETHER	3		-0.24	0.64 B	C5H11N1	PIPERIDINE
1244	DIETHYL ETHER	46		-0.18	0.69 B	C5H11N1	PIPERIDINE
1245	CHCL3	46		0.92	0.56 B	C5H11N1	PIPERIDINE
1246	BENZENE	183		-0.06	0.51 B	C5H11N1	PIPERIDINE
1247	I-BUTANOL	4		0.78	0.59	C5H11N1	PIPERIDINE
1248	XYLENE	46		0.03	0.63 B	C5H11N1	PIPERIDINE
1249	CCL4	234	12	-0.82		C5H11N1O1	OIMETHYLPROPIONAMIDE
1250	OCTANOL	218		-0.33	-0.33 =	C5H11N1O1	MORPHOLINE, 4-METHYL
1251	OILS	82		-1.15	0.19 A	C5H11N1O1	VALERAMIDE
1252	OILS	292	12	-0.50	0.73 A	C5H11N1O1	VALERAMIDE
1253	OLEYL ALCOHOL	82		-0.52	0.05	C5H11N1O1	VALERAMIDE
1254	DIETHYL ETHER	3		-0.77	0.17 B	C5H11N1O1	I-VALERAMIDE
1255	OILS	2		-1.64	-0.30 A	C5H11N1O1	I-VALERAMIDE
1256	N-BUTANOL	225		-0.98	-2.02	C5H11N1O2	A-AMINOVALERIC ACID/NORVALINE/
1257	SEC-BUTANOL	84	19	-0.54	-1.26	C5H11N1O2	A-AMINOVALERIC ACID/NORVALINE/
1258	OILS	293		0.73	1.85 A	C5H11N1O2	O-1-BUTYL CARBAMATE
1259	N-BUTANOL	225		-1.14	-2.10	C5H11N1O2	VALINE
1260	CCL4	294		0.00		C5H11N1S2	N, N-OIETHYLOI THIOCARBAMIC ACID
1261	N-BUTANOL	295	52	-0.47	-1.17	C5H12CL1N1O2	VALINE HYDROCHLORIDE
1262	N-BUTANOL	295	52	-0.40	-1.07	C5H12CL1N1O2S1	METHIONINE HYDROCHLORIDE
1263	OILS	2		-2.12	-0.70 A	C5H12N2O1	N, N-OIETHYLUREA
1264	DIETHYL ETHER	3		-1.72	-0.50 B	C5H12N2O1	OIETHYLUREA, UNSYM.
1265	SEC-BUTANOL	84	19	-1.70	-2.89	C5H12N2O2	ORNITHINE
1266	OCTANOL	216		1.40	1.40 =	C5H12O1	PENTANOL
1267	OILS	201		0.36	1.52 A	C5H12O1	PENTANOL
1268	BENZENE	231		0.19	1.56 A	C5H12O1	PENTANOL
1269	CCL4	234	12	0.36		C5H12O1	PENTANOL
1270	OCTANE	59		-0.19		C5H12O1	PENTANOL
1271	ODOECANE	59		-0.31		C5H12O1	PENTANOL
1272	HEXADECANE	59		-0.39		C5H12O1	PENTANOL
1273	OCTANOL	216		1.16	1.16 =	C5H12O1	1-PENTANOL
1274	DIETHYL ETHER	3		1.28	1.24 A	C5H12O1	1-PENTANOL
1275	OILS	173		0.26	1.43 A	C5H12O1	1-PENTANOL
1276	OILS	101		0.33	1.52 A	C5H12O1	1-PENTANOL
1277	OILS	201		0.32	1.48 A	C5H12O1	1-PENTANOL
1278	OILS	201		0.17	1.34 A	C5H12O1	2-PENTANOL
1279	OILS	201		0.20	1.37 A	C5H12O1	3-PENTANOL
1280	OCTANOL	186		1.36	1.36 =	C5H12O1	1-PROPANOL, 2,2-DIMETHYL
1281	OCTANOL	80		0.89	0.89 =	C5H12O1	2-PROPANOL, 2-ETHYL/T-AMYL ALCOHOL/
1282	OILS	173		-0.21	1.05 A	C5H12O1	2-PROPANOL, 2-ETHYL/T-AMYL ALCOHOL/
1283	OILS	224		0.00	1.22 A	C5H12O1	2-PROPANOL, 2-ETHYL/T-AMYL ALCOHOL/
1284	OILS	296		0.15	1.33 A	C5H12O1	2-PROPANOL, 2-ETHYL/T-AMYL ALCOHOL/
1285	OILS	201		-0.04	1.15 A	C5H12O1	2-PROPANOL, 2-ETHYL/T-AMYL ALCOHOL/
1286	OCTANOL	218		0.84	0.84 =	C5H12O2	OIETHOXYMETHANE
1287	DIETHYL ETHER	2		-1.26	-0.99 A	C5H12O2	1,5-PENTANEDIOL
1288	OILS	2		-2.21	-0.78 A	C5H12O2	1,5-PENTANEDIOL
1289	DIETHYL ETHER	3		-1.43	-1.14 A	C5H12O3	OIETHYLENE GLYCOL MONOMETHYL ETHER
1290	OILS	2		-2.38	-0.93 A	C5H12O3	OIETHYLENE GLYCOL MONOMETHYL ETHER
1291	DIETHYL ETHER	3		-1.58	-1.27 A	C5H12O3	GLYCERYL-A-MONOETHYL ETHER
1292	OILS	2		-2.13	-0.71 A	C5H12O3	GLYCERYL-A-MONOETHYL ETHER
1293	I-BUTANOL	4		-0.85	-1.70	C5H12O4	PENTAERYTHRITOL
1294	XYLENE	46		0.44	1.05 B	C5H13N1	AMYLAMINE
1295	DIETHYL ETHER	3		0.30	1.13 B	C5H13N1	1-AMYLAMINE
1296	OCTANOL	218		1.33	1.33 =	C5H13N1	METHYLBUTYLAMINE
1297	OI-BUTYL ETHER	236	17	-0.14		C5H13O4P1	AMYL PHOSPHATE
1298	OCTANOL	297	46	-3.00	-3.00 =	C5H141N1	TRIMETHYL-ETHYL-AMMONIUM IODIDE
1299	DIETHYL ETHER	3	12	-2.56	-1.42 B	C5H14N2	PENTAMETHYLENE DIAMINE
1300	I-BUTANOL	4		0.16	-0.28	C5H14N2	PENTAMETHYLENE DIAMINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1301	OCTANOL	298		3.22	3.22 =	C5H14S11	SILANE, DIMETHYL-PROPYL
1302	OCTANOL	56		2.22	2.22 =	C6F6	HEXAFLUOROBENZENE
1303	OCTANOL	206	27	4.17		C6H1CL4N3	4,5,6,7-TETRACHLORO BENZOTRIAZOLE
1304	HEXANE	299		0.18		C6H1CL4N3	4,5,6,7-TETRACHLORO BENZOTRIAZOLE
1305	OCTANOL	.56	49	5.01	5.01 =	C6H1CL5O1	PENTACHLOROPHENOL
1306	HEXANE	299		2.15		C6H1CL5O1	PENTACHLOROPHENOL
1307	CYCLOHEXANE	300		-0.52		C6H1F5O1	PENTAFLUOROPHENOL
1308	HEXANE	299		-0.30		C6H1F5O1	PENTAFLUOROPHENOL
1309	OLEYL ALCOHOL	300		2.37	2.91	C6H1F5O1	PENTAFLUOROPHENOL
1310	OLEYL ALCOHOL	300		2.09	2.64	C6H2F4O1	TETRAFLUOROPHENOL
1311	OI-1-PR. KETONE	93	46	-1.48		C6H2K1N3O7	POTASSIUM PICRATE
1312	OI-1-PR. KETONE	93	46	-1.62		C6H2N3NA1O7	SODIUM PICRATE
1313	HEXANE	299		-1.30		C6H3CL1N4O2	5-CHLORO-4-NITROBENZOTRIAZOLE
1314	OCTANOL	56		3.72	3.72 =	C6H3CL3O1	2,4,5-TRICHLOROPHENOL
1315	OCTANOL	9		3.06	3.06 =	C6H3CL3O1	2,4,6-TRICHLOROPHENOL
1316	OCTANOL	56		3.69	3.69 =	C6H3CL3O1	2,4,6-TRICHLOROPHENOL
1317	CYCLOHEXANE	300		-0.15		C6H3F3O1	TRIFLUOROPHENOL
1318	OLEYL ALCOHOL	300		1.98	2.53	C6H3F3O1	TRIFLUOROPHENOL
1319	CHCL3	47		1.20	2.31 A	C6H3N3O1	2,4,6-TRINITROPHENOL/PICRIC ACID/
1320	OCTANOL	218		2.03	2.03 =	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1321	BENZENE	33	12	1.69	3.02 A	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1322	N-BUTANOL	253	36	0.96	0.82	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1323	TOLUENE	42		0.88	2.35 A	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1324	TOLUENE	36	12	1.71	3.08 A	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1325	PRIM. PENTANOLS	182		1.85	2.01	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1326	S-PENTANOLS	195	12	0.82	0.63	C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1327	TETRALIN	246		2.04		C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1328	BROMOFORM	47		0.04		C6H3N3O7	2,4,6-TRINITROPHENOL/PICRIC ACID/
1329	OCTANOL	10		2.64	2.64 =	C6H4BR1N1O2	BENZENE, 3-BROMO-1-NITRO
1330	OLEYL ALCOHOL	124		2.01	2.56	C6H4BR2O1	2,4-DIBROMOPHENOL
1331	OCTANOL	10		2.39	2.39 =	C6H4CL1N1O2	BENZENE, 4-CHLORO-1-NITRO
1332	OCTANOL	10		2.46	2.46 =	C6H4CL1N1O2	BENZENE, 3-CHLORO-1-NITRO
1333	OCTANOL	301		2.24	2.24 =	C6H4CL1N1O2	BENZENE, 2-CHLORO-1-NITRO
1334	OCTANOL	301		2.41	2.41 =	C6H4CL1N1O2	BENZENE, 3-CHLORO-1-NITRO
1335	OCTANOL	301		2.41	2.41 =	C6H4CL1N1O2	BENZENE, 4-CHLORO-1-NITRO
1336	OCTANOL	301		3.38	3.38 =	C6H4CL2	M-01CHLORO BENZENE
1337	OCTANOL	301		3.38	3.38 =	C6H4CL2	O-01CHLORO BENZENE
1338	OCTANOL	301		3.39	3.39 =	C6H4CL2	P-01CHLORO BENZENE
1339	OLEYL ALCOHOL	124		2.54	3.08	C6H4I2O1	2,4-OI-100PHENOL
1340	OCTANOL	283	73	-0.84	-0.84 =	C6H4N1NA1O3	SODIUM P-NITROPHENOXIDE
1341	OCTANOL	283	71	-1.31	-1.31 =	C6H4N1NA1O3	SODIUM P-NITROPHENOXIDE (PKA = 7.15)
1342	OCTANOL	10		1.49	1.49 =	C6H4N2O4	M-01NITROBENZENE
1343	OCTANOL	301		1.49	1.49 =	C6H4N2O4	M-01NITROBENZENE
1344	OCTANOL	301		1.58	1.58 =	C6H4N2O4	O-01NITROBENZENE
1345	OCTANOL	10		1.46	1.46 =	C6H4N2O4	P-01NITROBENZENE
1346	OCTANOL	301		1.49	1.49 =	C6H4N2O4	P-01NITROBENZENE
1347	OCTANOL	218		1.51	1.51 =	C6H4N2O5	2,4-01NITROPHENOL
1348	OCTANOL	302		1.54	1.54 =	C6H4N2O5	2,4-01NITROPHENOL
1349	OILS	173	12	1.35	2.38 A	C6H4N2O5	2,4-01NITROPHENOL
1350	HEXANE	299		0.55		C6H4N2O5	2,4-01NITROPHENOL
1351	OCTANOL	186		1.75	1.75 =	C6H4N2O5	2,5-01NITROPHENOL
1352	OCTANOL	218		1.75	1.75 =	C6H4N2O5	2,5-01NITROPHENOL
1353	OCTANOL	186		1.25	1.25 =	C6H4N2O5	2,6-01NITROPHENOL
1354	OCTANOL	218		1.18	1.18 =	C6H4N2O5	2,6-01NITROPHENOL
1355	OCTANOL	218		2.32	2.32 =	C6H4N2O5	3,5-01NITROPHENOL
1356	OCTANOL	218		2.36	2.36 =	C6H4N2O5	3,5-01NITROPHENOL
1357	OCTANOL	218		-0.13	-0.13 =	C6H4N4	ISOPROPENYL AMINE, 1,1,3-TRICYANO
1358	OCTANOL	206	27	1.95		C6H4N4O2	5-NITROBENZOTRIAZOLE
1359	HEXANE	299		-2.60		C6H4N4O2	5-NITROBENZOTRIAZOLE
1360	OCTANOL	238		0.20	0.20 =	C6H4O2	QUINONE
1361	DIETHYL ETHER	3		-0.49	0.39 B	C6H4O2	QUINONE
1362	DIETHYL ETHER	303		-0.51	0.40 B	C6H4O2	QUINONE
1363	CYCLOHEXANE	304		-0.39		C6H4O2	QUINONE
1364	OILS	305		0.27	0.69 B	C6H4O2	QUINONE
1365	OCTANOL	10		2.99	2.99 =	C6H5BR1	BROMOBENZENE
1366	OCTANOL	10		2.63	2.63 =	C6H5BR1O1	M-BROMOPHENOL
1367	CYCLOHEXANE	124		-0.52		C6H5BR1O1	M-BROMOPHENOL
1368	METH. DECANOATE	124		2.12	2.59	C6H5BR1O1	M-BROMOPHENOL
1369	OLEYL ALCOHOL	124		2.02	2.57	C6H5BR1O1	M-BROMOPHENOL
1370	OCTANOL	10		2.35	2.35 =	C6H5BR1O1	O-BROMOPHENOL
1371	CYCLOHEXANE	124		0.26		C6H5BR1O1	O-BROMOPHENOL
1372	METH. DECANOATE	124		1.48	1.93	C6H5BR1O1	O-BROMOPHENOL
1373	OLEYL ALCOHOL	124		1.36	1.91	C6H5BR1O1	O-BROMOPHENOL
1374	OCTANOL	10		2.59	2.59 =	C6H5BR1O1	P-BROMOPHENOL
1375	CYCLOHEXANE	56		-0.09		C6H5BR1O1	P-BROMOPHENOL
1376	OLEYL ALCOHOL	124		2.23	2.77	C6H5BR1O1	P-BROMOPHENOL
1377	OCTANOL	10		2.84	2.84 =	C6H5CL1	CHLOROBENZENE
1378	OCTANOL	217	07	1.91	1.91 =	C6H5CL1N2O4S1	3-NITRO-4-CHLORO BENZENESULFONAMIDE
1379	CHCL3	217	07	0.03	1.21 A	C6H5CL1N2O4S1	3-NITRO-4-CHLORO BENZENESULFONAMIDE
1380	OCTANOL	10		2.50	2.50 =	C6H5CL1O1	M-CHLOROPHENOL
1381	OCTANOL	301		2.47	2.47 =	C6H5CL1O1	M-CHLOROPHENOL
1382	CYCLOHEXANE	124		-0.70		C6H5CL1O1	M-CHLOROPHENOL
1383	METH. DECANOATE	124		1.96	2.43	C6H5CL1O1	M-CHLOROPHENOL
1384	OLEYL ALCOHOL	124		1.76	2.31	C6H5CL1O1	M-CHLOROPHENOL
1385	OCTANOL	10		2.15	2.15 =	C6H5CL1O1	O-CHLOROPHENOL
1386	OCTANOL	301		2.19	2.19 =	C6H5CL1O1	O-CHLOROPHENOL
1387	CYCLOHEXANE	124		0.08		C6H5CL1O1	O-CHLOROPHENOL
1388	METH. DECANOATE	124		1.34	1.79	C6H5CL1O1	O-CHLOROPHENOL
1389	OLEYL ALCOHOL	124		1.23	1.78	C6H5CL1O1	O-CHLOROPHENOL
1390	OCTANOL	10		2.39	2.39 =	C6H5CL1O1	P-CHLOROPHENOL
1391	OCTANOL	301		2.44	2.44 =	C6H5CL1O1	P-CHLOROPHENOL
1392	CYCLOHEXANE	124		-0.70		C6H5CL1O1	P-CHLOROPHENOL
1393	CYCLOHEXANE	56		-0.26		C6H5CL1O1	P-CHLOROPHENOL
1394	METH. DECANOATE	124		2.18	2.65	C6H5CL1O1	P-CHLOROPHENOL
1395	OLEYL ALCOHOL	124		2.02	2.57	C6H5CL1O1	P-CHLOROPHENOL
1396	OCTANOL	268		2.78	2.78 =	C6H5CL2N1	2,3-01CHLOROANILINE
1397	OCTANOL	268		2.69	2.69 =	C6H5CL2N1	3,4-01CHLOROANILINE
1398	OCTANOL	217	07	1.44	1.44 =	C6H5CL2N1O2S1	3,4-01CHLORO BENZENESULFONAMIDE
1399	CHCL3	217	07	0.52	1.64 A	C6H5CL2N1O2S1	3,4-01CHLORO BENZENESULFONAMIDE
1400	OCTANOL	10		2.27	2.27 =	C6H5F1	FLUOROBENZENE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1401	OCTANOL	10		1.93	1.93 =	C6H5F101	M-FLUOROPHENOL
1402	CYCLOHEXANE	124		-1.00		C6H5F101	M-FLUOROPHENOL
1403	CYCLOHEXANE	300		-0.70		C6H5F101	M-FLUOROPHENOL
1404	METH. DECANOATE	124		1.56	2.02	C6H5F101	M-FLUOROPHENOL
1405	OLEYL ALCOHOL	124		1.43	1.98	C6H5F101	M-FLUOROPHENOL
1406	OLEYL ALCOHOL	300		1.73	2.28	C6H5F101	M-FLUOROPHENOL
1407	OCTANOL	10		1.71	1.71 =	C6H5F101	O-FLUOROPHENOL
1408	CYCLOHEXANE	124		-0.70		C6H5F101	O-FLUOROPHENOL
1409	CYCLOHEXANE	300		-0.15		C6H5F101	O-FLUOROPHENOL
1410	METH. DECANOATE	124		1.00	1.41	C6H5F101	O-FLUOROPHENOL
1411	OLEYL ALCOHOL	124		0.90	1.46	C6H5F101	O-FLUOROPHENOL
1412	OLEYL ALCOHOL	300		1.39	1.95	C6H5F101	O-FLUOROPHENOL
1413	OCTANOL	10		1.77	1.77 =	C6H5F101	P-FLUOROPHENOL
1414	CYCLOHEXANE	300		-1.00		C6H5F101	P-FLUOROPHENOL
1415	OLEYL ALCOHOL	124		1.49	2.04	C6H5F101	P-FLUOROPHENOL
1416	OLEYL ALCOHOL	300		1.48	2.03	C6H5F101	P-FLUOROPHENOL
1417	OCTANOL	56		3.25	3.25 =	C6H511	1000BENZENE
1418	OCTANOL	10		2.93	2.93 =	C6H51101	M-1000PHENOL
1419	CYCLOHEXANE	124		-0.10		C6H51101	M-1000PHENOL
1420	METH. DECANOATE	124		2.41	2.89	C6H51101	M-1000PHENOL
1421	OLEYL ALCOHOL	124		2.23	2.77	C6H51101	M-1000PHENOL
1422	OCTANOL	10		2.65	2.65 =	C6H51101	O-1000PHENOL
1423	OLEYL ALCOHOL	124		1.79	2.34	C6H51101	O-1000PHENOL
1424	OCTANOL	10		2.91	2.91 =	C6H51101	P-1000PHENOL
1425	CYCLOHEXANE	124		0.00		C6H51101	P-1000PHENOL
1426	CYCLOHEXANE	56		0.21		C6H51101	P-1000PHENOL
1427	OLEYL ALCOHOL	124		2.59	3.13	C6H51101	P-1000PHENOL
1428	OCTANOL	56	26	-1.61	-1.61 =	C6H51101	1000XYBENZENE
1429	DIETHYL ETHER	306		-1.82	-1.46 A	C6H51103S1	P-1000BENZENESULFONIC ACIO
1430	ETHYL ACETATE	306		-0.96	-1.08	C6H51103S1	P-1000BENZENESULFONIC ACIO
1431	CLCH2CH2CL	306		-2.52		C6H51103S1	P-1000BENZENESULFONIC ACIO
1432	OCTANOL	56		2.01	2.01 =	C6H5N101	NITROBENZENE
1433	OCTANOL	65		1.99	1.99 =	C6H5N101	NITROBENZENE
1434	DIETHYL ETHER	112	12	-2.05	-0.97 B	C6H5N102	2-CARBOXYPYRIDINE/PICOLINIC ACIO/
1435	CHCL3	112	12	-1.64	-0.27 A	C6H5N102	2-CARBOXYPYRIDINE/PICOLINIC ACIO/
1436	DIETHYL ETHER	112	50	-0.99	0.03 B	C6H5N102	3-CARBOXYPYRIDINE/NICOTINIC ACIO/
1437	CHCL3	112	12	-2.05	-0.65 A	C6H5N102	3-CARBOXYPYRIDINE/NICOTINIC ACIO/
1438	OCTANOL	10		1.85	1.85 =	C6H5N102	NITROBENZENE
1439	OCTANOL	301		1.88	1.88 =	C6H5N102	NITROBENZENE
1440	CYCLOHEXANE	141		1.46		C6H5N102S1	2-(8-NITROVINYL) THIOPHENE
1441	OCTANOL	10		2.00	2.00 =	C6H5N103	M-NITROPHENOL
1442	OCTANOL	301		2.00	2.00 =	C6H5N103	M-NITROPHENOL
1443	DIETHYL ETHER	3		2.20	2.05 A	C6H5N103	M-NITROPHENOL
1444	DIETHYL ETHER	112		2.18	2.02 A	C6H5N103	M-NITROPHENOL
1445	CYCLOHEXANE	248		-1.52		C6H5N103	M-NITROPHENOL
1446	CHCL3	307		0.41	1.59 A	C6H5N103	M-NITROPHENOL
1447	BENZENE	248		0.38	1.77 A	C6H5N103	M-NITROPHENOL
1448	1-BUTANOL	4		1.79	2.01	C6H5N103	M-NITROPHENOL
1449	CLCH2CH2CL	248		0.93		C6H5N103	M-NITROPHENOL
1450	OCTANOL	10		1.79	1.79 =	C6H5N103	O-NITROPHENOL
1451	OCTANOL	301		1.73	1.73 =	C6H5N103	O-NITROPHENOL
1452	DIETHYL ETHER	3		2.18	2.03 A	C6H5N103	O-NITROPHENOL
1453	CYCLOHEXANE	308		1.49		C6H5N103	O-NITROPHENOL
1454	CHCL3	307		2.54	1.97 B	C6H5N103	O-NITROPHENOL
1455	BENZENE	308		2.33	2.16 B	C6H5N103	O-NITROPHENOL
1456	1-BUTANOL	4		1.60	1.75	C6H5N103	O-NITROPHENOL
1457	XYLENE	308		2.30		C6H5N103	O-NITROPHENOL
1458	TOLUENE	308		2.28	3.58 A	C6H5N103	O-NITROPHENOL
1459	CCL4	308		2.07		C6H5N103	O-NITROPHENOL
1460	CS2	308		2.17		C6H5N103	O-NITROPHENOL
1461	OCTANOL	10		1.91	1.91 =	C6H5N103	P-NITROPHENOL
1462	OCTANOL	301		1.91	1.91 =	C6H5N103	P-NITROPHENOL
1463	DIETHYL ETHER	3		2.04	1.90 A	C6H5N103	P-NITROPHENOL
1464	DIETHYL ETHER	112		2.01	1.89 A	C6H5N103	P-NITROPHENOL
1465	CYCLOHEXANE	308		-1.93		C6H5N103	P-NITROPHENOL
1466	CYCLOHEXANE	248		-1.79		C6H5N103	P-NITROPHENOL
1467	CHCL3	307		0.08	1.29 A	C6H5N103	P-NITROPHENOL
1468	CHCL3	308		0.27	1.46 A	C6H5N103	P-NITROPHENOL
1469	BENZENE	308		0.15	1.56 A	C6H5N103	P-NITROPHENOL
1470	BENZENE	248		0.07	1.48 A	C6H5N103	P-NITROPHENOL
1471	1-BUTANOL	4		1.76	1.97	C6H5N103	P-NITROPHENOL
1472	CCL4	308		-0.99		C6H5N103	P-NITROPHENOL
1473	CCL4	234		-1.06		C6H5N103	P-NITROPHENOL
1474	CLCH2CH2CL	248		0.79		C6H5N103	P-NITROPHENOL
1475	HEXANE	308		-2.22		C6H5N103	P-NITROPHENOL
1476	CS2	308		-1.04		C6H5N103	P-NITROPHENOL
1477	CYCLOHEXANE	141		1.01		C6H5N103	2-(8-NITROVINYL) FURAN
1478	DIETHYL ETHER	112	12	-1.08	-0.82 A	C6H5N103	PICOLINIC ACIO,N-OXIOE
1479	CHCL3	112		0.03	1.25 A	C6H5N103	PICOLINIC ACIO,N-OXIOE
1480	OCTANOL	186		1.34	1.34 =	C6H5N3	BENZOTRIAZOLE
1481	DIETHYL ETHER	112		0.58	1.38 B	C6H5N3	BENZOTRIAZOLE
1482	CHCL3	112		-0.05	0.53 N	C6H5N3	BENZOTRIAZOLE
1483	OCTANOL	10		2.13	2.13 =	C6H6	BENZENE
1484	OCTANOL	309		1.56	1.56 =	C6H6	BENZENE
1485	OCTANOL	301		2.15	2.15 =	C6H6	BENZENE
1486	OILS	173		2.22	2.28 B	C6H6	BENZENE
1487	N-HEPTANE	310		2.26		C6H6	BENZENE
1488	BENZENE	311	6	0.10		C6H6818R102	PHENYL BORONIC ACIO,4-BROMO
1489	BENZENE	311	6	-0.09		C6H681C1L102	PHENYL BORONIC ACIO,4-CHLORO
1490	BENZENE	311	6	-0.51		C6H681F102	PHENYL BORONIC ACIO,4-FLUORO
1491	BENZENE	311	6	-1.09		C6H681N104	PHENYL BORONIC ACIO,3-NITRO
1492	BENZENE	311	6	-0.82		C6H681N104	PHENYL BORONIC ACIO,2-NITRO
1493	OCTANOL	312		2.10	2.10 =	C6H68R1N1	M-BROMOANILINE
1494	BENZENE	313		2.20	2.07 B	C6H68R1N1	M-BROMOANILINE
1495	OCTANOL	312		2.29	2.29 =	C6H68R1N1	O-BROMOANILINE
1496	OCTANOL	312		2.26	2.26 =	C6H68R1N1	P-BROMOANILINE
1497	BENZENE	313		2.06	1.98 B	C6H68R1N1	P-BROMOANILINE
1498	BENZENE	72		2.12	2.09 B	C6H68R1N1	P-BROMOANILINE
1499	OCTANOL	217	07	1.36	1.36 =	C6H68R1N102S1	P-BROMOBENZENESULFONAMIOE
1500	CHCL3	217	07	0.39	0.92 N	C6H68R1N102S1	P-BROMOBENZENESULFONAMIOE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1501	OCTANOL	10		1.88	1.88 =	C6H6CL1N1	M-CHLOROANILINE
1502	OCTANOL	301		1.90	1.90 =	C6H6CL1N1	M-CHLOROANILINE
1503	CYCLOHEXANE	314		0.89		C6H6CL1N1	M-CHLOROANILINE
1504	BENZENE	313		1.93	1.88 B	C6H6CL1N1	M-CHLOROANILINE
1505	BENZENE	315		1.94	1.91 B	C6H6CL1N1	M-CHLOROANILINE
1506	CCL4	314		1.37		C6H6CL1N1	M-CHLOROANILINE
1507	N-HEPTANE	314		0.71		C6H6CL1N1	M-CHLOROANILINE
1508	HEXADECANE	314		0.64		C6H6CL1N1	M-CHLOROANILINE
1509	OCTANOL	268		1.90	1.90 =	C6H6CL1N1	O-CHLOROANILINE
1510	OCTANOL	301		1.92	1.92 =	C6H6CL1N1	O-CHLOROANILINE
1511	CYCLOHEXANE	314		1.25		C6H6CL1N1	O-CHLOROANILINE
1512	BENZENE	314		2.13	2.02 B	C6H6CL1N1	O-CHLOROANILINE
1513	BENZENE	315		2.08	1.99 B	C6H6CL1N1	O-CHLOROANILINE
1514	CCL4	314		1.73		C6H6CL1N1	O-CHLOROANILINE
1515	N-HEPTANE	314		1.12		C6H6CL1N1	O-CHLOROANILINE
1516	HEXANE	314		1.11		C6H6CL1N1	O-CHLOROANILINE
1517	OCTANE	314		1.03		C6H6CL1N1	O-CHLOROANILINE
1518	HEXADECANE	314		1.07		C6H6CL1N1	O-CHLOROANILINE
1519	DECANE	314		1.12		C6H6CL1N1	O-CHLOROANILINE
1520	OCTANOL	301		1.83	1.83 =	C6H6CL1N1	P-CHLOROANILINE
1521	CYCLOHEXANE	314		0.69		C6H6CL1N1	P-CHLOROANILINE
1522	BENZENE	314		1.82	1.81 B	C6H6CL1N1	P-CHLOROANILINE
1523	BENZENE	313		1.81	1.80 B	C6H6CL1N1	P-CHLOROANILINE
1524	BENZENE	72		1.91	1.87 B	C6H6CL1N1	P-CHLOROANILINE
1525	BENZENE	315		1.80	1.80 B	C6H6CL1N1	P-CHLOROANILINE
1526	CCL4	314		1.31		C6H6CL1N1	P-CHLOROANILINE
1527	DI-PENTYL ETHER	315		0.64		C6H6CL1N1	P-CHLOROANILINE
1528	N-HEPTANE	75		0.63		C6H6CL1N1	P-CHLOROANILINE
1529	N-HEPTANE	314		0.57		C6H6CL1N1	P-CHLOROANILINE
1530	N-HEPTANE	315		0.64		C6H6CL1N1	P-CHLOROANILINE
1531	PARAFFINS	316		0.50		C6H6CL1N1	P-CHLOROANILINE
1532	HEXADECANE	314		0.56		C6H6CL1N1	P-CHLOROANILINE
1533	OCTANOL	217	07	1.29	1.29 =	C6H6CL1N1O2S1	M-CHLOROBENZENESULFONAMIDE
1534	CHCL3	217	07	0.26	0.89 N	C6H6CL1N1O2S1	M-CHLOROBENZENESULFONAMIDE
1535	OCTANOL	217	07	0.74	0.74 =	C6H6CL1N1O2S1	O-CHLOROBENZENESULFONAMIDE
1536	CHCL3	217	07	0.46	0.96 N	C6H6CL1N1O2S1	O-CHLOROBENZENESULFONAMIDE
1537	OCTANOL	217	07	0.84	0.84 =	C6H6CL1N1O2S1	P-CHLOROBENZENESULFONAMIDE
1538	CHCL3	217	07	0.14	0.69 N	C6H6CL1N1O2S1	P-CHLOROBENZENESULFONAMIDE
1539	HEXANE	317		3.24		C6H6CL6	1, 2, 3, 4, 5, 6-HEXACHLOROCYCLOHEXANE /LINDANE/
1540	OCTANOL	312		1.30	1.30 =	C6H6F1N1	M-FLUOROANILINE
1541	OCTANOL	10		1.30	1.30 =	C6H6F1N1	M-FLUOROANILINE
1542	OCTANOL	312		1.26	1.26 =	C6H6F1N1	O-FLUOROANILINE
1543	OCTANOL	10		1.15	1.15 =	C6H6F1N1	P-FLUOROANILINE
1544	OCTANOL	312		2.98	2.98 =	C6H6I1N1	M-IODOANILINE
1545	OCTANOL	312	12	3.34	3.34 =	C6H6I1N1	O-IODOANILINE
1546	OCTANOL	312	12	3.34	3.34 =	C6H6I1N1	P-IODOANILINE
1547	DIETHYL ETHER	112		-1.72	-0.61 B	C6H6N2O1	NICOTINAMIDE/3-CARBAMYLPIRIDINE/
1548	CHCL3	112		-1.37	-1.40 B	C6H6N2O1	NICOTINAMIDE/3-CARBAMYLPIRIDINE/
1549	CHCL3	318		-1.22	-1.27 B	C6H6N2O1	I-NICOTINAMIDE
1550	OCTANOL	10		1.37	1.37 =	C6H6N2O2	M-NITROANILINE
1551	OCTANOL	301		1.37	1.37 =	C6H6N2O2	M-NITROANILINE
1552	DIETHYL ETHER	112		1.71	1.61 A	C6H6N2O2	M-NITROANILINE
1553	CYCLOHEXANE	319		-0.42		C6H6N2O2	M-NITROANILINE
1554	CYCLOHEXANE	314		-0.42		C6H6N2O2	M-NITROANILINE
1555	CHCL3	112		1.61	1.13 B	C6H6N2O2	M-NITROANILINE
1556	CHCL3	254		1.59	1.12 B	C6H6N2O2	M-NITROANILINE
1557	BENZENE	319		1.31	1.46 B	C6H6N2O2	M-NITROANILINE
1558	BENZENE	314		1.30	1.45 B	C6H6N2O2	M-NITROANILINE
1559	BENZENE	72		1.36	1.49 B	C6H6N2O2	M-NITROANILINE
1560	TOLUENE	319		1.19	1.49 B	C6H6N2O2	M-NITROANILINE
1561	CCL4	319		0.45	1.39 N	C6H6N2O2	M-NITROANILINE
1562	CCL4	314		0.43		C6H6N2O2	M-NITROANILINE
1563	N-HEPTANE	319		-0.57		C6H6N2O2	M-NITROANILINE
1564	N-HEPTANE	254		-0.62		C6H6N2O2	M-NITROANILINE
1565	N-HEPTANE	314		-0.56		C6H6N2O2	M-NITROANILINE
1566	OCTANE	314		-0.61		C6H6N2O2	M-NITROANILINE
1567	CS2	319		0.52		C6H6N2O2	M-NITROANILINE
1568	OCTANOL	312		1.44	1.44 =	C6H6N2O2	O-NITROANILINE
1569	OCTANOL	186		1.83	1.83 =	C6H6N2O2	O-NITROANILINE
1570	OCTANOL	301		1.79	1.79 =	C6H6N2O2	O-NITROANILINE
1571	DIETHYL ETHER	112	50	1.95	1.83 A	C6H6N2O2	O-NITROANILINE
1572	CYCLOHEXANE	319		0.36		C6H6N2O2	O-NITROANILINE
1573	CYCLOHEXANE	314		-0.70		C6H6N2O2	O-NITROANILINE
1574	CHCL3	112		2.13	1.60 B	C6H6N2O2	O-NITROANILINE
1575	BENZENE	319		1.78	1.79 B	C6H6N2O2	O-NITROANILINE
1576	BENZENE	72		1.81	1.81 B	C6H6N2O2	O-NITROANILINE
1577	TOLUENE	319		1.64	1.84 B	C6H6N2O2	O-NITROANILINE
1578	CCL4	319		1.08	2.25 N	C6H6N2O2	O-NITROANILINE
1579	CCL4	314		1.08		C6H6N2O2	O-NITROANILINE
1580	N-HEPTANE	319		0.25		C6H6N2O2	O-NITROANILINE
1581	N-HEPTANE	315		0.25		C6H6N2O2	O-NITROANILINE
1582	HEXANE	319		0.21		C6H6N2O2	O-NITROANILINE
1583	OLEYL ALCOHOL	82		1.15	1.71	C6H6N2O2	O-NITROANILINE
1584	CS2	319		1.14		C6H6N2O2	O-NITROANILINE
1585	OCTANOL	10		1.39	1.39 =	C6H6N2O2	P-NITROANILINE
1586	DIETHYL ETHER	112		1.48	1.41 A	C6H6N2O2	P-NITROANILINE
1587	CYCLOHEXANE	319		-1.00		C6H6N2O2	P-NITROANILINE
1588	CYCLOHEXANE	314		-1.00		C6H6N2O2	P-NITROANILINE
1589	CHCL3	112		1.23	0.78 B	C6H6N2O2	P-NITROANILINE
1590	CHCL3	254		1.30	0.89 B	C6H6N2O2	P-NITROANILINE
1591	BENZENE	319		0.92	1.19 B	C6H6N2O2	P-NITROANILINE
1592	BENZENE	314		0.93	1.19 B	C6H6N2O2	P-NITROANILINE
1593	BENZENE	72		0.95	1.21 B	C6H6N2O2	P-NITROANILINE
1594	TOLUENE	319		0.78	1.19 B	C6H6N2O2	P-NITROANILINE
1595	CCL4	319		-0.13	0.61 N	C6H6N2O2	P-NITROANILINE
1596	CCL4	314		-0.14		C6H6N2O2	P-NITROANILINE
1597	N-HEPTANE	319		-1.14		C6H6N2O2	P-NITROANILINE
1598	N-HEPTANE	254		-0.89		C6H6N2O2	P-NITROANILINE
1599	N-HEPTANE	314		-1.13		C6H6N2O2	P-NITROANILINE
1600	OCTANE	314		-1.25		C6H6N2O2	P-NITROANILINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1601	CS2	319		0.05		C6H6N2O2	P-NITROANILINE
1602	CS2	314		0.05		C6H6N2O2	P-NITROANILINE
1603	DIETHYL ETHER	320		1.80	1.70 A	C6H6N2O2	N-NITROSOPHENYLHYDROXYL AMINE
1604	CHCL3	321		2.15	2.64 N	C6H6N2O2	N-NITROSOPHENYLHYDROXYL AMINE
1605	ETHYL ACETATE	321		2.45	2.58	C6H6N2O2	N-NITROSOPHENYLHYDROXYL AMINE
1606	CCL4	320		3.36		C6H6N2O2	N-NITROSOPHENYLHYDROXYL AMINE
1607	N-BUTYL ACETATE	320		2.23	2.06	C6H6N2O2	N-NITROSOPHENYLHYDROXYLAMINE
1608	OCTANOL	217	07	0.55	0.55 =	C6H6N2O4S1	M-NITROBENZENESULFONAMIDE
1609	CHCL3	217	07	-0.36	0.85 A	C6H6N2O4S1	M-NITROBENZENESULFONAMIDE
1610	OCTANOL	217	07	0.34	0.34 =	C6H6N2O4S1	O-NITROBENZENESULFONAMIDE
1611	CHCL3	217	07	0.14	0.69 N	C6H6N2O4S1	O-NITROBENZENESULFONAMIDE
1612	OCTANOL	217	07	0.64	0.64 =	C6H6N2O4S1	P-NITROBENZENESULFONAMIDE
1613	CHCL3	217	07	-0.60	0.65 A	C6H6N2O4S1	P-NITROBENZENESULFONAMIDE
1614	DIETHYL ETHER	112	12	-0.05	0.07 A	C6H6N2S1	PYRIDINE, 4-THIOCARBAMYL/1-NICOTINTHIOAMIDE/
1615	CHCL3	112		-0.41	-0.58 B	C6H6N2S1	PYRIDINE, 4-THIOCARBAMYL/1-NICOTINTHIOAMIDE/
1616	CHCL3	322		-0.33	-0.39 B	C6H6N4S1	METHYLTHIOPURINE
1617	OCTANOL	10		1.46	1.46 =	C6H6O1	PHENOL
1618	OCTANOL	301		1.48	1.48 =	C6H6O1	PHENOL
1619	DIETHYL ETHER	3		1.64	1.55 A	C6H6O1	PHENOL
1620	DIETHYL ETHER	323		1.58	1.50 A	C6H6O1	PHENOL
1621	CYCLOHEXANE	124		-1.00		C6H6O1	PHENOL
1622	CYCLOHEXANE	132		-0.72		C6H6O1	PHENOL
1623	CYCLOHEXANE	324	45	-0.93		C6H6O1	PHENOL
1624	CYCLOHEXANE	325		-0.77		C6H6O1	PHENOL
1625	CYCLOHEXANE	56		-0.81		C6H6O1	PHENOL
1626	CYCLOHEXANE	300		-1.00		C6H6O1	PHENOL
1627	CHCL3	243		0.00	1.22 A	C6H6O1	PHENOL
1628	CHCL3	324	45	0.34	1.54 A	C6H6O1	PHENOL
1629	CHCL3	326		0.37	1.55 A	C6H6O1	PHENOL
1630	CHCL3	254		0.36	1.49 A	C6H6O1	PHENOL
1631	OILS	324		0.81	1.93 A	C6H6O1	PHENOL
1632	OILS	173		0.78	1.96 A	C6H6O1	PHENOL
1633	OILS	224		0.60	1.76 A	C6H6O1	PHENOL
1634	OILS	327		0.75	1.87 A	C6H6O1	PHENOL
1635	BENZENE	35		0.36	1.76 A	C6H6O1	PHENOL
1636	BENZENE	324	45	0.34	1.70 A	C6H6O1	PHENOL
1637	BENZENE	328		0.41	1.77 A	C6H6O1	PHENOL
1638	BENZENE	329		0.40	1.76 A	C6H6O1	PHENOL
1639	BENZENE	330		0.37	1.73 A	C6H6O1	PHENOL
1640	BENZENE	219		0.32	1.69 A	C6H6O1	PHENOL
1641	BENZENE	248		0.42	1.81 A	C6H6O1	PHENOL
1642	XYLENE	324	45	0.13	1.93 A	C6H6O1	PHENOL
1643	XYLENE	42		0.18	1.97 A	C6H6O1	PHENOL
1644	TOLUENE	324	45	0.22	1.77 A	C6H6O1	PHENOL
1645	TOLUENE	328		0.32	1.86 A	C6H6O1	PHENOL
1646	TOLUENE	42		0.23	1.75 A	C6H6O1	PHENOL
1647	NITROBENZENE	324	45	0.95	1.66	C6H6O1	PHENOL
1648	NITROBENZENE	328		0.87	1.60	C6H6O1	PHENOL
1649	PRIM. PENTANOLS	182		1.21	1.14	C6H6O1	PHENOL
1650	PRIM. PENTANOLS	324		1.50	1.55	C6H6O1	PHENOL
1651	N-BUTYL ACETATE	331		1.58	1.58	C6H6O1	PHENOL
1652	CCL4	324	45	-0.42	1.55 A	C6H6O1	PHENOL
1653	CCL4	328		-0.50	1.40 A	C6H6O1	PHENOL
1654	CCL4	329		-0.36	1.55 A	C6H6O1	PHENOL
1655	METH. DECANOATE	124		1.21	1.65	C6H6O1	PHENOL
1656	DI-I-PR. ETHER	331		1.12		C6H6O1	PHENOL
1657	N-HEPTANE	310		-0.92		C6H6O1	PHENOL
1658	N-HEPTANE	254		-0.82		C6H6O1	PHENOL
1659	HEXANE	324	45	-0.96		C6H6O1	PHENOL
1660	HEXANOL	331		1.46		C6H6O1	PHENOL
1661	OLEYL ALCOHOL	124		1.23	1.78	C6H6O1	PHENOL
1662	OLEYL ALCOHOL	300		1.19	1.75	C6H6O1	PHENOL
1663	CS2	248		-0.26		C6H6O1	PHENOL
1664	PARAFFINS	327		-0.85		C6H6O1	PHENOL
1665	BROMOFORM	7		0.18		C6H6O1	PHENOL
1666	OCTANOL	10		0.80	0.80 =	C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1667	OCTANOL	301		0.77	0.77 =	C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1668	DIETHYL ETHER	3		0.62	0.67 A	C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1669	DIETHYL ETHER	248		0.67	0.70 A	C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1670	BENZENE	248	12	-2.11		C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1671	N-BUTYL ACETATE	331		0.32	0.57	C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1672	CLCH2CH2CL	248		-1.50		C6H6O2	M-OIHOROXYBENZENE/RESORCINOL/
1673	OCTANOL	56		0.88	0.88 =	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1674	OCTANOL	301		1.01	1.01 =	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1675	DIETHYL ETHER	3		1.04	1.03 A	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1676	DIETHYL ETHER	332		0.86	0.87 A	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1677	DIETHYL ETHER	323		0.89	0.90 A	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1678	BENZENE	248	12	-1.19	0.21 A	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1679	CLCH2CH2CL	248		-0.63		C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1680	DI-BUTYL ETHER	332		0.11		C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1681	OI-I-PR. ETHER	332		0.62	1.27	C6H6O2	O-OIHOROXYBENZENE/CATECHOL/
1682	OCTANOL	302		0.59	0.59 =	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1683	OCTANOL	301		0.50	0.50 =	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1684	DIETHYL ETHER	3		0.46	0.51 A	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1685	DIETHYL ETHER	333		0.36	0.44 A	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1686	DIETHYL ETHER	334		0.37	0.45 A	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1687	DIETHYL ETHER	248		0.38	0.44 A	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1688	OILS	305		-0.83	-0.48 A	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1689	BENZENE	248	12	-2.16		C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1690	CLCH2CH2CL	248		-1.61		C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1691	DI-I-PR. ETHER	335		-0.13	0.39	C6H6O2	P-OIHOROXYBENZENE/HYDROQUINONE/
1692	CHCL3	336		-0.22	0.40 N	C6H6O3	2-FURALOEHYDRE, HYDROXYMETHYL
1693	BENZENE	336	12	-0.24	1.04 A	C6H6O3	2-FURALOEHYDRE, HYDROXYMETHYL
1694	ETHYL ACETATE	336		0.13	0.12	C6H6O3	2-FURALOEHYDRE, 5-HYDROXYMETHYL
1695	DIETHYL ETHER	3		0.23	0.32 A	C6H6O3	1, 2, 3-TRIHOROXYBENZENE/PYROGALLOL/
1696	DIETHYL ETHER	248		0.09	0.19 A	C6H6O3	1, 2, 3-TRIHOROXYBENZENE/PYROGALLOL/
1697	DIETHYL ETHER	3		-0.35	-0.19 A	C6H6O3	1, 3, 5-TRIHOROXYBENZENE/PHLORGLUCINOL/
1698	DIETHYL ETHER	248		-0.35	-0.19 A	C6H6O3	1, 3, 5-TRIHOROXYBENZENE/PHLORGLUCINOL/
1699	DIETHYL ETHER	3		-2.70	-2.25 A	C6H6O3S1	BENZENESULFONIC ACID
1700	DIETHYL ETHER	3		-0.30	-0.15 A	C6H6O6	ACONITIC ACID





NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME	
1801	CHCL3	217	32	-1.69	-0.97	N	C6H8N2O2S1	SULFANILAMIDE
1802	BENZENE	343	2	-2.05	-0.64	A	C6H8N2O2S1	SULFANILAMIDE
1803	1-BUTANOL	130	12	-0.96	-1.85		C6H8N2O2S1	SULFANILAMIDE
1804	1-PENT. ACETATE	343	2	-0.44	-0.67		C6H8N2O2S1	SULFANILAMIDE
1805	CCL4	343	2	-2.52	-0.29	A	C6H8N2O2S1	SULFANILAMIDE
1806	OILS	345		-1.18	0.16	A	C6H8N2O3	BARBITURIC ACID, DIMETHYL
1807	OILS	240		1.61	1.94	B	C6H8N2O8	ISOSORBIDE DINITRATE
1808	OILS	240		2.69	2.94	B	C6H8N6O18	MANNITOL HEXANITRATE
1809	OCTANOL	346		0.58	0.58	=	C6H8O1	1-HEXYN-5-ONE
1810	OILS	347		0.49	1.70	A	C6H8O2	SORBIC ACID
1811	ME-1-BUT.KETONE	195		1.10	0.96		C6H8O2	SORBIC ACID
1812	S-PENTANOLS	195		-0.30	-0.65		C6H8O6	PROPANE TRICARBOXYLIC ACID
1813	DIETHYL ETHER	3		-1.22	-0.95	A	C6H8O6	PROPANE TRICARBOXYLIC ACID
1814	DIETHYL ETHER	207		-1.30	-1.03	A	C6H8O6	PROPANE TRICARBOXYLIC ACID
1815	ME-I-BUT.KETONE	195		-1.00	-0.93		C6H8O6	PROPANE TRICARBOXYLIC ACID
1816	OLEYL ALCOPOL	5		-1.52	-0.94		C6H8O6	PROPANE TRICARBOXYLIC ACID
1817	1-BUTANOL	4		0.01	-0.49		C6H8O6	PROPANETRICARBOXYLIC ACID
1818	OCTANOL	5		-1.72	-1.72	=	C6H8O7	CITRIC ACID
1819	DIETHYL ETHER	3		-2.06	-1.69	A	C6H8O7	CITRIC ACID
1820	DIETHYL ETHER	207		-2.18	-1.80	A	C6H8O7	CITRIC ACID
1821	DIETHYL ETHER	213		-2.19	-1.79	A	C6H8O7	CITRIC ACID
1822	1-BUTANOL	4		-0.53	-1.25		C6H8O7	CITRIC ACID
1823	1-BUTANOL	184		-0.62	-1.38		C6H8O7	CITRIC ACID
1824	PRIM. PENTANOLS	48		-0.76	-1.27		C6H8O7	CITRIC ACID
1825	CYCLOHEXANONE	194		-0.67	-1.47		C6H8O7	CITRIC ACID
1826	2-BUTANONE	194		-0.48	-1.63		C6H8O7	CITRIC ACID
1827	ME-1-BUT.KETONE	195		-1.62	-1.51		C6H8O7	CITRIC ACID
1828	S-PENTANOLS	195		-1.16	-1.63		C6H8O7	CITRIC ACID
1829	OCTANOL	348		-0.70	-0.70	=	C6H9N1O2	N-FORMYL CYCLOBUTANECARBOXAMIDE
1830	OILS	284		0.19	0.95	B	C6H9N3O1	1,3,5-TRIMETHYL-4-NITROSOPYRAZOLE
1831	SEC-BUTANOL	84	19	-1.68	-2.86		C6H9N3O2	HISTIDINE
1832	OCTANE	256		-1.26			C6H9N3O2	2-I-PROPYL-5-NITROIMIDAZOLE
1833	OCTANOL	56		2.45	2.45	=	C6H10	1,5-HEXAOLENE
1834	CHCL3	265		-0.94	-0.28	N	C6H10N2O2	CYCLOHEXANEDIONE OXIME
1835	OCTANOL	206		3.75	3.75	=	C6H10N2O6S3	IMIDAZOLE, 2,4,5-TRIMETHYLSULFONYL
1836	OCTANOL	134		1.22	1.22	=	C6H10N4O1S1	3-MERCAPTO-4-AMINO-6-I-PR-1,2,4-TRIAZINE-5-ONE
1837	OCTANOL	134		0.46	0.46	=	C6H10N4O1S1	3-METHIO-4-AMINO-6-ETHYL-1,2,4-TRIAZINE-5-ONE
1838	OCTANOL	349		-0.24	-0.24	=	C6H10N6O1	IMIDAZOLE-4-CARBOXAMIDE, 5-(3,3-DIMETHYL-1-TRIAZENO) (45388)
1839	OCTANOL	65		0.81	0.81	=	C6H10O1	CYCLOHEXANONE
1840	OILS	258		0.30	0.69	B	C6H10O1	DIALLYL ETHER
1841	OCTANOL	255		1.02	1.02	=	C6H10O1	1-HEXEN-5-ONE
1842	SOETHER+50%OMF	125		0.40	1.80		C6H10O1	3-METHYL-1-PENTYN-3-OL/MEPARFYNOL/
1843	CCL4	350		1.42	1.24	B	C6H10O1	1-PROPYLOXENE-ACETONE/MESITYL OXIDE/
1844	CHCL3	285		1.75	2.81	A	C6H10O2	2,4-HEXANEDIONE/PROPIONYLACETONE/
1845	DIETHYL ETHER	2		-0.35	-0.19	A	C6H10O2	2,5-HEXANEDIONE/ACETONYLACETONE/
1846	OILS	2		-1.09	0.17	A	C6H10O2	2,5-HEXANEDIONE/ACETONYLACETONE/
1847	OILS	173		0.04	1.23	A	C6H10O3	ETHYLACETOACETATE
1848	OCTANOL	255		-0.13	-0.13	=	C6H10O3	4-KETOVALERIC ACID, METHYL ESTER
1849	OCTANOL	5		0.08	0.08	=	C6H10O4	ADIPIC ACID
1850	DIETHYL ETHER	192		-0.29	-0.14	A	C6H10O4	ADIPIC ACID
1851	DIETHYL ETHER	351		-0.29	-0.14	A	C6H10O4	ADIPIC ACID
1852	DIETHYL ETHER	194		-0.24	-0.09	A	C6H10O4	ADIPIC ACID
1853	N-BUTANOL	194		0.44	0.09		C6H10O4	ADIPIC ACID
1854	1-BUTANOL	4		0.55	0.27		C6H10O4	ADIPIC ACID
1855	ETHYL ACETATE	194		0.08	0.05		C6H10O4	ADIPIC ACID
1856	CYCLOHEXANONE	194		0.49			C6H10O4	ADIPIC ACID
1857	2-BUTANONE	194		0.30	-0.06		C6H10O4	ADIPIC ACID
1858	ME-I-BUT.KETONE	194		-0.08	-0.82		C6H10O4	ADIPIC ACID
1859	ME-1-BUT.KETONE	195		-0.11	-0.16		C6H10O4	ADIPIC ACID
1860	S-PENTANOLS	195		0.48	0.24		C6H10O4	ADIPIC ACID
1861	DIETHYL ETHER	3		0.30	0.38	A	C6H10O4	ETHYLENE GLYCOL DIACETATE
1862	1-BUTANOL	4		0.43	0.10		C6H10O4	ETHYLENE GLYCOL DIACETATE
1863	OILS	352		0.30	1.46	A	C6H11BR1N2O2	A-BROMO-A-METHYLBUTYRYLUREA
1864	OILS	264		0.28	1.44	A	C6H11BR1N2O2	A-BROMO-A-METHYLBUTYRYLUREA
1865	OILS	264		0.12	1.30	A	C6H11BR1N2O2	A-BROMO-I-VALERYLUREA
1866	OILS	296		0.15	1.37	A	C6H11BR1N2O2	A-BROMO-I-VALERYLUREA/BROMISOVALUM/
1867	OILS	352		-0.36	0.87	A	C6H11BR1N2O2	A-BROMOVALERYLUREA
1868	OILS	264		-0.19	1.01	A	C6H11BR1N2O2	A-BROMOVALERYLUREA
1869	OILS	352		-0.45	0.78	A	C6H11BR1N2O2	B-BROMOVALERYLUREA
1870	OILS	352		-0.54	0.70	A	C6H11BR1N2O2	G-BROMOVALERYLUREA
1871	OILS	352		-0.07	1.13	A	C6H11BR1N2O2	A-ETHYL-8-BROMOPROPIONYLUREA
1872	OILS	352		0.23	1.39	A	C6H11BR1N2O2	A-METHYL-8-BROMOBUTYRYLUREA
1873	OILS	352		-0.04	1.16	A	C6H11BR1N2O2	A-METHYL-6-BROMOBUTYRYLUREA
1874	OILS	264		-0.11	1.09	A	C6H11CL1N2O2	A-CHLORO-I-VALERYLUREA
1875	OILS	264		0.02	1.21	A	C6H11I1N2O2	A-IODO-I-VALERYLUREA
1876	I-OCTANOL	353		-2.60			C6H11K1O2	POTASSIUM HEXANOATE
1877	OCTANOL	260		-0.19	-0.19	=	C6H11N1O1	2-AZACYCLOHEPTANONE
1878	OCTANOL	80		1.09	1.09	=	C6H11N1O2	O-(1-ETHYL-ALLYL)CARBAMATE
1879	CYCLOHEXANE	354		-0.10			C6H11N1O2	NITROCYCLOHEXANE
1880	CHCL3	67		-1.60			C6H11N1O3	A-AMINO BUTYRIC ACID, N-ACETYL (OL)
1881	ETHYL ACETATE	67		-0.84	-0.96		C6H11N1O3	A-AMINO BUTYRIC ACID, N-ACETYL (OL)
1882	OCTANOL	260		0.75	0.75	=	C6H11N1S1	2-AZACYCLOHEPTANTHIONE
1883	OCTANOL	56		-2.17	-2.17	=	C6H11NA1O2	HEXANOIC ACID, SODIUM SALT
1884	I-OCTANOL	353		-2.59			C6H11NA1O2	SODIUM HEXANOATE
1885	OILS	296		0.42	1.57	A	C6H12BR1N1O1	2-BROMO-2-ETHYLBUTYRAMIDE
1886	OCTANOL	227		0.29	0.29	=	C6H12BR2O4	1,6-DIBROMO-1,6-DIOXYGALACTITOL (104800)
1887	OCTANOL	227		0.24	0.24	=	C6H12BR2O4	1,6-DIBROMO-1,6-DIOXYMANNITOL (94100)
1888	OCTANOL	216		0.04	0.04	=	C6H12N2O1	1-(2-HYDROXYETHYL)-2-METHYLIMIDAZOLINE
1889	OILS	264		-0.31	0.91	A	C6H12N2O2	VALERYLUREA
1890	OILS	264		-0.16	1.04	A	C6H12N2O2	I-VALERYLUREA
1891	OILS	2		-3.68	-2.13	A	C6H12N4	HEXAMETHYLENE TETRAMINE
1892	DIETHYL ETHER	2		-3.58	-2.34	B	C6H12N4	HEXAMETHYLENETETRAMINE
1893	I-BUTANOL	4		-1.17	-2.15		C6H12N4	HEXAMETHYLENETETRAMINE
1894	OCTANOL	186		1.23	1.23	=	C6H12O1	CYCLOHEXANOL
1895	OCTANOL	255		1.38	1.38	=	C6H12O1	2-HEXANONE
1896	OCTANOL	218		1.88	1.88	=	C6H12O2	HEXANOIC ACID
1897	OCTANOL	218		1.92	1.92	=	C6H12O2	HEXANOIC ACID
1898	DIETHYL ETHER	190		1.88	1.76	A	C6H12O2	HEXANOIC ACID
1899	DIETHYL ETHER	3		1.97	1.84	A	C6H12O2	HEXANOIC ACID
1900	DIETHYL ETHER	49		1.95	1.84	A	C6H12O2	HEXANOIC ACID

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
1901	CHCL3	29		1.05	2.19 A	C6H12O2	HEXANOIC ACIO
1902	CHCL3	46		0.85	1.99 A	C6H12O2	HEXANOIC ACIO
1903	OILS	209		0.83	2.01 A	C6H12O2	HEXANOIC ACIO
1904	BENZENE	44		0.67	2.06 A	C6H12O2	HEXANOIC ACIO
1905	BENZENE	29		0.63	2.02 A	C6H12O2	HEXANOIC ACIO
1906	N-BUTANOL	190		1.86	2.12	C6H12O2	HEXANOIC ACIO
1907	1-BUTANOL	4		1.87	2.12	C6H12O2	HEXANOIC ACIO
1908	1-BUTANOL	184		1.89	2.15	C6H12O2	HEXANOIC ACIO
1909	SEC-BUTANOL	190		1.39	1.46	C6H12O2	HEXANOIC ACIO
1910	XYLENE	46		0.34	2.06 A	C6H12O2	HEXANOIC ACIO
1911	TOLUENE	29		0.56	2.07 A	C6H12O2	HEXANOIC ACIO
1912	TOLUENE	7	26	1.03	2.48 A	C6H12O2	HEXANOIC ACIO
1913	PRIM. PENTANOLS	190		2.04	2.24	C6H12O2	HEXANOIC ACIO
1914	2-BUTANONE	190		1.36	2.13	C6H12O2	HEXANOIC ACIO
1915	OCTANE	60	47	-0.52		C6H12O2	HEXANOIC ACIO
1916	OLEYL ALCOHOL	5		1.65	2.20	C6H12O2	HEXANOIC ACIO
1917	S-PENTANOLS	190		1.94	1.93	C6H12O2	HEXANOIC ACIO
1918	ODOECANE	60	47	-0.72		C6H12O2	HEXANOIC ACIO
1919	HEXADECANE	60	47	-0.85		C6H12O2	HEXANOIC ACIO
1920	1000METHANE	7	26	0.81		C6H12O2	HEXANOIC ACIO
1921	DECALIN	7	26	-0.23		C6H12O2	HEXANOIC ACIO
1922	CHCL3	29		0.90	2.03 A	C6H12O2	1-HEXANOIC ACIO
1923	OILS	220		0.90	2.02 A	C6H12O2	1-HEXANOIC ACIO
1924	BENZENE	29		0.57	1.96 A	C6H12O2	1-HEXANOIC ACIO
1925	XYLENE	46		0.18	1.89 A	C6H12O2	1-HEXANOIC ACIO
1926	DIETHYL ETHER	2		0.95	0.95 A	C6H12O3	PARALOEHYDE
1927	OILS	2		0.28	0.70 B	C6H12O3	PARALOEHYDE
1928	OILS	173		0.28	0.59 B	C6H12O3	PARALOEHYDE
1929	OILS	296		0.45	0.70 B	C6H12O3	PARALOEHYDE
1930	1-BUTANOL	4		-1.24	-2.24	C6H12O5	RHAMNOSE
1931	1-BUTANOL	4		-1.77	-3.00	C6H12O6	FRUCTOSE
1932	1-BUTANOL	4		-1.96	-3.29	C6H12O6	GLUCOSE
1933	1-BUTANOL	4	11	-1.47	-2.57	C6H12O7	GLUCONIC ACIO
1934	OCTANOL	216	46	-1.93	-1.93 =	C6H13CL1N2O1	1-(2-HYDROXYETHYL)-2-METHYLIMIDAZOLINE HCL
1935	XYLENE	46		0.33	0.94 B	C6H13N1	N-METHYLPIPERIDINE
1936	CCL4	234	12	-0.45		C6H13N1O1	DIETHYLACETAMIOE
1937	N-BUTANOL	225		-0.51	-1.22	C6H13N1O2	A-AMINOCAPROIC ACIO
1938	OCTANOL	56		-1.71	-1.71 =	C6H13N1O2	LEUCINE
1939	DIETHYL ETHER	3		-4.92	-3.46 B	C6H13N1O2	LEUCINE
1940	N-BUTANOL	225		-0.74	-1.55	C6H13N1O2	LEUCINE
1941	1-BUTANOL	4		-1.21	-2.21	C6H13N1O2	LEUCINE
1942	OCTANOL	181	10	-0.15	-0.15 =	C6H13O9P1	FRUCTOSE-6-PHOSPHATE
1943	N-BUTANOL	181	10	-1.52		C6H13O9P1	FRUCTOSE-6-PHOSPHATE
1944	PRIM. PENTANOLS	181	10	-0.70		C6H13O9P1	FRUCTOSE-6-PHOSPHATE
1945	HEXANOL	181	18	-0.82		C6H13O9P1	FRUCTOSE-6-PHOSPHATE
1946	OCTANOL	181	10	-1.00	-1.00 =	C6H13O9P1	GLUCOSE-1-PHOSPHATE
1947	PRIM. PENTANOLS	181	10	-1.00		C6H13O9P1	GLUCOSE-1-PHOSPHATE
1948	OCTANOL	181	10	-0.10	-0.10 =	C6H13O9P1	GLUCOSE-6-PHOSPHATE
1949	N-BUTANOL	181	10	-1.05		C6H13O9P1	GLUCOSE-6-PHOSPHATE
1950	PRIM. PENTANOLS	181	10	-1.00		C6H13O9P1	GLUCOSE-6-PHOSPHATE
1951	HEXANOL	181	18	-0.40		C6H13O9P1	GLUCOSE-6-PHOSPHATE
1952	OCTANOL	181	10	-0.10	-0.10 =	C6H13O9P1	SORBOSE-1-PHOSPHATE
1953	N-BUTANOL	181	10	-0.30		C6H13O9P1	SORBOSE-1-PHOSPHATE
1954	PRIM. PENTANOLS	181	10	-1.40		C6H13O9P1	SORBOSE-1-PHOSPHATE
1955	HEXANOL	181	18	-1.00		C6H13O9P1	SORBOSE-1-PHOSPHATE
1956	OCTANOL	181	10	0.38	0.38 =	C6H13O9P1	SORBOSE-6-PHOSPHATE
1957	N-BUTANOL	181	10	-1.00		C6H13O9P1	SORBOSE-6-PHOSPHATE
1958	PRIM. PENTANOLS	181	10	-0.05		C6H13O9P1	SORBOSE-6-PHOSPHATE
1959	HEXANOL	181	18	0.26		C6H13O9P1	SORBOSE-6-PHOSPHATE
1960	N-BUTANOL	295	52	-0.13	-0.69	C6H14CL1N1O2	LEUCINE HYDROCHLORIOE
1961	N-BUTANOL	295	52	-0.08	-0.62	C6H14CL1N1O2	1-LEUCINE HYDROCHLORIOE
1962	OILS	271		0.93	1.20 B	C6H14F1O3P1	O1-1-PROPYLFLUOROPHOSPHATE
1963	CCL4	228		1.57	1.47 B	C6H14F1O3P1	O1-1-PROPYLFLUOROPHOSPHATE
1964	CCL4	271		1.58	1.38 B	C6H14F1O3P1	O1-1-PROPYLFLUOROPHOSPHATE
1965	OILS	271		1.18	1.33 B	C6H14F1O3P1	O1-N-PROPYLFLUOROPHOSPHATE
1966	CCL4	271		1.78	3.20 N	C6H14F1O3P1	O1-N-PROPYLFLUOROPHOSPHATE
1967	SEC-BUTANOL	84	19	-1.66	-2.82	C6H14N2O2	LYSINE
1968	SEC-BUTANOL	84	19	-1.49	-2.59	C6H14N4O2	ARGININE
1969	OCTANOL	186		2.03	2.03 =	C6H14O1	BUTYL-ETHYLETHYER
1970	OCTANOL	56		2.03	2.03 =	C6H14O1	HEXANOL
1971	OILS	201		0.88	1.99 A	C6H14O1	HEXANOL
1972	OCTANE	59		0.28		C6H14O1	HEXANOL
1973	ODOECANE	59		0.22		C6H14O1	HEXANOL
1974	HEXADECANE	59		0.11		C6H14O1	HEXANOL
1975	OCTANOL	218		2.03	2.03 =	C6H14O1	PROPYL ETHER
1976	OILS	173		0.18	0.51 B	C6H14O2	DIETHYLACETAL
1977	OILS	224		0.90	1.17 B	C6H14O2	DIETHYLACETAL
1978	DIETHYL ETHER	3		-0.92	-0.69 A	C6H14O2	1,6-HEXANEDIOL
1979	OILS	2		-2.17	-0.74 A	C6H14O2	1,6-HEXANEDIOL
1980	OILS	2		-1.62	-0.24 A	C6H14O2	METHYLPENTANEDIOL
1981	DIETHYL ETHER	3		-0.29	-0.14 A	C6H14O2	2,4-PENTANEDIOL, 2-METHYL
1982	DIETHYL ETHER	2		-1.19	-0.93 A	C6H14O3	DIETHYLENE GLYCOL MONOETHYL ETHER
1983	OILS	2		-2.22	-0.79 A	C6H14O3	DIETHYLENE GLYCOL, MONOETHYL ETHER
1984	DIETHYL ETHER	2		-1.45	-1.17 A	C6H14O3	O1 PROPYLENE GLYCOL
1985	OILS	2		-2.70	-1.23 A	C6H14O3	OIPROPYLENE GLYCOL
1986	DIETHYL ETHER	2		-2.51	-2.09 A	C6H14O3	HEXANETRIOL
1987	DIETHYL ETHER	3		-2.51	-2.08 A	C6H14O4	TRIETHYLENE GLYCOL
1988	1-BUTANOL	4		-0.58	-1.32	C6H14O4	TRIETHYLENE GLYCOL
1989	1-BUTANOL	4		-1.85	-3.10	C6H14O6	MANNITOL
1990	N-BUTANOL	181	10	0.00		C6H14O12P2	HEXOSE-OIPHOSPHATE
1991	PRIM. PENTANOLS	181	10	0.23		C6H14O12P2	HEXOSE-OIPHOSPHATE
1992	HEXANOL	181	18	-0.15		C6H14O12P2	HEXOSE-OIPHOSPHATE
1993	XYLENE	46		1.17	1.84 B	C6H15N1	O1-I-PROPYLAMINE
1994	OCTANOL	218		1.70	1.70 =	C6H15N1	DI-METHYLBUTYLAMINE
1995	OCTANOL	218		1.73	1.73 =	C6H15N1	DI-PROPYLAMINE
1996	DIETHYL ETHER	3		0.95	1.69 B	C6H15N1	O1 PROPYLAMINE
1997	BENZENE	205		1.05	1.28 B	C6H15N1	O1 PROPYLAMINE
1998	1-BUTANOL	4		1.62	1.77	C6H15N1	OIPROPYLAMINE
1999	XYLENE	46		1.24	1.87 B	C6H15N1	OIPROPYLAMINE
2000	TOLUENE	68		1.16	1.47 B	C6H15N1	OIPROPYLAMINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2001	I-BUTANOL	4		2.02	2.34	C6H15N1	HEXYLAMINE
2002	XYLENE	46		0.89	1.52	C6H15N1	HEXYLAMINE
2003	OCTANOL	218		1.44	1.44 =	C6H15N1	TRIETHYLAMINE
2004	BENZENE	355		1.13	1.30	C6H15N1	TRIETHYLAMINE
2005	I-BUTANOL	4		1.32	1.47	C6H15N1	TRIETHYLAMINE
2006	XYLENE	46		1.11	1.77	C6H15N1	TRIETHYLAMINE
2007	TOLUENE	68		1.00	1.37	C6H15N1	TRIETHYLAMINE
2008	TOLUENE	66		0.76	1.20	C6H15N1	TRIETHYLAMINE
2009	TOLUENE	355		0.92	1.32	C6H15N1	TRIETHYLAMINE
2010	PRIM. PENTANOLS	182		1.42	1.42	C6H15N1	TRIETHYLAMINE
2011	DIETHYL ETHER	3		-0.46	0.46	C6H15N101	OIETHYLETHANOLAMINE
2012	I-BUTANOL	4		0.58	0.31	C6H15N101	OIETHYLETHANOLAMINE
2013	OCTANOL	5		-0.82	-0.82 =	C6H15N102	OI-I-PROPANOLAMINE
2014	DIETHYL ETHER	3		-2.23	-1.10	C6H15N102	OI-I-PROPANOLAMINE
2015	I-BUTANOL	4		-0.15	-0.72	C6H15N102	OI-I-PROPANOLAMINE
2016	DIETHYL ETHER	3		-2.96	-1.75	C6H15N103	TRIETHANOLAMINE
2017	I-BUTANOL	4		-0.58	-1.32	C6H15N103	TRIETHANOLAMINE
2018	CCL4	135		1.90	1.67	C6H15O2P152	PHOSPHOROOITHIOTIC ACIO,01-I-PROPYL
2019	PRIM. PENTANOLS	236	17	0.73	0.62	C6H15O4P1	PHOSPHATE, DI-N-PROPYL
2020	OCTANOL	56		0.30	0.30 =	C6H16N2	ETHYLENE DIAMINE, N,N,N',N'-TETRAMETHYL
2021	OCTANOL	298		3.57	3.57 =	C6H16S11	SILANE, BUTYL-DIMETHYL
2022	OCTANOL	298		3.84	3.84 =	C6H16S11	SILANE, PROPYL-TRIMETHYL
2023	OCTANOL	56		0.28	0.28 =	C6H18N3O1P1	HEXAMETHYL PHOSPHORIC TRIAMIDE
2024	I-BUTANOL	4		-0.82	-1.66	C6H18N4	TRIETHYLENETETRAMINE
2025	OCTANOL	206		4.53	4.53 =	C7H1C15N2	BENZIMIDAZOLE, 2,4,5,6,7-PENTACHLORO-
2026	OCTANOL	206	27	3.50	3.50 =	C7H2C12F3N3	4-PYRIDINE IMIDAZOLE, 2-TRIFLOROMETHYL-6,7-DICL
2027	HEXANE	299		0.49	0.49 =	C7H38R2N1O1	4-HYDROXY-3,5-DIBROMOBENZONITRILE
2028	OCTANOL	206	27	2.69	2.69 =	C7H3C11F3N3	4-PYRIDINE IMIDAZOLE, 2-TRIFLUOROMETHYL-6-CL
2029	HEXANE	299		-0.14	-0.14 =	C7H3C12N1O1	4-HYDROXY-3,5-DICHLOROBENZONITRILE
2030	HEXANE	299		1.08	1.08 =	C7H3I2N1O1	4-HYDROXY-3,5-DIODOBENZONITRILE
2031	DIETHYL ETHER	46		0.27	0.36	A C7H3N3O8	2,4,6-TRINITROBENZOIC ACIO
2032	OILS	173		2.61	3.56	A C7H48R1N1	BROMOBENZONITRILE
2033	OCTANOL	206	27	1.23	1.23 =	C7H4F3N3	4-PYRIDINE IMIDAZOLE, 2-TRIFLUOROMETHYL
2034	OCTANOL	206	27	0.94	0.94 =	C7H4F3N3	5-PYRIDINE IMIDAZOLE, 2-TRIFLUOROMETHYL
2035	OCTANOL	10		1.17	1.17 =	C7H4N2O2	BENZENE, 3-CYANO-1-NITRO
2036	OCTANOL	10		1.19	1.19 =	C7H4N2O2	BENZENE, 4-CYANO-1-NITRO
2037	DIETHYL ETHER	46		1.18	1.16	A C7H4N2O6	2,4-DINITROBENZOIC ACIO
2038	CHCL3	46		-0.88	0.42	A C7H4N2O6	2,4-DINITROBENZOIC ACIO
2039	XYLENE	46		-0.92	0.79	A C7H4N2O6	2,4-DINITROBENZOIC ACIO
2040	CHCL3	149		0.18	1.38	A C7H4N2O6	3,5-DINITROBENZOIC ACIO
2041	CHCL3	46		0.07	1.28	A C7H4N2O6	3,5-DINITROBENZOIC ACIO
2042	CHCL3	356		-0.20	1.04	A C7H4N2O6	3,5-DINITROBENZOIC ACIO
2043	XYLENE	46		0.09	1.90	A C7H4N2O6	3,5-DINITROBENZOIC ACIO
2044	ME-I-BUT.KETONE	149		2.48	2.22	A C7H4N2O6	3,5-DINITROBENZOIC ACIO
2045	OCTANOL	276		1.60	1.60 =	C7H4N4O4	5,7-DINITROBENZOPYRAZOLE /PKA = 1.20/
2046	OCTANOL	10		2.87	2.87 =	C7H58R1O2	M-BROMOBENZOIC ACIO
2047	CHCL3	29		2.04	3.07	A C7H58R1O2	M-BROMOBENZOIC ACIO
2048	CHCL3	29		0.91	2.05	A C7H58R1O2	O-BROMOBENZOIC ACIO
2049	OCTANOL	10		2.86	2.86 =	C7H58R1O2	P-BROMOBENZOIC ACIO
2050	OCTANOL	218		2.46	2.46 =	C7H5C11N2O1	BENZOXAZOLE, 2-AMINO-5-CHLORO/ZOXAZOLAMINE/
2051	OCTANOL	10		2.68	2.68 =	C7H5C11O2	M-CHLOROBENZOIC ACIO
2052	CHCL3	29	12	1.92	3.05	A C7H5C11O2	M-CHLOROBENZOIC ACIO
2053	TOLUENE	29		1.12	2.56	A C7H5C11O2	M-CHLOROBENZOIC ACIO
2054	OCTANOL	65		1.98	1.98 =	C7H5C11O2	O-CHLOROBENZOIC ACIO
2055	DIETHYL ETHER	46		2.14	2.00	A C7H5C11O2	O-CHLOROBENZOIC ACIO
2056	CYCLOHEXANE	357		-0.34	-0.34 =	C7H5C11O2	O-CHLOROBENZOIC ACIO
2057	CHCL3	29		0.90	2.03	A C7H5C11O2	O-CHLOROBENZOIC ACIO
2058	XYLENE	46		0.01	1.80	A C7H5C11O2	O-CHLOROBENZOIC ACIO
2059	TOLUENE	29		0.27	1.81	A C7H5C11O2	O-CHLOROBENZOIC ACIO
2060	OCTANOL	10		2.65	2.65 =	C7H5C11O2	P-CHLOROBENZOIC ACIO
2061	CHCL3	29		1.72	2.78	A C7H5C11O2	P-CHLOROBENZOIC ACIO
2062	TOLUENE	29		1.26	2.68	A C7H5C11O2	P-CHLOROBENZOIC ACIO
2063	OCTANOL	235		2.92	2.92 =	C7H5C13	A, A, A-TRICHLOROTOLUENE
2064	OCTANOL	10		2.15	2.15 =	C7H5F1O2	M-FLUOROBENZOIC ACIO
2065	OCTANOL	10		2.07	2.07 =	C7H5F1O2	P-FLUOROBENZOIC ACIO
2066	OCTANOL	56		2.79	2.79 =	C7H5F3	BENZENE, TRIFLUOROMETHYL
2067	OCTANOL	217	07	1.73	1.73 =	C7H5F3N2O4S1	3-TRICHLOROMETHYL-4-NITROBENZENE SULFONAMIDE
2068	CHCL3	217	07	0.19	1.44	A C7H5F3N2O4S1	3-TRICHLOROMETHYL-4-NITROBENZENE SULFONAMIDE
2069	OCTANOL	56		3.17	3.17 =	C7H5F3O1	BENZENE, TRIFLUOROMETHOXY
2070	OCTANOL	10		2.95	2.95 =	C7H5F3O1	M-TRIFLUOROMETHYL PHENOL
2071	OCTANOL	261		2.80	2.80 =	C7H5F3O1	O-TRIFLUOROMETHYL PHENOL
2072	OCTANOL	56		2.71	2.71 =	C7H5F3O2S1	SULFONE, PHENYL-TRIFLUOROMETHYL
2073	OCTANOL	56		3.79	3.79 =	C7H5F3S1	BENZENE, TRIFLUOROMETHYLTHIO
2074	OCTANOL	10		3.13	3.13 =	C7H5I1O2	M-IODOBENZOIC ACIO
2075	OCTANOL	65		2.40	2.40 =	C7H5I1O2	O-IODOBENZOIC ACIO
2076	DIETHYL ETHER	46		3.11	2.85	A C7H5I1O2	O-IODOBENZOIC ACIO
2077	CHCL3	46		1.09	2.21	A C7H5I1O2	O-IODOBENZOIC ACIO
2078	XYLENE	46		0.49	2.32	A C7H5I1O2	O-IODOBENZOIC ACIO
2079	OCTANOL	10		3.02	3.02 =	C7H5I1O2	P-IODOBENZOIC ACIO
2080	OCTANOL	10		1.56	1.56 =	C7H5N1	BENZONITRILE
2081	CYCLOHEXANE	358		1.06	1.06 =	C7H5N1	BENZONITRILE
2082	OCTANOL	309		1.59	1.59 =	C7H5N1O1	BENZOXAZOLE
2083	OCTANOL	10		1.70	1.70 =	C7H5N1O1	M-CYANOPHENOL
2084	OCTANOL	10		1.60	1.60 =	C7H5N1O1	P-CYANOPHENOL
2085	DIETHYL ETHER	112		1.79	1.68	A C7H5N1O1S1	BENZOXAZOLTHION
2086	OCTANOL	65		0.91	0.91 =	C7H5N1O3S1	SACCHARIN
2087	DIETHYL ETHER	359	16	0.64	0.67	A C7H5N1O3S1	SACCHARIN
2088	DIETHYL ETHER	113	16	0.60	0.64	A C7H5N1O3S1	SACCHARIN
2089	CHCL3	113	16	-0.06	1.17	A C7H5N1O3S1	SACCHARIN
2090	I-PENT. ACETATE	359	12	1.51	1.39	C7H5N1O3S1	SACCHARIN
2091	OCTANOL	10		1.83	1.83 =	C7H5N1O4	M-NITROBENZOIC ACIO
2092	DIETHYL ETHER	46		1.97	1.85	A C7H5N1O4	M-NITROBENZOIC ACIO
2093	CHCL3	29		0.48	1.66	A C7H5N1O4	M-NITROBENZOIC ACIO
2094	CHCL3	254		0.41	1.55	A C7H5N1O4	M-NITROBENZOIC ACIO
2095	BENZENE	356		0.21	1.58	A C7H5N1O4	M-NITROBENZOIC ACIO
2096	XYLENE	46		0.02	1.83	A C7H5N1O4	M-NITROBENZOIC ACIO
2097	TOLUENE	29		0.09	1.66	A C7H5N1O4	M-NITROBENZOIC ACIO
2098	N-HEPTANE	254		-1.22	-1.22 =	C7H5N1O4	M-NITROBENZOIC ACIO
2099	DIETHYL ETHER	46		1.59	1.52	A C7H5N1O4	O-NITROBENZOIC ACIO
2100	CYCLOHEXANE	357		-0.88	-0.88 =	C7H5N1O4	O-NITROBENZOIC ACIO

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2101	CHCL3	29		0.03	1.25 A	C7H5N1O4	O-NITROBENZOIC ACID
2102	CHCL3	46		-0.19	1.04 A	C7H5N1O4	O-NITROBENZOIC ACID
2103	BENZENE	307		-0.30	1.12 A	C7H5N1O4	O-NITROBENZOIC ACID
2104	BENZENE	356		-0.21	1.16 A	C7H5N1O4	O-NITROBENZOIC ACID
2105	XYLENE	46		-0.35	1.31 A	C7H5N1O4	O-NITROBENZOIC ACID
2106	TOLUENE	29		-0.32	1.30 A	C7H5N1O4	O-NITROBENZOIC ACID
2107	OCTANOL	10		1.89	1.89 =	C7H5N1O4	P-NITROBENZOIC ACID
2108	CHCL3	29		0.86	2.00 A	C7H5N1O4	P-NITROBENZOIC ACID
2109	BENZENE	307		0.31	1.67 A	C7H5N1O4	P-NITROBENZOIC ACID
2110	XYLENE	46		0.07	1.85 A	C7H5N1O4	P-NITROBENZOIC ACID
2111	TOLUENE	29		0.51	2.03 A	C7H5N1O4	P-NITROBENZOIC ACID
2112	OCTANOL	186		2.01	2.01 =	C7H5N1S1	BENZOTHIAZOLE
2113	OCTANOL	309		2.03	2.03 =	C7H5N1S1	BENZOTHIAZOLE
2114	OCTANOL	218		3.28	3.28 =	C7H5N1S1	PHENYLISOTHIOCYANATE
2115	OCTANOL	238		3.22	3.22 =	C7H5N1S1	PHENYLISOTHIOCYANATE
2116	OCTANOL	206		1.64	1.64 =	C7H5N3O2	BENZIMIDAZOLE, 5-NITRO
2117	OCTANOL	216	78	-0.85	-0.85 =	C7H5NA1O3	SODIUM SALICYLATE
2118	OILS	292		-0.97	-0.37 B	C7H5NA1O3	SODIUM SALICYLATE
2119	BENZENE	311	6	0.35		C7H681F3O2	PHENYLBORONIC ACID, 3-TRIFLUOROMETHYL
2120	BENZENE	311	6	-1.71		C7H681N1O6	PHENYLBORONIC ACID, 3-NITRO, 4-CARBOXYL
2121	OCTANOL	206		2.39	2.39 =	C7H6CL1N3S1	4-PYRIDINE IMIDAZOLE, 2-METHYLTHIO-6-CHLORO
2122	OCTANOL	216		1.82	1.82 =	C7H6N2	7-AZAINDOLE
2123	OCTANOL	218		1.34	1.34 =	C7H6N2	BENZIMIDAZOLE
2124	OCTANOL	206		1.50	1.50 =	C7H6N2	BENZIMIDAZOLE
2125	OCTANOL	360		1.20	1.20 =	C7H6N2	BENZIMIDAZOLE
2126	DIETHYL ETHER	112		-0.02	0.82 B	C7H6N2	BENZIMIDAZOLE
2127	CHCL3	112	50	-0.10	1.12 A	C7H6N2	BENZIMIDAZOLE
2128	OCTANOL	309		1.82	1.82 =	C7H6N2	INDAZOLE
2129	OCTANOL	217	07	0.23	0.23 =	C7H6N2O2S1	P-CYANOBENZENESULFONAMIDE
2130	CHCL3	217	07	-0.61	0.01 N	C7H6N2O2S1	P-CYANOBENZENESULFONAMIDE
2131	OCTANOL	235		1.48	1.48 =	C7H6O1	BENZALDEHYDE
2132	DIETHYL ETHER	248	50	1.74	2.41 B	C7H6O1	BENZALDEHYDE
2133	CYCLOHEXANE	141		1.13		C7H6O1	BENZALDEHYDE
2134	CYCLOHEXANE	248		1.34		C7H6O1	BENZALDEHYDE
2135	BENZENE	248	50	2.10	2.00 B	C7H6O1	BENZALDEHYDE
2136	CLCH2CH2CL	248		2.35		C7H6O1	BENZALDEHYDE
2137	OCTANOL	10		1.87	1.87 =	C7H6O2	BENZOIC ACID
2138	DIETHYL ETHER	3		1.89	1.78 A	C7H6O2	BENZOIC ACID
2139	DIETHYL ETHER	46		1.78	1.68 A	C7H6O2	BENZOIC ACID
2140	DIETHYL ETHER	36		1.85	1.72 A	C7H6O2	BENZOIC ACID
2141	CHCL3	29		0.71	1.86 A	C7H6O2	BENZOIC ACID
2142	CHCL3	39		0.30	1.51 A	C7H6O2	BENZOIC ACID
2143	CHCL3	254		0.46	1.60 A	C7H6O2	BENZOIC ACID
2144	CHCL3	17		0.54	1.73 A	C7H6O2	BENZOIC ACID
2145	OILS	361		0.66	1.86 A	C7H6O2	BENZOIC ACID
2146	OILS	362		0.54	1.71 A	C7H6O2	BENZOIC ACID
2147	BENZENE	29		0.21	1.58 A	C7H6O2	BENZOIC ACID
2148	BENZENE	39		0.24	1.61 A	C7H6O2	BENZOIC ACID
2149	BENZENE	38		0.18	1.55 A	C7H6O2	BENZOIC ACID
2150	BENZENE	363	12	-0.21	1.17 A	C7H6O2	BENZOIC ACID
2151	BENZENE	36		0.36	1.73 A	C7H6O2	BENZOIC ACID
2152	BENZENE	20		0.12	1.49 A	C7H6O2	BENZOIC ACID
2153	I-BUTANOL	4		1.69	1.87	C7H6O2	BENZOIC ACID
2154	XYLENE	46		-0.19	1.58 A	C7H6O2	BENZOIC ACID
2155	XYLENE	36	12	0.44	2.23 A	C7H6O2	BENZOIC ACID
2156	TOLUENE	29		0.36	1.90 A	C7H6O2	BENZOIC ACID
2157	TOLUENE	36		0.48	2.00 A	C7H6O2	BENZOIC ACID
2158	CCl4	364	12	-2.90		C7H6O2	BENZOIC ACID
2159	ETHYL BENZOATE	17		1.50		C7H6O2	BENZOIC ACID
2160	OI-PENTYL ETHER	17		0.95		C7H6O2	BENZOIC ACID
2161	N-HEPTANE	254		-0.72		C7H6O2	BENZOIC ACID
2162	PARAFFINS	291		-0.12		C7H6O2	BENZOIC ACID
2163	DIETHYL ETHER	248		1.32	1.27 A	C7H6O2	M-HYDROXYBENZALDEHYDE
2164	BENZENE	248		-0.16	1.21 A	C7H6O2	M-HYDROXYBENZALDEHYDE
2165	CLCH2CH2CL	248		0.44		C7H6O2	M-HYDROXYBENZALDEHYDE
2166	OCTANOL	365		1.70	1.70 =	C7H6O2	O-HYDROXYBENZALDEHYDE/SALICYLALDEHYDE/
2167	OCTANOL	268	32	1.81	1.81 =	C7H6O2	O-HYDROXYBENZALDEHYDE/SALICYLALDEHYDE/
2168	TOLUENE	150		2.15	2.70 B	C7H6O2	O-HYDROXYBENZALDEHYDE/SALICYLALDEHYDE/
2169	DIETHYL ETHER	366		1.10	1.08 A	C7H6O2	P-HYDROXYBENZALDEHYDE
2170	CHCL3	366		-0.12	1.11 A	C7H6O2	P-HYDROXYBENZALDEHYDE
2171	BENZENE	366		-0.55	0.87 A	C7H6O2	P-HYDROXYBENZALDEHYDE
2172	CCl4	366		-1.70	0.41 A	C7H6O2	P-HYDROXYBENZALDEHYDE
2173	CLCH2CH2CL	366		0.11		C7H6O2	P-HYDROXYBENZALDEHYDE
2174	CLCH2CH2CL	248		0.21		C7H6O2	P-HYDROXYBENZALDEHYDE
2175	OI-1-PR. ETHER	366		0.84	1.51	C7H6O2	P-HYDROXYBENZALDEHYDE
2176	OCTANOL	9		0.53	0.53 =	C7H6O2	TROPOLONE
2177	CHCL3	367	12	1.70	1.21 B	C7H6O2	TROPOLONE
2178	OCTANOL	10		1.50	1.50 =	C7H6O3	M-HYDROXYBENZOIC ACID
2179	DIETHYL ETHER	3		1.32	1.27 A	C7H6O3	M-HYDROXYBENZOIC ACID
2180	I-BUTANOL	4		1.40	1.47	C7H6O3	M-HYDROXYBENZOIC ACID
2181	OCTANOL	186		2.26	2.26 =	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2182	OCTANOL	218		2.21	2.21 =	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2183	DIETHYL ETHER	3		2.37	2.20 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2184	DIETHYL ETHER	46		2.53	2.32 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2185	CYCLOHEXANE	15		-1.02		C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2186	CYCLOHEXANE	357		-0.50		C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2187	CHCL3	149		0.48	1.66 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2188	CHCL3	29		0.50	1.67 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2189	CHCL3	39	12	0.34	1.46 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2190	CHCL3	254		0.46	1.60 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2191	OILS	173		1.00	2.10 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2192	BENZENE	39		0.45	1.81 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2193	BENZENE	368	68	0.38	1.88 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2194	I-BUTANOL	4		2.13	2.31	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2195	XYLENE	46		0.11	1.93 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2196	TOLUENE	29		0.31	1.80 A	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2197	CCl4	17		-0.30		C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2198	ETHYL BENZOATE	17		1.90		C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2199	N-HEPTANE	254		-0.92		C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/
2200	ME-I-BUT.KETONE	149		2.51	2.25	C7H6O3	O-HYDROXYBENZOIC ACID/SALICYLIC ACID/

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2201	OCTANOL	10		1.58	1.58 =	C7H603	P-HYDROXYBENZDIC ACIO
2202	OIETHYL ETHER	3		1.42	1.36 A	C7H603	P-HYDROXYBENZDIC ACIO
2203	OIETHYL ETHER	46		1.00	1.00 A	C7H603	P-HYDROXYBENZDIC ACIO
2204	CHCL3	254	12	-2.00	-0.59 A	C7H603	P-HYDROXYBENZDIC ACIO
2205	OILS	369		0.22	1.45 A	C7H603	P-HYDROXYBENZDIC ACIO
2206	I-BUTANOL	4		1.43	1.51	C7H603	P-HYDROXYBENZDIC ACIO
2207	ETHYL BENZOATE	17		0.75		C7H603	P-HYDROXYBENZDIC ACIO
2208	OI-PENTYL ETHER	17		-0.39		C7H603	P-HYDROXYBENZDIC ACIO
2209	XYLENE	46	12	-1.66	-0.02 A	C7H604	2,4-OIHYDROXYBENZDIC ACIO/RESORCYLIC ACIO/ 2,4-OIHYDROXYBENZDIC ACIO /RESORCYLIC ACIO/
2210	ME-I-BUT.KETONE	195		1.55	1.44	C7H604	2,5-OIHYDROXYBENZDIC ACIO/GENTISIC ACIO/
2211	OIETHYL ETHER	46		1.35	1.31 A	C7H604	2,5-OIHYDROXYBENZDIC ACIO/GENTISIC ACIO/
2212	CHCL3	46	12	-1.57	-0.21 A	C7H604	2,5-OIHYDROXYBENZDIC ACIO/GENTISIC ACIO/
2213	XYLENE	46	12	-1.82	-0.20 A	C7H604	2,5-OIHYDROXYBENZDIC ACIO/GENTISIC ACIO/
2214	OCTANOL	56		2.20	2.20 =	C7H604	2,6-OIHYDROXYBENZDIC ACIO
2215	OIETHYL ETHER	46		1.45	1.39 A	C7H604	3,5-OIHYDROXYBENZDIC ACIO
2216	OIETHYL ETHER	3		-0.30	-0.15 A	C7H605	3,4,5-TRIHYDROXYBENZDIC ACIO/GALLIC ACIO/
2217	OIETHYL ETHER	46		-0.42	-0.25 A	C7H605	3,4,5-TRIHYDROXYBENZDIC ACIO/GALLIC ACIO/
2218	OIETHYL ETHER	207		-1.56	-1.25 A	C7H606S1	SULFOSALICYLIC ACIO/3-CO2H-4-OH-BENZENESULFONIC ACIO/
2219	ME-I-BUT.KETONE	195		-1.25	-1.17	C7H606S1	SULFOSALICYLIC ACIO/3-CO2H-4-OH-BENZENESULFONIC ACIO/
2220	S-PENTANOLS	195		-1.08	-1.54	C7H606S1	SULFOSALICYLIC ACIO/3-CO2H-4-OH-BENZENESULFONIC ACIO/
2221	BENZENE	311	6	-1.46		C7H78103	P-FORMYLPHENYLBORONIC ACIO
2222	BENZENE	311	6	-2.52		C7H78104	M-CARBOXYPHENYLBORONIC ACIO
2223	BENZENE	311	6	-1.83		C7H78104	P-CARBOXYPHENYLBORONIC ACIO
2224	OCTANOL	218	26	2.92	2.92 =	C7H78R1	A-BROMOTOLUENE
2225	OCTANOL	302		2.30	2.30 =	C7H7CL1	A-CHLOROTOLUENE
2226	OCTANOL	301		3.28	3.28 =	C7H7CL1	M-CHLOROTOLUENE
2227	OCTANOL	301		3.42	3.42 =	C7H7CL1	O-CHLOROTOLUENE
2228	OCTANOL	301		3.33	3.33 =	C7H7CL1	P-CHLOROTOLUENE
2229	OCTANOL	206	27	3.70	3.70 =	C7H7CL1N4O4S2	PURINE, 2,6-OI-(METHYLSULFONYL)-8-CHLORO
2230	OCTANOL	206		0.63	0.63 =	C7H7CL1N4S2	PURINE, 2,8-OIMETHYLTHIO,6-CHLORO
2231	OCTANOL	10		1.94	1.94 =	C7H7CL1O1	M-CHLOROBENZYL ALCOHOL
2232	OCTANOL	10		1.96	1.96 =	C7H7CL1O1	P-CHLOROBENZYL ALCOHOL
2233	OCTANOL	261		3.10	3.10 =	C7H7CL1O1	PHENOL, 4-CHLORO, 3-METHYL
2234	CYCLOHEXANE	124		0.15		C7H7CL1O1	PHENOL, 4-CHLORO, 3-METHYL
2235	METH. DECANOATE	124		2.65	3.14	C7H7CL1O1	PHENOL, 4-CHLORO, 3-METHYL
2236	OLEYL ALCOHOL	124		2.46	3.00	C7H7CL1O1	PHENOL, 4-CHLORO, 3-METHYL
2237	OCTANOL	65		2.74	2.74 =	C7H7F1O2S1	P-FLUOROSULFONYLTOLUENE
2238	I-OCTANOL	353		-2.83		C7H7K1O2	POTASSIUM GUAICOLATE
2239	OCTANOL	235		1.75	1.75 =	C7H7N1O1	BENZALDOXIME
2240	OCTANOL	10		0.64	0.64 =	C7H7N1O1	BENZAMIOE
2241	OIETHYL ETHER	248		-0.22	0.65 B	C7H7N1O1	BENZAMIOE
2242	CHCL3	248		0.11	0.71 N	C7H7N1O1	BENZAMIOE
2243	OILS	173		-0.51	0.73 A	C7H7N1O1	BENZAMIOE
2244	OILS	82		-0.36	0.87 A	C7H7N1O1	BENZAMIOE
2245	OILS	293		-0.66	0.59 A	C7H7N1O1	BENZAMIOE
2246	OILS	249		-0.42	0.81 A	C7H7N1O1	BENZAMIOE
2247	OILS	70		-0.36	0.89 A	C7H7N1O1	BENZAMIOE
2248	BENZENE	248		-0.71	0.68 A	C7H7N1O1	BENZAMIOE
2249	CCL4	248		-1.54		C7H7N1O1	BENZAMIOE
2250	CLCH2CH2CL	248		0.00		C7H7N1O1	BENZAMIOE
2251	OLEYL ALCOHOL	82		0.40	0.96	C7H7N1O1	BENZAMIOE
2252	OCTANOL	56		1.15	1.15 =	C7H7N1O1	FORMANILOE
2253	OIETHYL ETHER	3		0.18	0.27 A	C7H7N1O2	M-AMINO BENZDIC ACIO
2254	I-BUTANOL	4		0.46	0.14	C7H7N1O2	M-AMINO BENZDIC ACIO
2255	OCTANOL	56		1.21	1.21 =	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2256	OIETHYL ETHER	3		1.43	1.37 A	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2257	OIETHYL ETHER	112		1.48	1.41 A	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2258	OIETHYL ETHER	46	12	0.05	0.17 A	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2259	CHCL3	112	12	0.57	1.73 A	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2260	CHCL3	29	25	-1.15	0.27 A	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2261	BENZENE	72		-0.27	1.11 A	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2262	I-BUTANOL	4		1.18	1.15	C7H7N1O2	O-AMINO BENZDIC ACIO/ANTHRANILIC ACIO/
2263	OCTANOL	65		0.68	0.68 =	C7H7N1O2	P-AMINO BENZDIC ACIO
2264	OIETHYL ETHER	3		0.88	0.89 A	C7H7N1O2	P-AMINO BENZDIC ACIO
2265	I-BUTANOL	4		0.89	0.75	C7H7N1O2	P-AMINO BENZDIC ACIO
2266	OCTANOL	186		1.28	1.28 =	C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2267	OILS	173		0.45	1.60 A	C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2268	OILS	224	12	1.15		C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2269	OILS	82		0.41	1.56 A	C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2270	OILS	293		0.34	1.50 A	C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2271	OILS	70	12	1.15	2.23 A	C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2272	OLEYL ALCOHOL	82		0.77	1.33	C7H7N1O2	O-HYDROXYBENZAMIOE/SALICYLAMIOE/
2273	CHCL3	318		2.01	1.49 B	C7H7N1O2	I-NICOTINIC ACIO, METHYL ESTER
2274	OCTANOL	10		2.45	2.45 =	C7H7N1O2	M-NITROTOLUENE
2275	OCTANOL	301		2.40	2.40 =	C7H7N1O2	M-NITROTOLUENE
2276	OCTANOL	301		2.30	2.30 =	C7H7N1O2	O-NITROTOLUENE
2277	OCTANOL	10		2.37	2.37 =	C7H7N1O2	P-NITROTOLUENE
2278	OCTANOL	301		2.42	2.42 =	C7H7N1O2	P-NITROTOLUENE
2279	OCTANOL	56		1.08	1.08 =	C7H7N1O2	O-PHENYL CARBAMATE
2280	N-HEPTANE	370	14	-1.04		C7H7N1O3	P-AMINOSALICYLIC ACIO
2281	OCTANOL	10		2.16	2.16 =	C7H7N1O3	M-NITROANISOLE
2282	OCTANOL	10		2.03	2.03 =	C7H7N1O3	P-NITROANISOLE
2283	OCTANOL	10		1.21	1.21 =	C7H7N1O3	M-NITROBENZYL ALCOHOL
2284	OCTANOL	10		1.26	1.26 =	C7H7N1O3	P-NITROBENZYL ALCOHOL
2285	I-OCTANOL	353		-2.62		C7H7NA1O2	SODIUM GUAICOLATE
2286	OCTANOL	10		2.69	2.69 =	C7H8	TOLUENE
2287	OCTANOL	56		2.73	2.73 =	C7H8	TOLUENE
2288	OCTANOL	309		2.11	2.11 =	C7H8	TOLUENE
2289	OCTANOL	301		2.80	2.80 =	C7H8	TOLUENE
2290	N-HEPTANE	310		2.85		C7H8	TOLUENE
2291	OCTANOL	218		-0.07	-0.07 =	C7H8CL1N3O4S2	HYDROCHLOROTHIAZIOE
2292	BENZENE	72		0.51	0.91 B	C7H8N2O1	P-NITROSOMETHYLANILINE
2293	OCTANOL	56		0.83	0.83 =	C7H8N2O1	PHENYLUREA
2294	OCTANOL	235		0.82	0.82 =	C7H8N2O1	PHENYLUREA
2295	OIETHYL ETHER	3		0.04	0.81 B	C7H8N2O1	PHENYLUREA
2296	OIETHYL ETHER	113		-0.26	-0.10 A	C7H8N2O1	PHENYLUREA
2297	CHCL3	113	12	-0.72	-0.07 N	C7H8N2O1	PHENYLUREA
2298	OCTANOL	235		0.73	0.73 =	C7H8N2S1	PHENYLTHIOUREA
2299	OIETHYL ETHER	248		0.23	0.32 A	C7H8N2S1	PHENYLTHIOUREA
2300	CHCL3	248		0.54	1.10 N	C7H8N2S1	PHENYLTHIOUREA

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2301	OCTANOL	226		1.04	1.04 =	C7H8N4O151	5-HYDROXYPICOLINALDEHYDE THIOSEMICARBAZONE (107392)
2302	OCTANOL	65		1.04	1.04 =	C7H8N4O151	5-HYDROXYPICOLINALDEHYDE THIOSEMICARBAZONE (107392)
2303	OCTANOL	218		-0.78	-0.78 =	C7H8N4O2	THEOBROMINE/3,7-DIMETHYLXANTHINE/
2304	CHCL3	254		-0.40	-0.45 B	C7H8N4O2	THEOBROMINE/3,7-DIMETHYLXANTHINE/
2305	CHCL3	322		-0.91	-0.85 B	C7H8N4O2	THEOBROMINE/3,7-DIMETHYLXANTHINE/
2306	OILS	371	12	0.19	1.36 A	C7H8N4O2	THEOBROMINE/3,7-DIMETHYLXANTHINE/
2307	OCTANOL	218		-0.02	-0.02 =	C7H8N4O2	THEOPHYLLINE/1,3-DIMETHYLXANTHINE/
2308	CHCL3	254		-0.52	-0.54 B	C7H8N4O2	THEOPHYLLINE/1,3-DIMETHYLXANTHINE/
2309	CHCL3	322	12	-0.86	-0.80 B	C7H8N4O2	THEOPHYLLINE/1,3-DIMETHYLXANTHINE/
2310	OILS	371	12	0.21	0.46 B	C7H8N4O2	THEOPHYLLINE/1,3-DIMETHYLXANTHINE/
2311	CCL4	234	12	-2.70		C7H8N4O2	THEOPHYLLINE/1,3-DIMETHYLXANTHINE/
2312	N-HEPTANE	254		-1.70		C7H8N4O2	THEOPHYLLINE/1,3-DIMETHYLXANTHINE/
2313	OCTANOL	10		2.11	2.11 =	C7H8O1	ANISOLE
2314	OCTANOL	309		2.04	2.04 =	C7H8O1	ANISOLE
2315	DIETHYL ETHER	323	50	2.46	2.27 A	C7H8O1	ANISOLE
2316	CYCLOHEXANE	358		2.30		C7H8O1	ANISOLE
2317	OCTANOL	10		1.10	1.10 =	C7H8O1	BENZYL ALCOHOL
2318	CYCLOHEXANE	141		-0.62		C7H8O1	BENZYL ALCOHOL
2319	HEXANE	372		-0.76		C7H8O1	BENZYL ALCOHOL
2320	OCTANOL	10		1.96	1.96 =	C7H8O1	M-METHYLPHENOL/CRESOL/
2321	OCTANOL	301		2.01	2.01 =	C7H8O1	M-METHYLPHENOL/CRESOL/
2322	DIETHYL ETHER	329		1.80	1.70 A	C7H8O1	M-METHYLPHENOL/CRESOL/
2323	CYCLOHEXANE	124		-0.30		C7H8O1	M-METHYLPHENOL/CRESOL/
2324	CYCLOHEXANE	132		-0.15		C7H8O1	M-METHYLPHENOL/CRESOL/
2325	CYCLOHEXANE	325		-0.20		C7H8O1	M-METHYLPHENOL/CRESOL/
2326	CYCLOHEXANE	133		-0.10		C7H8O1	M-METHYLPHENOL/CRESOL/
2327	OILS	324		1.29	2.37 A	C7H8O1	M-METHYLPHENOL/CRESOL/
2328	OILS	327		1.21	2.28 A	C7H8O1	M-METHYLPHENOL/CRESOL/
2329	BENZENE	324	45	0.88	2.24 A	C7H8O1	M-METHYLPHENOL/CRESOL/
2330	N-BUTYL ACETATE	331		2.19	1.98	C7H8O1	M-METHYLPHENOL/CRESOL/
2331	METH. DECANOATE	124		1.83	2.29	C7H8O1	M-METHYLPHENOL/CRESOL/
2332	N-HEPTANE	310		-0.35		C7H8O1	M-METHYLPHENOL/CRESOL/
2333	OLEYL ALCOHOL	124		1.79	2.34	C7H8O1	M-METHYLPHENOL/CRESOL/
2334	PARAFFINS	327		-0.51		C7H8O1	M-METHYLPHENOL/CRESOL/
2335	OCTANOL	216		1.95	1.95 =	C7H8O1	O-METHYLPHENOL
2336	CYCLOHEXANE	124		0.04		C7H8O1	O-METHYLPHENOL
2337	CYCLOHEXANE	132		0.13		C7H8O1	O-METHYLPHENOL
2338	CYCLOHEXANE	325		0.10		C7H8O1	O-METHYLPHENOL
2339	CYCLOHEXANE	133		0.20		C7H8O1	O-METHYLPHENOL
2340	OILS	327		1.34	2.49 A	C7H8O1	O-METHYLPHENOL
2341	N-BUTYL ACETATE	331		2.20	1.98	C7H8O1	O-METHYLPHENOL
2342	METH. DECANOATE	124		1.93	2.40	C7H8O1	O-METHYLPHENOL
2343	N-HEPTANE	310		-0.05		C7H8O1	O-METHYLPHENOL
2344	OLEYL ALCOHOL	124		1.81	2.36	C7H8O1	O-METHYLPHENOL
2345	PARAFFINS	327		-0.14		C7H8O1	O-METHYLPHENOL
2346	OCTANOL	10		1.94	1.94 =	C7H8O1	P-METHYLPHENOL
2347	OCTANOL	301		1.92	1.92 =	C7H8O1	P-METHYLPHENOL
2348	CYCLOHEXANE	132		-0.10		C7H8O1	P-METHYLPHENOL
2349	CYCLOHEXANE	325		-0.19		C7H8O1	P-METHYLPHENOL
2350	OILS	327		1.21	2.28 A	C7H8O1	P-METHYLPHENOL
2351	N-BUTYL ACETATE	331		2.28	2.10	C7H8O1	P-METHYLPHENOL
2352	N-HEPTANE	310		-0.35		C7H8O1	P-METHYLPHENOL
2353	OLEYL ALCOHOL	124		1.80	2.35	C7H8O1	P-METHYLPHENOL
2354	PARAFFINS	327		-0.58		C7H8O1	P-METHYLPHENOL
2355	DIETHYL ETHER	332		1.23	1.20 A	C7H8O2	BENZENE, 1,2-DIHYDROXY, 4-METHYL
2356	OI-BUTYL ETHER	332		0.50		C7H8O2	BENZENE, 1,2-DIHYDROXY, 4-METHYL
2357	OI-1-PR. ETHER	332		0.94	1.64	C7H8O2	BENZENE, 1,2-DIHYDROXY, 4-METHYL
2358	OCTANOL	10		0.49	0.49 =	C7H8O2	M-HYDROXYBENZYL ALCOHOL
2359	OCTANOL	10		0.25	0.25 =	C7H8O2	P-HYDROXYBENZYL ALCOHOL
2360	OCTANOL	276		0.73	0.73 =	C7H8O2	O-HYDROXYBENZYL ALCOHOL
2361	OCTANOL	10		1.58	1.58 =	C7H8O2	M-METHOXYPHENOL
2362	OLEYL ALCOHOL	124		1.15	1.70	C7H8O2	M-METHOXYPHENOL
2363	DIETHYL ETHER	323		1.36	1.31 A	C7H8O2	O-METHOXYPHENOL/GUAJACOL/
2364	OILS	224	12	1.48	2.53 A	C7H8O2	O-METHOXYPHENOL/GUAJACOL/
2365	OILS	327		0.96	2.06 A	C7H8O2	O-METHOXYPHENOL/GUAJACOL/
2366	OLEYL ALCOHOL	124		1.15	1.70	C7H8O2	O-METHOXYPHENOL/GUAJACOL/
2367	PARAFFINS	327		0.30		C7H8O2	O-METHOXYPHENOL/GUAJACOL/
2368	OCTANOL	10		1.34	1.34 =	C7H8O2	P-METHOXYPHENOL
2369	DIETHYL ETHER	323		1.36	1.31 A	C7H8O2	P-METHOXYPHENOL
2370	CYCLOHEXANE	56		-1.08		C7H8O2	P-METHOXYPHENOL
2371	OLEYL ALCOHOL	124		1.00	1.56	C7H8O2	P-METHOXYPHENOL
2372	OCTANOL	186		0.47	0.47 =	C7H8O2S1	SULFONE, METHYLPHENYL
2373	OCTANOL	56		0.50	0.50 =	C7H8O2S1	SULFONE, METHYLPHENYL
2374	OCTANOL	349		2.33	2.33 =	C7H8O2S1	THIOPHENE, 2-CARBOXYLIC ACID, ETHYL ESTER
2375	OCTANOL	349		1.52	1.52 =	C7H8O3	FUROIC ACID, ETHYL ESTER
2376	DIETHYL ETHER	113	50	1.72	1.62 A	C7H8O3S1	BENZENESULFONIC ACID, METHYL ESTER
2377	CHCL3	113		2.98	3.39 N	C7H8O3S1	BENZENESULFONIC ACID, METHYL ESTER
2378	OCTANOL	56		2.74	2.74 =	C7H8S1	METHYLTHIOBENZENE
2379	BENZENE	311	6	-0.20		C7H9B1O2	M-METHYLPHENYL BORONIC ACID
2380	BENZENE	311	6	-0.16		C7H9B1O2	O-METHYLPHENYL BORONIC ACID
2381	BENZENE	311	6	-0.19		C7H9B1O2	P-METHYLPHENYL BORONIC ACID
2382	BENZENE	311	6	0.17		C7H9B1O2S1	P-METHYLTHIOPHENYL BORONIC ACID
2383	BENZENE	311	6	-0.43		C7H9B1O3	P-METHOXYPHENYL BORONIC ACID
2384	OCTANOL	373		-2.02	-2.02 =	C7H9CLIN2O1	N1-METHYLNICOTINAMIOE CHLORIOE
2385	OCTANOL	312		1.82	1.82 =	C7H9N1	ANILINE, N-METHYL
2386	OCTANOL	218		1.66	1.66 =	C7H9N1	ANILINE, N-METHYL
2387	CYCLOHEXANE	337		1.23		C7H9N1	ANILINE, N-METHYL
2388	OCTANOL	255		1.09	1.09 =	C7H9N1	BENZYLAMINE
2389	DIETHYL ETHER	3		0.28	1.11 B	C7H9N1	BENZYLAMINE
2390	DIETHYL ETHER	46		0.32	1.14 B	C7H9N1	BENZYLAMINE
2391	DIETHYL ETHER	374		0.36	1.14 B	C7H9N1	BENZYLAMINE
2392	CHCL3	46		1.18	0.78 B	C7H9N1	BENZYLAMINE
2393	BENZENE	315		0.61	0.97 B	C7H9N1	BENZYLAMINE
2394	I-BUTANOL	4		0.98	0.87	C7H9N1	BENZYLAMINE
2395	XYLENE	46		0.30	0.86 B	C7H9N1	BENZYLAMINE
2396	N-HEPTANE	315		-0.21		C7H9N1	BENZYLAMINE
2397	CHCL3	280		2.30		C7H9N1	2,6-LUTIOINE
2398	OCTANOL	10		1.40	1.40 =	C7H9N1	M-TOLUIOINE
2399	OCTANOL	301		1.43	1.43 =	C7H9N1	M-TOLUIOINE
2400	CYCLOHEXANE	337		0.64		C7H9N1	M-TOLUIOINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2401	CYCLOHEXANE	314		0.58		C7H9N1	M-TOLUIDINE
2402	BENZENE	314		1.50	1.59 8	C7H9N1	M-TOLUIDINE
2403	BENZENE	313		1.51	1.60 8	C7H9N1	M-TOLUIDINE
2404	BENZENE	72		1.28	1.43 8	C7H9N1	M-TOLUIDINE
2405	CCL4	314		1.15		C7H9N1	M-TOLUIDINE
2406	N-HEPTANE	310		0.54		C7H9N1	M-TOLUIDINE
2407	N-HEPTANE	314		0.45		C7H9N1	M-TOLUIDINE
2408	OCTANE	314		0.35		C7H9N1	M-TOLUIDINE
2409	OCTANOL	312		1.29	1.29 =	C7H9N1	O-TOLUIDINE
2410	OCTANOL	301		1.32	1.32 =	C7H9N1	O-TOLUIDINE
2411	CYCLOHEXANE	337		0.67		C7H9N1	O-TOLUIDINE
2412	CYCLOHEXANE	314		0.61		C7H9N1	O-TOLUIDINE
2413	BENZENE	314		1.53	1.61 8	C7H9N1	O-TOLUIDINE
2414	BENZENE	72		1.13	1.31 8	C7H9N1	O-TOLUIDINE
2415	CCL4	314		1.18		C7H9N1	O-TOLUIDINE
2416	N-HEPTANE	310		0.55		C7H9N1	O-TOLUIDINE
2417	N-HEPTANE	314		0.47		C7H9N1	O-TOLUIDINE
2418	OCTANE	314		0.37		C7H9N1	O-TOLUIDINE
2419	HEXADECANE	314		0.38		C7H9N1	O-TOLUIDINE
2420	OCTANOL	10		1.39	1.39 =	C7H9N1	P-TOLUIDINE
2421	OCTANOL	301		1.41	1.41 =	C7H9N1	P-TOLUIDINE
2422	CYCLOHEXANE	337		0.58		C7H9N1	P-TOLUIDINE
2423	CYCLOHEXANE	314		0.55		C7H9N1	P-TOLUIDINE
2424	CHCL3	254		1.99	1.43 8	C7H9N1	P-TOLUIDINE
2425	BENZENE	314		1.43	1.54 8	C7H9N1	P-TOLUIDINE
2426	BENZENE	313		1.49	1.58 8	C7H9N1	P-TOLUIDINE
2427	BENZENE	72		1.38	1.52 8	C7H9N1	P-TOLUIDINE
2428	BENZENE	375		1.70	1.73 8	C7H9N1	P-TOLUIDINE
2429	CCL4	329		1.14	1.07 8	C7H9N1	P-TOLUIDINE
2430	CCL4	314		1.11		C7H9N1	P-TOLUIDINE
2431	N-HEPTANE	310		0.48		C7H9N1	P-TOLUIDINE
2432	N-HEPTANE	254		0.51		C7H9N1	P-TOLUIDINE
2433	N-HEPTANE	314		0.44		C7H9N1	P-TOLUIDINE
2434	HEXANE	314		0.41		C7H9N1	P-TOLUIDINE
2435	HEXANE	375		0.54		C7H9N1	P-TOLUIDINE
2436	OCTANE	314		0.33		C7H9N1	P-TOLUIDINE
2437	PARAFFINS	316		0.30		C7H9N1	P-TOLUIDINE
2438	HEXADECANE	314		0.36		C7H9N1	P-TOLUIDINE
2439	DECANE	314		0.37		C7H9N1	P-TOLUIDINE
2440	OCTANOL	10		-0.05	-0.05 =	C7H9N1O1	M-AMINO BENZYL ALCOHOL
2441	OCTANOL	312		0.93	0.93 =	C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2442	OCTANOL	10		0.93	0.93 =	C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2443	CYCLOHEXANE	314		-0.13		C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2444	BENZENE	314		1.12	1.32 8	C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2445	CCL4	314		0.63		C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2446	N-HEPTANE	314		-0.28		C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2447	HEXADECANE	314		-0.33		C7H9N1O1	M-METHOXYANILINE/M-ANISIOINE/
2448	OCTANOL	312		0.95	0.95 =	C7H9N1O1	O-METHOXYANILINE/O-ANISIOINE/
2449	CYCLOHEXANE	314		0.52		C7H9N1O1	O-METHOXYANILINE/O-ANISIOINE/
2450	BENZENE	314		1.59	1.65 8	C7H9N1O1	O-METHOXYANILINE/O-ANISIOINE/
2451	CCL4	314		1.22		C7H9N1O1	O-METHOXYANILINE/O-ANISIOINE/
2452	N-HEPTANE	314		0.39		C7H9N1O1	O-METHOXYANILINE/O-ANISIOINE/
2453	HEXADECANE	314		0.33		C7H9N1O1	O-METHOXYANILINE/O-ANISIOINE/
2454	OCTANOL	312		0.95	0.95 =	C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2455	CYCLOHEXANE	314		-0.41		C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2456	BENZENE	314		0.87	1.15 8	C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2457	BENZENE	72		0.78	1.09 8	C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2458	CCL4	314		0.38		C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2459	N-HEPTANE	314		-0.54		C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2460	HEXADECANE	314		-0.54		C7H9N1O1	P-METHOXYANILINE/P-ANISIOINE/
2461	DIETHYL ETHER	113		0.80	0.81 A	C7H9N1O2S1	BENZENESULFONAMIOE,N-METHYL
2462	CHCL3	113		1.31	1.84 N	C7H9N1O2S1	BENZENESULFONAMIOE,N-METHYL
2463	OCTANOL	217	07	0.85	0.85 =	C7H9N1O2S1	M-METHYLBENZENESULFONAMIOE
2464	CHCL3	217	07	0.32	0.85 N	C7H9N1O2S1	M-METHYLBENZENESULFONAMIOE
2465	OCTANOL	217	07	0.84	0.84 =	C7H9N1O2S1	O-METHYLBENZENESULFONAMIOE
2466	CHCL3	217	07	0.46	0.96 N	C7H9N1O2S1	O-METHYLBENZENESULFONAMIOE
2467	OCTANOL	217	07	0.82	0.82 =	C7H9N1O2S1	P-METHYLBENZENESULFONAMIOE
2468	CHCL3	217	07	0.33	0.86 N	C7H9N1O2S1	P-METHYLBENZENESULFONAMIOE
2469	OCTANOL	217	07	0.47	0.47 =	C7H9N1O3S1	P-METHOXYBENZENESULFONAMIOE
2470	CHCL3	217	07	0.15	0.70 N	C7H9N1O3S1	P-METHOXYBENZENESULFONAMIOE
2471	DIETHYL ETHER	113		0.37	0.44 A	C7H9N3O2S2	SULFATHIOLCARBAMIOE
2472	CHCL3	113		-0.78	-0.12 N	C7H9N3O2S2	SULFATHIOLCARBAMIOE
2473	DIETHYL ETHER	113		-1.25	-0.98 A	C7H9N3O3S1	SULFACARBAMIOE
2474	CHCL3	113	15	-2.16	-1.41 N	C7H9N3O3S1	SULFACARBAMIOE
2475	CHCL3	322		-0.14	-0.24 8	C7H9N5	6-DIMETHYLAMINOPURINE
2476	BENZENE	311	6	-1.83		C7H10B1N1O2	PHENYLBORONIC ACID,3-AMINO,4-METHYL
2477	OCTANOL	341	60	0.39	0.39 =	C7H10N2	N-METHYL-3-PYRIDOYLMETHYLAMINE
2478	OCTANOL	341	60	-0.11	-0.11 =	C7H10N2	3-PYRIDOYLETHYLAMINE
2479	OCTANOL	217	32	0.08	0.08 =	C7H10N2O2S1	P-METHYLAMINOBENZENESULFONAMIOE
2480	CHCL3	217	32	-0.59	0.03 N	C7H10N2O2S1	P-METHYLAMINOBENZENESULFONAMIOE
2481	OCTANOL	56		-1.22	-1.22 =	C7H10N4O2S1	SULFAGUANIDINE
2482	DIETHYL ETHER	113		-2.61	-1.47 8	C7H10N4O2S1	SULFAGUANIDINE
2483	CHCL3	343	2	-2.00	-1.26 N	C7H10N4O2S1	SULFAGUANIDINE
2484	CHCL3	113	12	-3.20	-2.38 N	C7H10N4O2S1	SULFAGUANIDINE
2485	BENZENE	343	2	-1.47	-0.47 8	C7H10N4O2S1	SULFAGUANIDINE
2486	1-PENT. ACETATE	343	2	-1.52	-1.75	C7H10N4O2S1	SULFAGUANIDINE
2487	CCL4	343	2	-3.00	-3.37 N	C7H10N4O2S1	SULFAGUANIDINE
2488	N-BUTANOL	194		0.07	-0.46	C7H10O6	8-CARBOXYADIPIC ACID
2489	ETHYL ACETATE	194		-0.50	-0.62	C7H10O6	8-CARBOXYADIPIC ACID
2490	CYCLOHEXANONE	194		0.13		C7H10O6	8-CARBOXYADIPIC ACID
2491	2-BUTANONE	194		0.00	-0.68	C7H10O6	8-CARBOXYADIPIC ACID
2492	ME-1-BUT.KETONE	194		-0.83	-2.35	C7H10O6	8-CARBOXYADIPIC ACID
2493	OCTANOL	348		-0.40	-0.40 =	C7H11N1O2	N-ACETYLCYCLOBUTANECARBOXAMIOE
2494	CHCL3	67		-1.18		C7H11N1O3	ACETYL PROLINE
2495	HEXANE	376		-0.59		C7H11N1O3	N-METHYLCARBAMIC ACID,2,3-DIHYDRO-2-MEFURANYL ESTER
2496	ETHYL ACETATE	67		-1.36	-1.52	C7H11N1O5	GLUTAMIC ACID,L,N-ACETYL
2497	CHCL3	265		-0.70	-0.05 N	C7H12N2O2	CYCLOHEPTANEOIONE DIOXIME
2498	OCTANOL	134		1.01	1.01 =	C7H12N4O1S1	3-METHIO-4-AMINO-6-1-PR-1,2,4-TRIAZINE-5-ONE
2499	OCTANOL	134		0.93	0.93 =	C7H12N4O1S1	3-METHIO-4-AMINO-6-N-PR-1,2,4-TRIAZINE-5-ONE
2500	OCTANOL	134		-0.06	-0.06 =	C7H12N4O2	3-METHOXY-4-AMINO-6-1-PR-1,2,4-TRIAZINE-5-ONE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2501	OCTANOL	255		1.50	1.50 =	C7H12O1	2-BUTANONE, 4-CYCLOPROPYL
2502	DIETHYL ETHER	3		1.04	1.03 A	C7H12O4	DIETHYLMALONIC ACIO
2503	I-BUTANOL	4		1.22	1.21	C7H12O4	DIETHYLMALONIC ACIO
2504	DIETHYL ETHER	212		0.17	0.26 A	C7H12O4	PIMELIC ACIO
2505	DIETHYL ETHER	212		0.18	0.27 A	C7H12O4	PIMELIC ACIO
2506	DIETHYL ETHER	207		0.14	0.24 A	C7H12O4	PIMELIC ACIO
2507	DIETHYL ETHER	194		0.04	0.14 A	C7H12O4	PIMELIC ACIO
2508	N-BUTANOL	194		0.77	0.58	C7H12O4	PIMELIC ACIO
2509	I-BUTANOL	4		0.86	0.70	C7H12O4	PIMELIC ACIO
2510	ETHYL ACETATE	194		0.43	0.41	C7H12O4	PIMELIC ACIO
2511	DIETHYL ETHER	3		-0.66	-0.46 A	C7H12O5	GLYCERYL OIACETATE
2512	OILS	2		-1.15	-0.51 B	C7H12O5	GLYCERYL OIACETATE
2513	OILS	2		-1.15	0.14 A	C7H12O5	GLYCERYL OIACETATE
2514	OILS	214	12	-0.64	0.65 A	C7H12O5	GLYCERYL OIACETATE
2515	DIETHYL ETHER	3		-3.51	-1.90 B	C7H12O6	CYCLOHEXANECARBOXYLIC ACIO, 1,3,4,5-TETRAHYDROXY/QUINIC/
2516	I-BUTANOL	4		-1.09	-2.04	C7H12O6	CYCLOHEXANECARBOXYLIC ACIO, 1,3,4,5-TETRAHYDROXY/QUINIC/
2517	OILS	296		0.52	1.66 A	C7H13BR1N2O2	A-BROMO-A-ETHYLBUTYRLUREA/CARBROMAL/
2518	OLEYL ALCOHOL	82		0.81	1.37	C7H13BR1N2O2	A-BROMO-A-ETHYLBUTYRLUREA/CARBROMAL/
2519	OCTANOL	260		0.24	0.24 =	C7H13N1O1	2-AZACYCLOOCTANONE
2520	CHCL3	67		-1.48		C7H13N1O3	L-VALINE, ACETYL
2521	CHCL3	67		-1.34		C7H13N1O3S1	L-METHIONINE, ACETYL
2522	OCTANOL	260		1.00	1.00 =	C7H13N1S1	2-AZACYCLOOCTANTHIONE
2523	OCTANOL	134		0.30	0.30	C7H13N5O1	6-1-PROPYL-4-AMINO-3-MEAMINO-1,2,4-TRIAZIN-5-ONE
2524	DIETHYL ETHER	3		-1.92	-0.82 B	C7H14N2O2	OIETHYLMALONIC ACIO OIAMIOE
2525	PARAFFINS	241		-1.02		C7H14N2S1	N-BUTYLETHYLENETHIOUREA
2526	XYLENE	46		1.24	3.13 A	C7H14O2	I-AMYLACETIC ACIO
2527	OILS	220		1.69	2.72 A	C7H14O2	HEPTANOIC ACIO
2528	OCTANE	60	47	-0.13		C7H14O2	HEPTANOIC ACIO
2529	DODECANE	60	47	-0.18		C7H14O2	HEPTANOIC ACIO
2530	HEXADECANE	60	47	-0.29		C7H14O2	HEPTANOIC ACIO
2531	OCTANOL	268		-0.17	-0.17 =	C7H14O4	GLYCERYL MONOBUTYRATE/BUTYRIN/
2532	I-BUTANOL	4		-1.41	-2.48	C7H14O6	A-METHYLGLUCOSIOE
2533	OCTANOL	227		0.63	0.63 =	C7H15CL2N2O2P1	CYTOXAN/CYCLOPHOSPHAMIOE/
2534	CCL4	234	12	0.32		C7H15N1O1	OIETHYLPROPIONAMIOE
2535	OILS	292		-0.38	0.84 A	C7H15N1O1	N,N-DIMETHYLVALERAMIOE
2536	OILS	292		-0.59	0.65 A	C7H15N1O1	N-ETHYLVALERAMIOE
2537	OILS	292		-0.81	0.45 A	C7H15N1O2	N,N-OIETHYLLACTAMIOE
2538	N-BUTANOL	377		-0.77	-1.59	C7H16CL1N1O2	ACETYLCOLINE CHLOROIOE
2539	OCTANOL	297	46	-0.25	-0.25 =	C7H16N1O2	ACETYLCOLINE CATION
2540	DIETHYL ETHER	378	44	-1.03	0.04 B	C7H16N2O2	CARBAMIC ACIO, N,N-OIETHYLAMINOETHYL ESTER
2541	OILS	201		1.34	2.41 A	C7H16O1	HEPTANOL
2542	OCTANE	59		0.93		C7H16O1	HEPTANOL
2543	DODECANE	59		0.86		C7H16O1	HEPTANOL
2544	HEXADECANE	59		0.77		C7H16O1	HEPTANOL
2545	DIETHYL ETHER	3		-0.07	0.05 A	C7H16O3	GLYCEROL, 1,3-OIETHYL ETHER
2546	OILS	2		-0.96	0.37 A	C7H16O3	GLYCEROL, 1,3-OIETHYL ETHER
2547	OILS	214		0.05	0.48 B	C7H16O4S2	2,2-BIS(ETHYLSULFONYL)PROPANE/SULFONAL/
2548	OILS	173		0.18	0.58 B	C7H16O4S2	2,2-BIS(ETHYLSULFONYL)PROPANE/SULFONAL/
2549	OILS	224		0.65	0.98 B	C7H16O4S2	2,2-BIS(ETHYLSULFONYL)PROPANE/SULFONAL/
2550	OILS	168		0.10	0.52 B	C7H16O4S2	2,2-BIS(ETHYLSULFONYL)PROPANE/SULFONAL/
2551	DIETHYL ETHER	46		1.30	2.02 B	C7H17N1	HEPTYLAMINE
2552	XYLENE	46		1.34	2.09 B	C7H17N1	HEPTYLAMINE
2553	OCTANOL	297	46	-2.60	-2.60 =	C7H18I1N1	TRIMETHYLBUTYLAMMONIUM IOOIOE
2554	OCTANOL	298		4.20	4.20 =	C7H18S11	SILANE, BUTYL-TRIMETHYL
2555	OCTANOL	206		4.81	4.81 =	C8H18R4F3N2	BENZIMIDAZOLE, 4,5,6,7-TETRABROMO-2-TRIFLUOROMETHYL
2556	CYCLOHEXANE	379	19	-0.26		C8H1CL2F3N4O4	BENZIMIDAZOLE, 2-TRIFLUOROMETHYL-4,6-OICL-5,7-OIN1TRO
2557	CYCLOHEXANE	379	19	0.94		C8H1CL4F3N2	BENZIMIDAZOLE, 4,5,6,7-TETRACHLORO-2-TRIFLUOROMETHYL
2558	OCTANOL	206		3.97	3.97 =	C8H1CL4F3N2	BENZIMIDAZOLE, 4,5,6,7-TETRACHLORO-2-TRIFLUOROMETHYL
2559	OCTANOL	206		4.08	4.08 =	C8H2BR3F3N2	BENZIMIDAZOLE, 4,5,6-TRIBROMO-2-TRIFLUOROMETHYL
2560	OCTANOL	206		3.78	3.78 =	C8H2CL3F3N2	BENZIMIDAZOLE, 4,5,7-TRICHLORO-2-TRIFLUOROMETHYL
2561	OCTANOL	206		3.87	3.87 =	C8H2CL3F3N2	BENZIMIDAZOLE, 4,5,6-TRICHLORO-2-TRIFLUOROMETHYL
2562	CYCLOHEXANE	379	19	0.57		C8H2CL3F3N2	BENZIMIDAZOLE, 4,5,6-TRICHLORO-2-TRIFLUOROMETHYL
2563	CYCLOHEXANE	379	19	0.42		C8H2CL3F3N2	BENZIMIDAZOLE, 2-TRIFLUOROMETHYL-4,6,7-TRICHLORO
2564	OCTANOL	206		4.15	4.15 =	C8H3BR2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROMETHYL-5,6-O1BROMO
2565	OCTANOL	206		3.21	3.21 =	C8H3CL1F3N3O2	BENZIMIDAZOLE, 5-CHLORO-6-NITRO-2-TRIFLUOROME
2566	CYCLOHEXANE	379	19	-0.74		C8H3CL1F3N3O2	BENZIMIDAZOLE, 2-TRIFLUOROME-4, CHLORO-6-NITRO
2567	CYCLOHEXANE	379	19	-0.06		C8H3CL1F3N3O2	BENZIMIDAZOLE, 2-TRIFLUOROME-6-CHLORO-5-NITRO
2568	CYCLOHEXANE	379	19	0.37		C8H3CL1F3N3O2	BENZIMIDAZOLE, 2-TRIFLUOROME-6-CHLORO-4-NITRO
2569	OCTANOL	206		2.87	2.87 =	C8H3CL2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-4,7-O1CHLORO
2570	OCTANOL	206		3.49	3.49 =	C8H3CL2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-4,5-O1CHLORO
2571	OCTANOL	206		3.49	3.49 =	C8H3CL2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-4,6-O1CHLORO
2572	OCTANOL	206		3.99	3.99 =	C8H3CL2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-4,6-O1CHLORO
2573	CYCLOHEXANE	379	19	0.30		C8H3CL2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-4,5-O1CHLORO
2574	OCTANOL	206		3.89	3.89 =	C8H3F3N4O4	BENZIMIDAZOLE, 2-TRIFLUOROME-5,6-OIN1TRO
2575	CYCLOHEXANE	379	19	-1.10		C8H3F3N4O4	BENZIMIDAZOLE, 2-TRIFLUOROME-5,6-O1N1TRO
2576	CYCLOHEXANE	379	19	-0.82		C8H3F3N4O4	BENZIMIDAZOLE, 2-TRIFLUOROME-4,6-O1N1TRO
2577	OCTANOL	206		3.57	3.57 =	C8H4BR1F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-5-BROMO
2578	OCTANOL	206		3.39	3.39 =	C8H4CL1F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-5-CHLORO
2579	CYCLOHEXANE	379	19	-0.31		C8H4CL1F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-5-CHLORO
2580	OCTANOL	206		2.93	2.93 =	C8H4CL1F3N2	BENZIMIDAZOLE, 2-TRIFLUOROME-4-CHLORO
2581	OCTANOL	235		4.62	4.62 =	C8H4CL6	P-DI(TRICHLOROMETHYL)BENZENE
2582	OCTANOL	206		2.68	2.68 =	C8H4F3N3O2	BENZIMIDAZOLE, 2-TRIFLUOROME-5-NITRO
2583	CYCLOHEXANE	379	19	-1.70		C8H4F3N3O2	BENZIMIDAZOLE, 2-TRIFLUOROME-5-NITRO
2584	CYCLOHEXANE	379	19	-0.10		C8H4F3N3O2	BENZIMIDAZOLE, 2-TRIFLUOROME-4-NITRO
2585	OCTANOL	218		3.34	3.34 =	C8H5BR1F3N1O1	BROMOBENZENE, P-TRIFLUOROACETAMIOE
2586	CYCLOHEXANE	141		1.66		C8H5BR1N2O4	STYRENE, 2-BROMO, 5-NITRO, 8-NITRO
2587	OCTANOL	141		2.23	2.23 =	C8H5CL1N2O4	STYRENE, 2-CHLORO-5-NITRO, 8-NITRO
2588	CYCLOHEXANE	141		1.49		C8H5CL1N2O4	STYRENE, 2-CHLORO, 5-NITRO, 8-NITRO
2589	OCTANOL	141		2.53		C8H5CL2N1O2	STYRENE, 2,4-O1CHLORO-8-NITRO
2590	CYCLOHEXANE	141		2.68		C8H5CL2N1O2	STYRENE, 3,4-O1CHLORO, 8-NITRO
2591	CYCLOHEXANE	141		2.76		C8H5CL2N1O2	STYRENE, 2,4-O1CHLORO, 8-NITRO
2592	CYCLOHEXANE	141		3.12		C8H5CL2N1O2	STYRENE, 2,6-O1CHLORO, 8-NITRO
2593	CYCLOHEXANE	141		0.31		C8H5F1N2O4	STYRENE, 4-FLUORO, 3-NITRO, 8-NITRO
2594	CYCLOHEXANE	141		0.87		C8H5F1N2O4	STYRENE, 2-FLUORO, 5-NITRO, 8-NITRO
2595	OCTANOL	206		2.67	2.67 =	C8H5F3N2	BENZIMIDAZOLE, 2-TRIFLUOROMETHYL
2596	CYCLOHEXANE	379	19	-0.95		C8H5F3N2	BENZIMIDAZOLE, 2-TRIFLUOROMETHYL
2597	OCTANOL	10		2.95	2.95 =	C8H5F3O2	M-TRIFLUOROMETHYLBENZOIC ACIO
2598	CHCL3	279		1.73	2.79 A	C8H5F3O2S1	THENOYL-TRIFLUOROACETONE
2599	BENZENE	380		1.60	2.95 A	C8H5F3O2S1	THENOYL-TRIFLUOROACETONE
2600	BENZENE	279		1.62	2.96 A	C8H5F3O2S1	THENOYL-TRIFLUOROACETONE



NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2601	CCL4	279		1.30	2.54	N C8H5F3O2S1	THENOYL TRIFLUOROACETONE
2602	HEXANE	279		0.68		C8H5F3O2S1	THENOYL TRIFLUOROACETONE
2603	O-DICL. BENZENE	279		1.59		C8H5F3O2S1	THENOYL TRIFLUOROACETONE
2604	XYLENE	279		1.58		C8H5F3O2S1	THENOYL TRIFLUOROACETONE
2605	TOLUENE	279		1.60	2.98	A C8H5F3O2S1	THENOYL TRIFLUOROACETONE
2606	OCTANOL	10		1.48	1.48	= C8H5N1O2	M-CYANOBENZOIC ACID
2607	OCTANOL	10		1.56	1.56	= C8H5N1O2	P-CYANOBENZOIC ACID
2608	DIETHYL ETHER	113		0.31	1.12	B C8H5N1O2	INOOLE, 2,3-DIONE/1SAT1N/
2609	CHCL3	113		0.23	0.80	N C8H5N1O2	INOOLE, 2,3-DIONE/1SAT1N/
2610	OCTANOL	9		1.15	1.15	= C8H5N1O2	PHTHALIMIDE
2611	DIETHYL ETHER	113		1.03	1.02	A C8H5N1O2	PHTHALIMIDE
2612	CYCLOHEXANE	304		-1.46		C8H5N1O2	PHTHALIMIDE
2613	CHCL3	113		1.08	1.60	N C8H5N1O2	PHTHALIMIDE
2614	OILS	381	12	0.55	1.69	A C8H5N1O2	PHTHALIMIDE
2615	OCTANOL	255		2.53	2.53	= C8H6	BENZENE, ETHYNYL
2616	OCTANOL	302		2.75	2.75	= C8H68R1CL1O3	PHENOXYACETIC ACID, 3-BROMO-4-CHLORO
2617	OCTANOL	309		3.00	3.00	= C8H68R1N1	INOOLE, 5-BROMO
2618	CYCLOHEXANE	141		2.33		C8H68R1N1O2	STYRENE, 4-BROMO, 8-NITRO
2619	CYCLOHEXANE	141		2.44		C8H68R1N1O2	STYRENE, 2-BROMO, 8-NITRO
2620	CYCLOHEXANE	141		2.48		C8H68R1N1O2	STYRENE, 3-BROMO, 8-NITRO
2621	OCTANOL	302		2.20	2.20	= C8H6CL1F1O3	PHENOXYACETIC ACID, 3-CHLORO-5-FLUORO
2622	OCTANOL	302		3.10	3.10	= C8H6CL1I1O3	PHENOXYACETIC ACID, 4-CHLORO-3-1000
2623	OCTANOL	141		2.44	2.44	= C8H6CL1N1O2	STYRENE, 4-CHLORO-8-NITRO
2624	OCTANOL	141		2.57	2.57	= C8H6CL1N1O2	STYRENE, 3-CHLORO-8-NITRO
2625	OCTANOL	141		2.85	2.85	= C8H6CL1N1O2	STYRENE, 2-CHLORO-8-NITRO
2626	CYCLOHEXANE	141		2.24		C8H6CL1N1O2	STYRENE, 4-CHLORO, 8-NITRO
2627	CYCLOHEXANE	141		2.33		C8H6CL1N1O2	STYRENE, 3-CHLORO, 8-NITRO
2628	CYCLOHEXANE	141		2.52		C8H6CL1N1O2	STYRENE, 2-CHLORO, 8-NITRO
2629	OCTANOL	302		1.85	1.85	= C8H6CL1N1O5	PHENOXYACETIC ACID, 4-CHLORO-3-NITRO
2630	OCTANOL	10		2.81	2.81	= C8H6CL2O3	PHENOXYACETIC ACID, 2,4-DICHLORO
2631	OCTANOL	218		2.81	2.81	= C8H6CL2O3	PHENOXYACETIC ACID, 3,4-DICHLORO
2632	OCTANOL	302		2.42	2.42	= C8H6F1I1O3	PHENOXYACETIC ACID, 5-FLUORO-3-1000
2633	CYCLOHEXANE	141		1.61		C8H6F1N1O2	STYRENE, 4-FLUORO, 8-NITRO
2634	CYCLOHEXANE	141		1.74		C8H6F1N1O2	STYRENE, 3-FLUORO, 8-NITRO
2635	CYCLOHEXANE	141		1.94		C8H6F1N1O2	STYRENE, 2-FLUORO, 8-NITRO
2636	OILS	382	24	3.55	4.42	A C8H6I2O3	BENZOIC ACID, 4-OH, 3,5-DI-1000, METHYL ESTER
2637	OCTANOL	360		0.84	0.84	= C8H6N2	QUINOLINE
2638	OCTANOL	141		1.80	1.80	= C8H6N2O4	STYRENE, 2-NITRO-8-NITRO
2639	OCTANOL	141		1.82	1.82	= C8H6N2O4	STYRENE, 3-NITRO-8-NITRO
2640	OCTANOL	141		1.89	1.89	= C8H6N2O4	STYRENE, 4-NITRO-8-NITRO
2641	CYCLOHEXANE	141		0.72		C8H6N2O4	STYRENE, 4-NITRO, 8-NITRO
2642	CYCLOHEXANE	141		0.89		C8H6N2O4	STYRENE, 2-NITRO, 8-NITRO
2643	CYCLOHEXANE	141		1.01		C8H6N2O4	STYRENE, 3-NITRO, 8-NITRO
2644	OCTANOL	276		1.63	1.63	= C8H6N4O4	1-METHYL-5,7-DINITROBENZOPYRAZOLE
2645	OCTANOL	218		2.67	2.67	= C8H6O1	BENZOFURAN
2646	OILS	224		0.52	0.88	B C8H6O2	O-TOLUIC ACID LACTONE/PHTHALIDE/
2647	DIETHYL ETHER	207		0.80	0.82	A C8H6O3	BENZOYLFORMIC ACID
2648	OILS	173		1.47	1.61	B C8H6O3	PIPERONAL
2649	OILS	224	12	2.00		C8H6O3	PIPERONAL
2650	OCTANOL	10		1.66	1.66	= C8H6O4	M-PHTHALIC ACID
2651	DIETHYL ETHER	212		1.46	1.39	A C8H6O4	M-PHTHALIC ACID
2652	DIETHYL ETHER	212		0.20	0.29	A C8H6O4	O-PHTHALIC ACID
2653	DIETHYL ETHER	207		0.10	0.20	A C8H6O4	O-PHTHALIC ACID
2654	DIETHYL ETHER	46		0.28	0.37	A C8H6O4	O-PHTHALIC ACID
2655	1-BUTANOL	4		0.86	0.70	C8H6O4	O-PHTHALIC ACID
2656	XYLENE	46		-1.55	0.10	A C8H6O4	O-PHTHALIC ACID
2657	ME-I-BUT.KETONE	195		0.44	0.41	C8H6O4	O-PHTHALIC ACID
2658	S-PENTANOLS	195		0.60	0.38	C8H6O4	O-PHTHALIC ACID
2659	CHCL3	46		0.70	1.85	A C8H6O4	PIPERONYLIC ACID
2660	OCTANOL	218		3.12	3.12	= C8H6S1	BENZOTHIOPHENE, (8)
2661	OCTANOL	309		3.09	3.09	= C8H6S1	BENZOTHIOPHENE, (8)
2662	OILS	173		2.24	2.29	B C8H78R1O1	BROMOACETOPHENONE
2663	OCTANOL	10		2.37	2.37	= C8H78R1O2	M-BROMOPHENYLACETIC ACID
2664	OCTANOL	10		2.31	2.31	= C8H78R1O2	P-BROMOPHENYLACETIC ACID
2665	OILS	383	12	1.86	2.88	A C8H78R1O2	P-BROMOPHENYLACETIC ACID
2666	OCTANOL	10		2.10	2.10	= C8H78R1O3	PHENOXYACETIC ACID, 2-BROMO
2667	OCTANOL	10		2.22	2.22	= C8H78R1O3	PHENOXYACETIC ACID, 3-BROMO
2668	OCTANOL	10		2.45	2.45	= C8H78R1O3	PHENOXYACETIC ACID, 4-BROMO
2669	OCTANOL	206		3.22	3.22	= C8H7CL1N2S1	BENZIMIDAZOLE, 5-CHLORO-2-(METHYLTHIO)
2670	CYCLOHEXANE	304		1.44		C8H7CL1O1	CHLOROACETOPHENONE
2671	OILS	173		1.99	2.08	B C8H7CL1O1	CHLOROACETOPHENONE
2672	OCTANOL	10		2.09	2.09	= C8H7CL1O2	M-CHLOROPHENYLACETIC ACID
2673	OCTANOL	10		2.12	2.12	= C8H7CL1O2	P-CHLOROPHENYLACETIC ACID
2674	OILS	383		1.38	2.48	A C8H7CL1O2	P-CHLOROPHENYLACETIC ACID
2675	OCTANOL	10		2.03	2.03	= C8H7CL1O3	PHENOXYACETIC ACID, M-CHLORO
2676	CYCLOHEXANONE	302		3.00		C8H7CL1O3	PHENOXYACETIC ACID, M-CHLORO
2677	ME-I-BUT.KETONE	302		2.32		C8H7CL1O3	PHENOXYACETIC ACID, M-CHLORO
2678	CYCLOHEXANOL	302		2.46		C8H7CL1O3	PHENOXYACETIC ACID, M-CHLORO
2679	OCTANOL	10		2.02	2.02	= C8H7CL1O3	PHENOXYACETIC ACID, O-CHLORO
2680	OCTANOL	10		1.99	1.99	= C8H7CL1O3	PHENOXYACETIC ACID, P-CHLORO
2681	OCTANOL	384		2.80	2.80	= C8H7CL2N1O2	N-METHYL-3,4-DICHLOROPHENYL CARBAMATE
2682	OCTANOL	384		3.03	3.03	= C8H7CL2N1O2	N-METHYL-3,5-DICHLOROPHENYL CARBAMATE
2683	OCTANOL	10		1.65	1.65	= C8H7F1O2	M-FLUOROPHENYLACETIC ACID
2684	OCTANOL	10		1.50	1.50	= C8H7F1O2	O-FLUOROPHENYLACETIC ACID
2685	OCTANOL	10		1.55	1.55	= C8H7F1O2	P-FLUOROPHENYLACETIC ACID
2686	OCTANOL	10		1.48	1.48	= C8H7F1O3	PHENOXYACETIC ACID, M-FLUORO
2687	OCTANOL	10		1.26	1.26	= C8H7F1O3	PHENOXYACETIC ACID, O-FLUORO
2688	OCTANOL	10		1.41	1.41	= C8H7F1O3	PHENOXYACETIC ACID, P-FLUORO
2689	CYCLOHEXANOL	302		1.82		C8H7F1O3	PHENOXYACETIC ACID, P-FLUORO
2690	OCTANOL	65		1.86	1.86	= C8H7F1O4S1	P-FLUOROSULFONYLPHENYLACETIC ACID
2691	OCTANOL	65		1.82	1.82	= C8H7F1O5S1	P-FLUOROSULFONYLPHENOXYACETIC ACID
2692	OCTANOL	10		2.78	2.78	= C8H7F5O3S1	PHENOXYACETIC ACID, 3-PENTAFLUOROTHIO
2693	OCTANOL	10		2.62	2.62	= C8H7I1O2	M-1000PHENYLACETIC ACID
2694	OCTANOL	10		2.64	2.64	= C8H7I1O2	P-1000PHENYLACETIC ACID
2695	OILS	383		1.63	2.72	A C8H7I1O2	P-1000PHENYLACETIC ACID
2696	OCTANOL	10		2.19	2.19	= C8H7I1O3	PHENOXYACETIC ACID, 2-1000
2697	OCTANOL	10		2.44	2.44	= C8H7I1O3	PHENOXYACETIC ACID, 3-1000
2698	OCTANOL	10		2.69	2.69	= C8H7I1O3	PHENOXYACETIC ACID, 4-1000
2699	OCTANOL	276		2.00	2.00	= C8H7N1	INOOLE
2700	OCTANOL	186		2.14	2.14	= C8H7N1	INOOLE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2701	OCTANOL	309		2.25	2.25 =	C8H7N1	INOOLE
2702	OCTANOL	255		1.56	1.56 =	C8H7N1	PHENYLACETONITRILE
2703	CYCLOHEXANE	358		1.56		C8H7N1	P-TOLUONITRILE
2704	OCTANOL	309		1.15	1.15 =	C8H7N1O1	OXINOOLE
2705	OCTANOL	56		2.24	2.24 =	C8H7N1O2	STYRENE, 8-NITRO
2706	OCTANOL	141		2.11	2.11 =	C8H7N1O2	STYRENE, 8-NITRO
2707	CYCLOHEXANE	141		1.80		C8H7N1O2	STYRENE, 8-NITRO
2708	OCTANOL	10		1.42	1.42 =	C8H7N1O3	M-ACETYLNITROBENZENE
2709	OCTANOL	10		1.49	1.49 =	C8H7N1O3	P-ACETYLNITROBENZENE
2710	OCTANOL	141		2.07	2.07 =	C8H7N1O3	STYRENE, 3-HYDROXY-8-NITRO
2711	OCTANOL	141		2.12	2.12 =	C8H7N1O3	STYRENE, 4-HYDROXY-8-NITRO
2712	CYCLOHEXANE	141		-1.60		C8H7N1O3	STYRENE, 4-HYDROXY, 8-NITRO
2713	CYCLOHEXANE	141		-1.36		C8H7N1O3	STYRENE, 3-HYDROXY, 8-NITRO
2714	OCTANOL	10		1.45	1.45 =	C8H7N1O4	M-NITROPHENYLACETIC ACID
2715	OCTANOL	10		1.39	1.39 =	C8H7N1O4	P-NITROPHENYLACETIC ACID
2716	OILS	383		0.43	1.61 A	C8H7N1O4	P-NITROPHENYLACETIC ACID
2717	OCTANOL	10		1.37	1.37 =	C8H7N1O5	PHENOXYACETIC ACID, M-NITRO
2718	CYCLOHEXANONE	302		2.77		C8H7N1O5	PHENOXYACETIC ACID, M-NITRO
2719	ME-1-BUT.KETONE	302		1.88		C8H7N1O5	PHENOXYACETIC ACID, M-NITRO
2720	CYCLOHEXANOL	302		1.93		C8H7N1O5	PHENOXYACETIC ACID, M-NITRO
2721	OCTANOL	10		1.22	1.22 =	C8H7N1O5	PHENOXYACETIC ACID, O-NITRO
2722	OCTANOL	10		1.48	1.48 =	C8H7N1O5	PHENOXYACETIC ACID, P-NITRO
2723	OCTANOL	238		2.83	2.83 =	C8H7N1S1	BENZYL ISOTHIOCYANATE
2724	CHCL3	322		2.00	2.38 N	C8H7N1S2	METHYLTHIOBENZOTHIADIAZOLE
2725	OCTANOL	384		1.77	1.77 =	C8H88R1N1O2	N-METHYL-2-BROMOPHENYL CARBAMATE
2726	OCTANOL	384		2.25	2.25 =	C8H88R1N1O2	N-METHYL-3-BROMOPHENYL CARBAMATE
2727	OCTANOL	384		2.17	2.17 =	C8H88R1N1O2	N-METHYL-4-BROMOPHENYL CARBAMATE
2728	OCTANOL	384		1.64	1.64 =	C8H8CL1N1O2	N-METHYL-2-CHLOROPHENYL CARBAMATE
2729	OCTANOL	384		2.03	2.03 =	C8H8CL1N1O2	N-METHYL-3-CHLOROPHENYL CARBAMATE
2730	OCTANOL	384		2.01	2.01 =	C8H8CL1N1O2	N-METHYL-4-CHLOROPHENYL CARBAMATE
2731	OCTANOL	302		1.16	1.16 =	C8H8CL1N1O3	PHENOXYACETIC ACID, 3-AMINO-4-CHLORO
2732	OCTANOL	384		1.25	1.25 =	C8H8F1N1O2	N-METHYL-2-FLUOROPHENYL CARBAMATE
2733	OCTANOL	384		1.48	1.48 =	C8H8F1N1O2	N-METHYL-3-FLUOROPHENYL CARBAMATE
2734	OCTANOL	384		1.28	1.28 =	C8H8F1N1O2	N-METHYL-4-FLUOROPHENYL CARBAMATE
2735	OCTANOL	65		2.17	2.17 =	C8H8F1N1O3S1	P-ACETAMIDO-BENZENESULFONYL FLUORIDE
2736	DIETHYL ETHER	306		1.64	1.60 A	C8H8I1N1O4S1	N-(P-1000BENZENESULFONYL)GLYCINE
2737	CHCL3	306		-0.20	1.00 A	C8H8I1N1O4S1	N-(P-1000BENZENESULFONYL)GLYCINE
2738	CCL4	306	12	-2.00	0.15 A	C8H8I1N1O4S1	N-(P-1000BENZENESULFONYL)GLYCINE
2739	CLCH2CH2CL	306		0.32		C8H8I1N1O4S1	N-(P-1000BENZENESULFONYL)GLYCINE
2740	OCTANOL	384		1.02	1.02 =	C8H8N2O4	N-METHYL-2-NITROPHENYL CARBAMATE
2741	OCTANOL	384		1.39	1.39 =	C8H8N2O4	N-METHYL-3-NITROPHENYL CARBAMATE
2742	OCTANOL	384		1.47	1.47 =	C8H8N2O4	N-METHYL-4-NITROPHENYL CARBAMATE
2743	OCTANOL	10		1.58	1.58 =	C8H8O1	ACETOPHENONE
2744	DIETHYL ETHER	248	50	1.75	1.67 A	C8H8O1	ACETOPHENONE
2745	BENZENE	248	12	2.20	2.07 B	C8H8O1	ACETOPHENONE
2746	CLCH2CH2CL	248		2.38		C8H8O1	ACETOPHENONE
2747	OCTANOL	268		2.23	2.23 =	C8H8O1S1	THIOACETIC ACID, S-PHENYL ESTER
2748	OCTANOL	10		1.49	1.49 =	C8H8O2	ACETIC ACID, PHENYL ESTER
2749	OCTANOL	10		1.39	1.39 =	C8H8O2	M-ACETYLPHENOL
2750	OCTANOL	10		1.35	1.35 =	C8H8O2	P-ACETYLPHENOL
2751	CYCLOHEXANE	56		-2.14		C8H8O2	P-ACETYLPHENOL
2752	OCTANOL	10		2.12	2.12 =	C8H8O2	BENZOIC ACID, METHYL ESTER
2753	OCTANOL	10		1.41	1.41 =	C8H8O2	PHENYLACETIC ACID
2754	DIETHYL ETHER	3		1.57	1.49 A	C8H8O2	PHENYLACETIC ACID
2755	DIETHYL ETHER	207		1.33	1.28 A	C8H8O2	PHENYLACETIC ACID
2756	DIETHYL ETHER	46		1.44	1.37 A	C8H8O2	PHENYLACETIC ACID
2757	CHCL3	29	12	0.45	1.63 A	C8H8O2	PHENYLACETIC ACID
2758	OILS	361		0.35	1.57 A	C8H8O2	PHENYLACETIC ACID
2759	OILS	362		0.13	1.33 A	C8H8O2	PHENYLACETIC ACID
2760	OILS	385		0.26	1.42 A	C8H8O2	PHENYLACETIC ACID
2761	BENZENE	29		-0.03	1.38 A	C8H8O2	PHENYLACETIC ACID
2762	1-BUTANOL	4		1.43	1.51	C8H8O2	PHENYLACETIC ACID
2763	XYLENE	46		-0.38	1.38 A	C8H8O2	PHENYLACETIC ACID
2764	TOLUENE	48		0.09	1.66 A	C8H8O2	PHENYLACETIC ACID
2765	TOLUENE	29		-0.13	1.46 A	C8H8O2	PHENYLACETIC ACID
2766	NITROBENZENE	48		0.67	1.42	C8H8O2	PHENYLACETIC ACID
2767	PRIM. PENTANOLS	48		1.48	1.57	C8H8O2	PHENYLACETIC ACID
2768	OCTANOL	10		2.37	2.37 =	C8H8O2	M-TOLUIC ACID
2769	CYCLOHEXANE	357		0.65		C8H8O2	O-TOLUIC ACID
2770	CHCL3	29	25	1.76	2.83 A	C8H8O2	O-TOLUIC ACID
2771	TOLUENE	29		1.10	2.54 A	C8H8O2	O-TOLUIC ACID
2772	OCTANOL	10		2.27	2.27 =	C8H8O2	P-TOLUIC ACID
2773	CHCL3	29	12	1.81	2.91 A	C8H8O2	P-TOLUIC ACID
2774	TOLUENE	29		0.68	2.18 A	C8H8O2	P-TOLUIC ACID
2775	OCTANOL	386		1.91	1.91 =	C8H8O2S1	PHENYLTHIO-ACETIC ACID
2776	BENZENE	279		2.40	3.70 A	C8H8O2S1	THENOYLACETONE
2777	CCL4	279		2.06	3.57 N	C8H8O2S1	THENOYLACETONE
2778	HEXANE	279		1.30		C8H8O2S1	THENOYLACETONE
2779	O-OICL. BENZENE	279		2.49		C8H8O2S1	THENOYLACETONE
2780	OCTANOL	386		2.05	2.05 =	C8H8O2SE1	PHENYLSELENO-ACETIC ACID
2781	CHCL3	387		2.92	3.89 A	C8H8O2SE1	1-(2-SELENO-PHENYL)-1,3-BUTANEDIOL
2782	CHCL3	388		3.39	4.30 A	C8H8O2SE1	1-(2-SELENO-PHENYL)-1,3-BUTANEDIOL
2783	BENZENE	387		3.00	4.30 A	C8H8O2SE1	1-(2-SELENO-PHENYL)-1,3-BUTANEDIOL
2784	BENZENE	388		2.92	4.23 A	C8H8O2SE1	1-(2-SELENO-PHENYL)-1,3-BUTANEDIOL
2785	DIETHYL ETHER	323		1.35	1.30 A	C8H8O3	BENZALDEHYDE, 2-HYDROXY-3-METHOXY-O-VANILLIN
2786	DIETHYL ETHER	3		0.97	0.96 A	C8H8O3	BENZALDEHYDE, 3-METHOXY, 4-HYDROXY-VANILLIN
2787	DIETHYL ETHER	323		0.91	0.91 A	C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2788	DIETHYL ETHER	359		0.93	0.94 A	C8H8O3	BENZALDEHYDE, 3-METHOXY, 4-HYDROXY-VANILLIN
2789	DIETHYL ETHER	248		0.96	0.96 A	C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2790	CYCLOHEXANE	248		-0.75		C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2791	CHCL3	366		1.42	1.92 N	C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2792	OILS	173		0.42	1.58 A	C8H8O3	BENZALDEHYDE, 3-METHOXY, 4-HYDROXY-VANILLIN
2793	OILS	224		0.48	1.63 A	C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2794	BENZENE	389		0.81	2.20 A	C8H8O3	BENZALDEHYDE, 3-METHOXY, 4-HYDROXY-VANILLIN
2795	BENZENE	248		0.82	2.21 A	C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2796	TOLUENE	389		0.64	2.14 A	C8H8O3	BENZALDEHYDE, 3-METHOXY, 4-HYDROXY-VANILLIN
2797	CLCH2CH2CL	248		1.29		C8H8O3	BENZALDEHYDE, 3-METHOXY-4-HYDROXY-VANILLIN
2798	OI-1-PR. ETHER	366		0.60	1.24	C8H8O3	BENZALDEHYDE, 3-METHOXY, 4-HYDROXY-VANILLIN
2799	OCTANOL	186		1.05	1.05 =	C8H8O3	BENZYL ALCOHOL, 3,4-METHYLENEOXY
2800	OCTANOL	261		1.89	1.89 =	C8H8O3	M-CARBOMETHOXYPHENOL

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2801	OCTANOL	261		1.96	1.96 =	C8H803	P-CARBOMETHOXYPHENOL
2802	OCTANOL	235		1.96	1.96 =	C8H803	P-HYDROXYBENZOIC ACID, METHYL ESTER
2803	OCTANOL	10		0.85	0.85 =	C8H803	M-HYDROXYPHENYLACETIC ACID
2804	OCTANOL	10		0.85	0.85 =	C8H803	O-HYDROXYPHENYLACETIC ACID
2805	OILS	383		-1.04	0.27 A	C8H803	P-HYDROXYPHENYLACETIC ACID
2806	OCTANOL	10		2.02	2.02 =	C8H803	M-METHOXYBENZOIC ACID
2807	DIETHYL ETHER	112		0.78	0.80 A	C8H803	O-METHOXYBENZOIC ACID
2808	CHCL3	112		1.65	2.72 A	C8H803	O-METHOXYBENZOIC ACID
2809	CHCL3	29		1.65	2.93 A	C8H803	O-METHOXYBENZOIC ACID
2810	BENZENE	17		0.64	2.02 A	C8H803	O-METHOXYBENZOIC ACID
2811	TOLUENE	29		0.45	1.97 A	C8H803	O-METHOXYBENZOIC ACID
2812	OCTANOL	10		1.96	1.96 =	C8H803	P-METHOXYBENZOIC ACID/ANISIC ACID/
2813	CHCL3	29	12	1.48	2.56 A	C8H803	P-METHOXYBENZOIC ACID/ANISIC ACID/
2814	CHCL3	46		0.90	2.04 A	C8H803	P-METHOXYBENZOIC ACID/ANISIC ACID/
2815	BENZENE	17		0.46	1.85 A	C8H803	P-METHOXYBENZOIC ACID/ANISIC ACID/
2816	XYLENE	46		-0.26	1.51 A	C8H803	P-METHOXYBENZOIC ACID/ANISIC ACID/
2817	TOLUENE	29		0.54	2.05 A	C8H803	P-METHOXYBENZOIC ACID/ANISIC ACID/
2818	OCTANOL	10		1.26	1.26 =	C8H803	PHENOXYACETIC ACID
2819	CYCLOHEXANONE	302		2.18		C8H803	PHENOXYACETIC ACID
2820	ME-I-BUT.KETONE	302		1.54		C8H803	PHENOXYACETIC ACID
2821	CYCLOHEXANOL	302		1.61		C8H803	PHENOXYACETIC ACID
2822	DIETHYL ETHER	3		0.35	0.42 A	C8H803	PHENYL ACETIC ACID, A-HYDROXY/MANDELIC ACID/
2823	DIETHYL ETHER	207		0.30	0.38 A	C8H803	PHENYL ACETIC ACID, A-HYDROXY/MANDELIC ACID/
2824	DIETHYL ETHER	46		0.28	0.37 A	C8H803	PHENYL ACETIC ACID, A-HYDROXY/MANDELIC ACID/
2825	CHCL3	29		-1.26	0.07 A	C8H803	PHENYL ACETIC ACID, A-HYDROXY/MANDELIC ACID/
2826	BENZENE	36	12	-1.95	-0.54 A	C8H803	PHENYL ACETIC ACID, A-HYDROXY/MANDELIC ACID/
2827	I-BUTANOL	4		0.72	0.50	C8H803	PHENYL ACETIC ACID, A-HYDROXY/MANDELIC ACID/
2828	OCTANOL	10		0.76	0.76 =	C8H804	PHENOXYACETIC ACID, M-HYDROXY
2829	OCTANOL	302		0.85	0.85 =	C8H804	PHENOXYACETIC ACID, O-HYDROXY
2830	OCTANOL	10		0.65	0.65 =	C8H804	PHENOXYACETIC ACID, P-HYDROXY
2831	CYCLOHEXANONE	302		1.91		C8H804	PHENOXYACETIC ACID, P-HYDROXY
2832	ME-I-BUT.KETONE	302		1.05		C8H804	PHENOXYACETIC ACID, P-HYDROXY
2833	CYCLOHEXANOL	302		1.32		C8H804	PHENOXYACETIC ACID, P-HYDROXY
2834	OCTANOL	255		3.09	3.09 =	C8H9R1	BENZENE, 2-BROMO-1-ETHYL
2835	OCTANOL	255		2.95	2.95 =	C8H9C1	BENZENE, 2-CHLORO-1-ETHYL
2836	OCTANOL	10		1.16	1.16 =	C8H9N101	ACETANILIOE
2837	DIETHYL ETHER	3		0.48	1.28 B	C8H9N101	ACETANILIOE
2838	DIETHYL ETHER	359		0.50	1.29 B	C8H9N101	ACETANILIOE
2839	CHCL3	359		0.89	1.41 N	C8H9N101	ACETANILIOE
2840	CHCL3	254		0.88	1.39 N	C8H9N101	ACETANILIOE
2841	CHCL3	338	44	0.48	1.06 N	C8H9N101	ACETANILIOE
2842	OILS	173		0.00	1.19 A	C8H9N101	ACETANILIOE
2843	OILS	224		0.30	1.47 A	C8H9N101	ACETANILIOE
2844	BENZENE	338	44	-1.70		C8H9N101	ACETANILIOE
2845	BENZENE	72		0.22	1.59 A	C8H9N101	ACETANILIOE
2846	N-HEPTANE	254		-1.70		C8H9N101	ACETANILIOE
2847	N-HEPTANE	338	44	-2.00		C8H9N101	ACETANILIOE
2848	TOLUENE	151		1.77	3.13 A	C8H9N101	N-METHYL-SALICYLIDENEIMINE /SCHIFF BASE/
2849	CYCLOHEXANE	151		0.95		C8H9N101	N-METHYL-SALICYLIDENEIMINE /SCHIFF BASE/
2850	OCTANOL	255		0.45	0.45 =	C8H9N101	PHENYLACETAMIOE
2851	OLEYL ALCOHOL	390	44	1.09	1.63	C8H9N102	P-AMINO BENZOIC ACID, METHYL ESTER
2852	OILS	383		-0.89	0.40 A	C8H9N102	P-AMINOPHENYLACETIC ACID
2853	CHCL3	29		0.81	1.98 A	C8H9N102	ANTHRANILIC ACID, N-METHYL
2854	TOLUENE	29		0.61	2.11 A	C8H9N102	ANTHRANILIC ACID, N-METHYL
2855	CYCLOHEXANE	141		1.81		C8H9N102	BENZENE, 8-NITROETHYL
2856	OCTANOL	65		2.95	2.95 =	C8H9N102	1,3-DIMETHYL-2-NITROBENZENE
2857	OCTANOL	386		0.62	0.62 =	C8H9N102	GLYCINE, N-PHENYL
2858	OCTANOL	276		0.94	0.94 =	C8H9N102	M-METHOXYBENZAMIOE
2859	OCTANOL	276		0.87	0.87 =	C8H9N102	O-METHOXYBENZAMIOE
2860	OCTANOL	276		0.86	0.86 =	C8H9N102	P-METHOXYBENZAMIOE
2861	OCTANOL	384		1.16	1.16 =	C8H9N102	N-METHYLPHENYL CARBAMATE
2862	OCTANOL	186		1.24	1.24 =	C8H9N102	N-METHYLPHENYL CARBAMATE
2863	HEXANE	391		-0.54		C8H9N102	N-METHYLPHENYL CARBAMATE
2864	OCTANOL	349		1.32	1.32 =	C8H9N102	NICOTINIC ACID, ETHYL ESTER
2865	OCTANOL	349		1.43	1.43 =	C8H9N102	I-NICOTINIC ACID, ETHYL ESTER
2866	OCTANOL	349		0.87	0.87 =	C8H9N102	PICOLINIC ACID, ETHYL ESTER
2867	OILS	381		-0.01	1.18 A	C8H9N102	TETRAHYDROPTHALIMIOE
2868	N-HEPTANE	370	14	0.28		C8H9N103	P-AMINOSALICYLIC ACID, METHYL ESTER
2869	OILS	249		0.25	1.41 A	C8H9N103	ORTHOCAINE
2870	CYCLOHEXANONE	302		0.71		C8H9N103	PHENOXYACETIC ACID, P-AMINO
2871	OCTANOL	217	07	0.20	0.20 =	C8H9N103S1	P-ACETYL BENZENESULFONAMIOE
2872	CHCL3	217	07	-0.36	0.24 N	C8H9N103S1	P-ACETYL BENZENESULFONAMIOE
2873	OCTANOL	276		1.61	1.61 =	C8H9N301S1	M-HYDROXYBENZYLIDINETHIOUREA
2874	OCTANOL	226		-0.57	-0.57 =	C8H9N302	1-ACETYL-2-PICOLINOLYLHYDRAZINE (68626)
2875	OCTANOL	255		3.15	3.15 =	C8H10	BENZENE, ETHYL
2876	OCTANOL	301		3.20	3.20 =	C8H10	M-XYLENE
2877	N-HEPTANE	310		3.54		C8H10	M-XYLENE
2878	OCTANOL	301		2.77	2.77 =	C8H10	O-XYLENE
2879	N-HEPTANE	310		3.39		C8H10	O-XYLENE
2880	OCTANOL	301		3.15	3.15 =	C8H10	P-XYLENE
2881	N-HEPTANE	310		3.45		C8H10	P-XYLENE
2882	OCTANOL	80		1.71	1.71 =	C8H10CL1N102	O-(1-ETHYL-1-ETHYNYL-3-CHLOROALLYL)CARBAMATE
2883	OCTANOL	392		2.04	2.04 =	C8H10N105P1S1	OIMETHYL PARATHION
2884	CHCL3	392		1.38	0.97 B	C8H10N105P1S1	OIMETHYL PARATHION
2885	BENZENE	392		1.28	1.44 B	C8H10N105P1S1	OIMETHYL PARATHION
2886	OCTANOL	392		1.33	1.33 =	C8H10N106P1	OIMETHYL PARA-OXON
2887	CHCL3	392		1.33	0.91 B	C8H10N106P1	OIMETHYL PARA-OXON
2888	BENZENE	392		1.17	1.36 B	C8H10N106P1	OIMETHYL PARA-OXON
2889	BENZENE	72		1.71	1.73 B	C8H10N201	P-NITROSODIMETHYLANILINE
2890	OCTANOL	186		0.42	0.42 =	C8H10N201	UREA, 1-METHYL-1-PHENYL
2891	DIETHYL ETHER	113	15	-0.67	-0.47 A	C8H10N203S1	SULFANILACETAMIOE
2892	CHCL3	343	2	-0.66	-0.01 N	C8H10N203S1	SULFANILACETAMIOE
2893	CHCL3	113	15	-0.12	0.48 N	C8H10N203S1	SULFANILACETAMIOE
2894	CHCL3	393	63	-0.35	0.27 N	C8H10N203S1	SULFANILACETAMIOE
2895	BENZENE	343	2	-1.54	-0.14 A	C8H10N203S1	SULFANILACETAMIOE
2896	1-PENT. ACETATE	343	2	-0.06	-0.24	C8H10N203S1	SULFANILACETAMIOE
2897	CCL4	343	2	-1.77	-1.72 N	C8H10N203S1	SULFANILACETAMIOE
2898	OCTANOL	186		0.85	0.85 =	C8H10N2S1	UREA, 1-METHYL-1-PHENYL-2-THIO
2899	OCTANOL	218		-0.07	-0.07 =	C8H10N402	CAFFEINE
2900	DIETHYL ETHER	3		-1.30	-0.30 B	C8H10N402	CAFFEINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
2901	CHCL3	394	42	1.33	0.91 B	C8H10N4O2	CAFFEINE
2902	CHCL3	359	42	1.32	0.86 B	C8H10N4O2	CAFFEINE
2903	CHCL3	322	42	1.28	0.87 B	C8H10N4O2	CAFFEINE
2904	OILS	371		-0.40	0.18 B	C8H10N4O2	CAFFEINE
2905	OILS	2	12	-1.48	-0.79 B	C8H10N4O2	CAFFEINE
2906	OILS	249		-1.13	-0.50 B	C8H10N4O2	CAFFEINE
2907	1-BUTANOL	4		0.08	-0.39	C8H10N4O2	CAFFEINE
2908	I-PENT. ACETATE	395	14	-2.22		C8H10N4O2	CAFFEINE
2909	CCL4	234	12	-0.68		C8H10N4O2	CAFFEINE
2910	BENZENE	368	68	-0.16	0.44 B	C8H10N4O2	CAFFEINE
2911	OCTANOL	206	27	3.58	3.58 =	C8H10N4O6S3	PURINE, 2,6,8-TRI-METHYL SULFONYL
2912	CYCLOHEXANE	325		0.51		C8H10O1	2,3-OIMETHYLPHENOL
2913	N-HEPTANE	310		0.43		C8H10O1	2,3-OIMETHYLPHENOL
2914	CYCLOHEXANE	132		0.76		C8H10O1	2,4-OIMETHYLPHENOL
2915	CYCLOHEXANE	325		0.55		C8H10O1	2,4-OIMETHYLPHENOL
2916	N-HEPTANE	310		0.40		C8H10O1	2,4-OIMETHYLPHENOL
2917	CYCLOHEXANE	132		0.77		C8H10O1	2,5-OIMETHYLPHENOL
2918	CYCLOHEXANE	325		0.57		C8H10O1	2,5-OIMETHYLPHENOL
2919	N-HEPTANE	310		0.52		C8H10O1	2,5-OIMETHYLPHENOL
2920	OCTANOL	261		2.36	2.36 =	C8H10O1	2,6-OIMETHYLPHENOL
2921	DIETHYL ETHER	323		2.53	2.33 A	C8H10O1	2,6-OIMETHYLPHENOL
2922	CYCLOHEXANE	132		1.28		C8H10O1	2,6-OIMETHYLPHENOL
2923	CYCLOHEXANE	325		0.93		C8H10O1	2,6-OIMETHYLPHENOL
2924	N-HEPTANE	310		0.82		C8H10O1	2,6-OIMETHYLPHENOL
2925	CYCLOHEXANE	325		0.20		C8H10O1	3,4-OIMETHYLPHENOL
2926	N-HEPTANE	310		0.10		C8H10O1	3,4-OIMETHYLPHENOL
2927	OCTANOL	261		2.35	2.35 =	C8H10O1	3,5-OIMETHYLPHENOL
2928	CYCLOHEXANE	132		0.54		C8H10O1	3,5-OIMETHYLPHENOL
2929	CYCLOHEXANE	325		0.27		C8H10O1	3,5-OIMETHYLPHENOL
2930	N-HEPTANE	310		0.21		C8H10O1	3,5-OIMETHYLPHENOL
2931	OCTANOL	255		1.36	1.36 =	C8H10O1	ETHANOL, 2-PHENYL
2932	HEXANE	372		-0.39		C8H10O1	ETHANOL, 2-PHENYL
2933	OCTANOL	10		2.40	2.40 =	C8H10O1	M-ETHYLPHENOL
2934	CYCLOHEXANE	132		0.43		C8H10O1	M-ETHYLPHENOL
2935	CYCLOHEXANE	325		0.36		C8H10O1	M-ETHYLPHENOL
2936	CYCLOHEXANE	132		0.83		C8H10O1	O-ETHYLPHENOL
2937	CYCLOHEXANE	325		0.68		C8H10O1	O-ETHYLPHENOL
2938	CYCLOHEXANE	132		0.44		C8H10O1	P-ETHYLPHENOL
2939	CYCLOHEXANE	325		0.37		C8H10O1	P-ETHYLPHENOL
2940	OILS	324	12	1.79	2.81 A	C8H10O1	P-ETHYLPHENOL
2941	OILS	327		1.62	2.66 A	C8H10O1	P-ETHYLPHENOL
2942	BENZENE	324	45	1.44	2.78 A	C8H10O1	P-ETHYLPHENOL
2943	PARAFFINS	327		0.04		C8H10O1	P-ETHYLPHENOL
2944	OCTANOL	10		1.60	1.60 =	C8H10O1	P-METHYLBENZYL ALCOHOL
2945	OCTANOL	10		1.58	1.58 =	C8H10O1	P-METHYLBENZYL ALCOHOL
2946	CYCLOHEXANE	358		2.77		C8H10O1	PHENETOLE
2947	DIETHYL ETHER	332		1.65	1.57 A	C8H10O2	BENZENE, 1,2-OIHOROXY-4-ETHYL
2948	DI-BUTYL ETHER	332		0.88		C8H10O2	BENZENE, 1,2-OIHOROXY-4-ETHYL
2949	DI-1-PR. ETHER	332		1.39	2.16	C8H10O2	BENZENE, 1,2-OIHOROXY-4-ETHYL
2950	CYCLOHEXANE	358		2.32		C8H10O2	BENZENE, 1,3-OIMETHOXY
2951	OILS	173		2.15	3.14 A	C8H10O2	BENZENE, 1,4-OIMETHOXY
2952	OILS	224		2.21	3.20 A	C8H10O2	BENZENE, 1,4-OIMETHOXY
2953	OCTANOL	261		1.81	1.81 =	C8H10O2	P-ETHOXYPHENOL
2954	OCTANOL	10		1.10	1.10 =	C8H10O2	P-METHOXYBENZYL ALCOHOL
2955	OILS	327		1.26	2.33 A	C8H10O2	PHENOL, 2-METHOXY-4-METHYL/P-METHYLGUAICOL/
2956	PARAFFINS	327		0.71		C8H10O2	PHENOL, 2-METHOXY-4-METHYL/P-METHYLGUAICOL/
2957	OCTANOL	56		1.16	1.16 =	C8H10O2	2-PHENOCXYETHANOL
2958	N-BUTYL ACETATE	331		1.21	1.26	C8H10O2	RESORCINOL, 4,5-OIMETHYL
2959	N-BUTYL ACETATE	331		1.64	1.62	C8H10O2	RESORCINOL, 2,4-OIMETHYL
2960	N-BUTYL ACETATE	331		1.94	1.82	C8H10O2	RESORCINOL, 2,5-OIMETHYL
2961	DIETHYL ETHER	323		-0.20	-0.06 A	C8H10O3	BENZYL ALCOHOL, 4-HYDROXY, 3-METHOXY
2962	DIETHYL ETHER	323		0.74	0.76 A	C8H10O3	PHENOL, 2,6-OIMETHOXY
2963	OILS	327		0.57	1.69 A	C8H10O3	PHENOL, 2,6-OIMETHOXY
2964	PARAFFINS	327		-0.36		C8H10O3	PHENOL, 2,6-OIMETHOXY
2965	BENZENE	311	6	-0.01		C8H11B1O3	P-ETHOXYPHENYLBORONIC ACID
2966	OCTANOL	373		-2.02	-2.02 =	C8H11CLIN2O1	N1-ETHYLNICOTINAMIOE CHLORIOE
2967	DIETHYL ETHER	46		0.78	1.54 B	C8H11N1	BENZYL METHYLAMINE
2968	DIETHYL ETHER	374		0.85	1.61 B	C8H11N1	BENZYL METHYLAMINE
2969	XYLENE	46		1.39	2.03 B	C8H11N1	BENZYL METHYLAMINE
2970	OCTANOL	10		2.31	2.31 =	C8H11N1	N,N-DIMETHYLANILINE
2971	OCTANOL	309		2.62	2.62 =	C8H11N1	N,N-DIMETHYLANILINE
2972	CYCLOHEXANE	337		2.47		C8H11N1	N,N-DIMETHYLANILINE
2973	N-HEPTANE	310		1.00		C8H11N1	2,3-DIMETHYLANILINE
2974	CYCLOHEXANE	337		1.23		C8H11N1	2,4-DIMETHYLANILINE
2975	XYLENE	46		1.18	1.85 B	C8H11N1	2,4-DIMETHYLANILINE
2976	N-HEPTANE	310		1.10		C8H11N1	2,4-DIMETHYLANILINE
2977	CYCLOHEXANE	337		1.22		C8H11N1	2,5-DIMETHYLANILINE
2978	N-HEPTANE	310		1.12		C8H11N1	2,5-DIMETHYLANILINE
2979	CYCLOHEXANE	337		1.35		C8H11N1	2,6-DIMETHYLANILINE
2980	N-HEPTANE	310		1.21		C8H11N1	2,6-DIMETHYLANILINE
2981	XYLENE	46		1.05	1.70 B	C8H11N1	3,4-DIMETHYLANILINE
2982	N-HEPTANE	310		0.95		C8H11N1	3,4-DIMETHYLANILINE
2983	CYCLOHEXANE	337		1.18		C8H11N1	3,5-DIMETHYLANILINE
2984	OCTANOL	255		1.41	1.41 =	C8H11N1	ETHYLAMINE, 2-PHENYL
2985	CHCL3	396	31	1.32	0.91 B	C8H11N1	ETHYLAMINE, 2-PHENYL
2986	N-HEPTANE	396	31	-0.56		C8H11N1	ETHYLAMINE, 2-PHENYL
2987	OCTANOL	312		2.26	2.26 =	C8H11N1	N-ETHYLANILINE
2988	XYLENE	73		1.72	2.36 B	C8H11N1	PYRIOINE, 2-METHYL, 5-ETHYL
2989	TOLUENE	73		1.80	1.95 B	C8H11N1	PYRIOINE, 2-METHYL, 5-ETHYL
2990	OCTANOL	9		2.10	2.10 =	C8H11N1	PYRIOINE, 4-PROPYL
2991	TOLUENE	188		1.43	1.72 B	C8H11N1	PYRIOINE, 2,4,6-TRIMETHYL/COLLOIN/
2992	OCTANOL	10		1.56	1.56 =	C8H11N1O1	3-OIMETHYLANINOPHENOL
2993	OCTANOL	80		1.09	1.09 =	C8H11N1O2	O-11-ETHYL-1-VINYL-2-PROPYNYL) CARBAMATE
2994	OILS	381		0.16	1.34 A	C8H11N1O2	HEXAHYDROPHTHALIMIOE
2995	DIETHYL ETHER	113		1.11	1.09 A	C8H11N1O2S1	BENZENESULFONAMIOE, N-ETHYL
2996	CHCL3	113		1.77	2.28 N	C8H11N1O2S1	BENZENESULFONAMIOE, N-ETHYL
2997	DIETHYL ETHER	113		1.16	1.13 A	C8H11N1O2S1	N,N-DIMETHYLBENZENESULFONAMIOE
2998	CHCL3	113		2.69	3.11 N	C8H11N1O2S1	N,N-DIMETHYLBENZENESULFONAMIOE
2999	OCTANOL	227		-2.14	-2.14 =	C8H11N3O6	6-AZAUROINE (NCS 32074) (PKA = 6.63)
3000	OCTANOL	397		0.74	0.74 =	C8H11N5	ADENINE, 9-PROPYL

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3001	OCTANOL	341	60	0.49	0.49 =	C8H12N2	N,N-DIMETHYL-3-PYRIDYLMETHYLAMINE
3002	OCTANOL	341	60	0.76	0.76 =	C8H12N2	N-ETHYL-3-PYRIDYLMETHYLAMINE
3003	CHCL3	322		0.88	1.36 N	C8H12N2O1S1	2-METHIO-4-HYDROXYTRIMETHYLENEPYRIMIDINE
3004	OCTANOL	56		0.81	0.81 =	C8H12N2O2S1	PHENETHYL SULFAMIOE
3005	OILS	398	44	0.36	1.52 A	C8H12N2O2S1	2-THIO-5,5-DIETHYLBARBITURIC ACIO/THIOBARBITAL/
3006	OCTANOL	80		0.65	0.65 =	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3007	DIETHYL ETHER	113	16	0.63	0.67 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3008	CHCL3	399	1	-0.14	0.49 N	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3009	CHCL3	113		-0.07	0.54 N	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3010	CHCL3	254		-0.15	0.45 N	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3011	CHCL3	338	44	0.45	1.03 N	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3012	OILS	82		-0.72	0.54 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3013	OILS	345		-0.67	0.58 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3014	OILS	398	44	-0.58	0.68 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3015	OILS	296	12	-1.22	0.08 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3016	OILS	168		-0.57	0.69 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3017	OILS	290		-0.96	0.32 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3018	BENZENE	399	1	-0.77	0.62 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3019	BENZENE	338	44	-1.85		C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3020	1-PENT. ACETATE	399	1	0.58	0.43	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3021	CCL4	399	1	-1.46	0.62 A	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3022	N-HEPTANE	338	44	-2.15		C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3023	OLEYL ALCOHOL	82		0.14	0.70	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3024	50%ETHER+50%OMF	125		-0.10	0.55	C8H12N2O3	5,5-DIETHYLBARBITURIC ACIO/BARBITAL/VERONAL/
3025	OCTANOL	80		1.73	1.73 =	C8H12O1	CYCLOHEXANOL, 1-ETHYNYL
3026	DIETHYL ETHER	112		0.29	0.37 A	C8H12O2	CYCLOHEXANE-1,3-DIONE, 5,5-DIMETHYL/DIMEON/
3027	CHCL3	112		0.76	1.30 N	C8H12O2	CYCLOHEXANE-1,3-DIONE, 5,5-DIMETHYL/DIMEON/
3028	OILS	347		1.42	2.48 A	C8H12O2	SORBITIC ACIO, ETHYL ESTER
3029	OCTANOL	298		3.99	3.99 =	C8H12S1I	SILANE, DIMETHYL-PHENYL
3030	N-HEPTANE	400	14	-1.15		C8H13N1O2	ARECOLIN
3031	OCTANOL	348		-0.04	-0.04 =	C8H13N1O2	N-PROPIONYLCYCLOBUTANECARBOXAMIOE
3032	OCTANOL	218		1.52	1.52 =	C8H13N1O2S1	3,5-THIOMORPHOLINEIONE, 2,2-DIETHYL
3033	OCTANOL	134		1.52	1.52 =	C8H14N4O1S1	3-ETHYLTHIO-4-AMINO-6-I-PR-1,2,4-TRIAZINE-5-ONE
3034	OCTANOL	134		1.39	1.39 =	C8H14N4O1S1	3-METHIO-4-AMINO-6-I-BU-1,2,4-TRIAZINE-5-ONE
3035	OCTANOL	134		1.70	1.70 =	C8H14N4O1S1	3-METHIO-4-AMINO-6-T-BU-1,2,4-TRIAZINE-5-ONE
3036	CHCL3	285		2.97	4.20 A	C8H14O2	6-METHYL-2,4-HEPTANEOIONE/I-VALERYLACETONE/
3037	OCTANOL	255		0.55	0.55 =	C8H14O3	HEPTANOIC ACIO, 6-KETO METHYL ESTER
3038	DIETHYL ETHER	212		0.67	0.70 A	C8H14O4	SUBERIC ACIO
3039	DIETHYL ETHER	194		0.47	0.54 A	C8H14O4	SUBERIC ACIO
3040	N-BUTANOL	194		0.92	0.80	C8H14O4	SUBERIC ACIO
3041	ETHYL ACETATE	194		0.70	0.70	C8H14O4	SUBERIC ACIO
3042	CYCLOHEXANONE	194		0.85		C8H14O4	SUBERIC ACIO
3043	2-BUTANONE	194		0.68	0.72	C8H14O4	SUBERIC ACIO
3044	ME-I-BUT.KETONE	194		0.68	0.74	C8H14O4	SUBERIC ACIO
3045	OCTANOL	56		-0.29	-0.29 =	C8H14O6	TARTARIC ACIO, DIETHYL ESTER
3046	DIETHYL ETHER	3		-0.19	-0.05 A	C8H14O6	TARTARIC ACIO, DIETHYL ESTER
3047	DIETHYL ETHER	401		-0.35	-0.19 A	C8H14O6	TARTARIC ACIO, DIETHYL ESTER
3048	1-OCTANOL	353		-1.38		C8H15K1O2	POTASSIUM OCTANOATE
3049	OCTANOL	260		0.67	0.67 =	C8H15N1O1	2-AZACYCLONONANONE
3050	DIETHYL ETHER	3		-1.28	-0.28 B	C8H15N1O1	TROPINE
3051	1-BUTANOL	4		0.49	0.21	C8H15N1O1	TROPINE
3052	CHCL3	67		-0.77		C8H15N1O3	D-ISOLEUCINE, ACETYL
3053	CHCL3	67		-0.84		C8H15N1O3	O-LEUCINE, ACETYL
3054	CHCL3	67		-0.70		C8H15N1O3	NORLEUCINE, ACETYL
3055	OCTANOL	260		1.44	1.44 =	C8H15N1S1	2-AZACYCLONONANTHIONE
3056	OCTANOL	227		-1.45	-1.45 =	C8H15N3O7	STREPTOZOTOCIN (NCS 85998)
3057	1-OCTANOL	353		-1.38		C8H15NA1O2	SODIUM OCTANOATE
3058	PARAFFINS	241		-0.57		C8H16N2S1	N-AMYLETHYLENETHIOUREA
3059	N-HEPTANE	139	31	0.63		C8H16O2	OCTANOIC ACIO
3060	CHCL3	402	46	-0.92		C8H17CL2N1O2	OI-I-PROPYLAMMONIUM-OICHLOROACETATE
3061	BENZENE	402	46	-1.77		C8H17CL2N1O2	OI-I-PROPYLAMMONIUM-OICHLOROACETATE
3062	1-BUTANOL	4		1.99	2.29	C8H17N1	2-PROPYLPYPERIDINE/CONIINE/
3063	XYLENE	46		1.95	2.61 B	C8H17N1	2-PROPYLPYPERIDINE/CONIINE/
3064	OCTANOL	218		1.81	1.81 =	C8H17N1O1S1	PROPIONAMIOE, 2-BUTYLTHIO-2-METHYL
3065	OILS	271		1.79	1.92 B	C8H18F1O3P1	OIBUTYLFLUOROPHOSPHATE
3066	CCL4	271		2.01	1.77 B	C8H18F1O3P1	OIBUTYLFLUOROPHOSPHATE
3067	DIETHYL ETHER	378	44	-1.00	0.06 B	C8H18N2O2	N-METHYLCARBAMIC ACIO, DIETHYLAMINOETHYL ESTER
3068	OCTANOL	5		3.15	3.15 =	C8H18O1	OCTANOL
3069	OILS	201		1.77	2.80 A	C8H18O1	OCTANOL
3070	DIETHYL ETHER	2		0.04	0.15 A	C8H18O3	OIETHYLENE GLYCOL, MONOBUTYL ETHER
3071	OILS	2		-0.92	0.40 A	C8H18O3	OIETHYLENE GLYCOL, MONOBUTYL ETHER
3072	OILS	173		0.72	1.04 B	C8H18O4S2	2,2-BIS(ETHYLSULFONYL)BUTANE/TRIIONAL/
3073	OILS	168		0.66	0.98 B	C8H18O4S2	2,2-BIS(ETHYLSULFONYL)BUTANE/TRIIONAL/
3074	OILS	214		0.65	0.97 B	C8H18O4S2	2,2-BIS(ETHYLSULFONYL)BUTANE/TRIIONAL/
3075	DIETHYL ETHER	3		-2.62	-2.18 A	C8H18O5	TETRAETHYLENE GLYCOL
3076	1-BUTANOL	4		-0.62	-1.38	C8H18O5	TETRAETHYLENE GLYCOL
3077	DIETHYL ETHER	3		2.52	3.04 B	C8H19N1	OI-1-BUTYLAMINE
3078	1-BUTANOL	4		2.38	2.84	C8H19N1	OI-I-BUTYLAMINE
3079	OCTANOL	218		2.68	2.68 =	C8H19N1	OIBUTYLAMINE
3080	1-BUTANOL	4		2.35	2.90	C8H19N1	OCTYLAMINE
3081	CCL4	135		2.63	2.33 B	C8H19O2P1S2	PHOSPHORODITHIOTIC ACIO, OI-1-BUTYL
3082	1-PENT. ACETATE	135		2.23	2.13	C8H19O2P1S2	PHOSPHORODITHIOTIC ACIO, OI-N-BUTYL
3083	CCL4	135		2.52	2.26 B	C8H19O2P1S2	PHOSPHORODITHIOTIC ACIO, OI-N-BUTYL
3084	ME-I-BUT.KETONE	135		2.54	2.27	C8H19O2P1S2	PHOSPHORODITHIOTIC ACIO, OI-N-BUTYL
3085	OCTANOL	56		2.03	2.03 =	C8H19O2S2	ETHYLPHOSPHONATE, O-ET-S-(2-ET-THIOETHYL)
3086	OI-BUTYL ETHER	236	17	1.04		C8H19O4P1	OI-1-BUTYL PHOSPHATE
3087	CHCL3	50		0.24	1.44 A	C8H19O4P1	OIBUTYL PHOSPHATE
3088	CHCL3	403		0.34	1.53 A	C8H19O4P1	OIBUTYL PHOSPHATE
3089	BENZENE	50		-0.42		C8H19O4P1	OIBUTYL PHOSPHATE
3090	BENZENE	404		-0.42	1.00 A	C8H19O4P1	OIBUTYL PHOSPHATE
3091	TOLUENE	404		-0.70	0.94 A	C8H19O4P1	OIBUTYL PHOSPHATE
3092	NITROBENZENE	50		-0.14		C8H19O4P1	OIBUTYL PHOSPHATE
3093	CCL4	50		-1.44	0.63 A	C8H19O4P1	OIBUTYL PHOSPHATE
3094	OI-BUTYL ETHER	50		-0.14		C8H19O4P1	OIBUTYL PHOSPHATE
3095	OI-BUTYL ETHER	236	17	1.18		C8H19O4P1	OIBUTYL PHOSPHATE
3096	OI-I-PR. ETHER	50		0.52	1.15	C8H19O4P1	OIBUTYL PHOSPHATE
3097	HEXANE	50		-2.34		C8H19O4P1	OIBUTYL PHOSPHATE
3098	ME-I-BUT.KETONE	50		1.36	1.19	C8H19O4P1	OIBUTYL PHOSPHATE
3099	S-PENTANOLS	274		2.21		C8H19O4P1	OIBUTYL PHOSPHATE
3100	PARAFFINS	50		-1.96		C8H19O4P1	OIBUTYL PHOSPHATE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3101	PARAFFINS	404		-1.96		C8H19O4P1	OIBUTYL PHOSPHATE
3102	DIETHYL ETHER	236	17	1.62		C8H19O4P1	OCTYL PHOSPHATE
3103	ME-I-BUT.KETONE	236	17	1.45	1.28	C8H19O4P1	OCTYL PHOSPHATE
3104	CHCL3	405	46	-2.52		C8H20CL1N1	TETRAETHYLAMMONIUM CHLORIDE
3105	OCTANOL	297	46	-2.82	-2.82 =	C8H20I1N1	TETRAETHYLAMMONIUM IODIDE
3106	NI TROBENZENE	92	46	-1.65		C8H20I1N1	TETRAETHYLAMMONIUM IODIDE
3107	I-BUTANOL	184		-1.14		C8H21N1O5	TETRAETHANOLAMMONIUM HYDROXIDE
3108	OCTANOL	235		2.85	2.85 =	C9H4CL3N1O2S1	N-(TRICHLOROMETHYLTHIO)PHTHALIMIDE/PHALAN/
3109	OLEYL ALCOHOL	406		3.13	3.70	C9H4CL3N1O2S1	N-TRICHLMETHIOPHTHALIMIDE/PHALAN/
3110	CYCLOHEXANE	379	19	-1.15		C9H4F3N3	2-TRIFLUOROMETHYL-5-CYANO-BENZIMIDAZOLE
3111	CHCL3	407	14	1.58		C9H5CL1I1N1O1	8-QUINOLINOL, 5-CHLORO-7- IODO
3112	HEXANE	299		0.58		C9H5CL1N4	CARBONYL CYANIDE, M-CHLORO-PHENYLHYDRAZONE
3113	CYCLOHEXANE	379	19	1.18		C9H5CL2F3N2	2-TRIFLUOROME-4, 6-DICL-5-ME-BENZIMIDAZOLE
3114	CYCLOHEXANE	379	19	-0.07		C9H6CL1F3N2	2-TRIFLUOROME-6-CL-5-ME-BENZIMIDAZOLE
3115	OCTANOL	216		2.73	2.73 =	C9H6CL1N1	6-CHLOROQUINOLINE
3116	OCTANOL	268		2.33	2.33 =	C9H6CL1N1	8-CHLOROQUINOLINE
3117	CHCL3	407	14	1.12		C9H6CL1N1O1	8-QUINOLINOL, 5-CHLORO
3118	OCTANOL	302		1.56	1.56 =	C9H6CL1N1O3	PHENOXYACETIC ACID, 3-CYANO-4-CHLORO
3119	OCTANE	408		2.63		C9H6CL1S1	QUINOLINE, 5-BROMO, 8-MERCAPTO
3120	OCTANOL	216		1.86	1.86 =	C9H6N2O2	5-NITROQUINOLINE
3121	OCTANOL	216		1.84	1.84 =	C9H6N2O2	6-NITROQUINOLINE
3122	OCTANOL	216		1.82	1.82 =	C9H6N2O2	7-NITROQUINOLINE
3123	OCTANOL	216		1.40	1.40 =	C9H6N2O2	8-NITROQUINOLINE
3124	HEXANE	299		0.21		C9H6N4	CARBONYL CYANIDE, PHENYLHYDRAZONE
3125	OCTANOL	218		1.39	1.39 =	C9H6O2	COUMARIN
3126	CYCLOHEXANE	304		0.48		C9H6O2	COUMARIN
3127	OILS	173		1.21	1.42 8	C9H6O2	COUMARIN
3128	OCTANOL	218		0.61	0.61 =	C9H6O2	1, 3-INDANONE
3129	OCTANOL	409		0.36	0.36 =	C9H6O2	1, 3-INDANONE
3130	CYCLOHEXANE	304		-0.12		C9H6O2	1, 3-INDANONE
3131	DIETHYL ETHER	3		1.04	1.03 A	C9H6O6	BENZENE, 1, 3, 5-TRICARBOXYLIC ACID
3132	I-BUTANOL	4		1.48	1.57	C9H6O6	BENZENE, 1, 3, 5-TRICARBOXYLIC ACID
3133	CYCLOHEXANE	141		2.46		C9H7CL1N2O4	STYRENE, 2-CHLORO, 5-NITRO, 8-NITRO, 8-METHYL
3134	OCTANOL	302		1.07	1.07 =	C9H7CL1O5	PHENOXYACETIC ACID, 3-CARBOXY-4-CHLORO
3135	CYCLOHEXANE	141		3.36		C9H7CL2N1O2	STYRENE, 3, 4-DICHLORO, 8-NITRO, 8-METHYL
3136	CYCLOHEXANE	141		4.40		C9H7CL2N2O2	STYRENE, 2, 6-DICHLORO, 8-NITRO, 8-METHYL
3137	CYCLOHEXANE	141		3.61		C9H7CL2N2O2	STYRENE, 2, 4-DICHLORO, 8-NITRO, 8-METHYL
3138	CYCLOHEXANE	379	19	-0.48		C9H7F3N2	2-TRIFLUOROME-5-METHYL BENZIMIDAZOLE
3139	OCTANOL	10		2.62	2.62 =	C9H7F3O2	M-TRIFLUOROMETHYLPHENYLACETIC ACID
3140	OCTANOL	10		2.36	2.36 =	C9H7F3O3	M-TRIFLUOROMETHYLPHENOXYACETIC ACID
3141	CYCLOHEXANONE	302		3.42		C9H7F3O3	M-TRIFLUOROMETHYLPHENOXYACETIC ACID
3142	CYCLOHEXANOL	302		2.72		C9H7F3O3	M-TRIFLUOROMETHYLPHENOXYACETIC ACID
3143	OCTANOL	10		2.86	2.86 =	C9H7F3O3S1	M-TRIFLUOROMETHYLTHIOPHENOXYACETIC ACID
3144	OCTANOL	10		2.48	2.48 =	C9H7F3O4	M-TRIFLUOROMETHOXYPHENOXYACETIC ACID
3145	OCTANOL	10		2.19	2.19 =	C9H7F3O5S1	M-TRIFLUOROMETHYLSULFONYLPHENOXYACETIC ACID
3146	CYCLOHEXANE	141		1.53		C9H7N1	CINNAMONITRILE
3147	OCTANOL	255		2.03	2.03 =	C9H7N1	QUINOLINE
3148	OCTANOL	309		2.06	2.06 =	C9H7N1	QUINOLINE
3149	CYCLOHEXANE	280		1.26		C9H7N1	QUINOLINE
3150	XYLENE	46		1.14	1.81 8	C9H7N1	QUINOLINE
3151	OCTANOL	186		2.08	2.08 =	C9H7N1	1-QUINOLINE
3152	CYCLOHEXANE	280		1.11		C9H7N1	I-QUINOLINE
3153	OCTANOL	65		1.26	1.26 =	C9H7N1O1	2-QUINOLINOL
3154	OCTANOL	410		1.96	1.96 =	C9H7N1O1	8-QUINOLINOL
3155	OCTANOL	349		2.02	2.02 =	C9H7N1O1	8-QUINOLINOL
3156	CHCL3	411		2.60	1.90 8	C9H7N1O1	8-QUINOLINOL
3157	CHCL3	412		2.64	2.06 8	C9H7N1O1	8-QUINOLINOL
3158	N-BUTANOL	410		1.67	1.81	C9H7N1O1	8-QUINOLINOL
3159	TOLUENE	410		2.21	2.26 8	C9H7N1O1	8-QUINOLINOL
3160	PRIM. PENTANOLS	410		1.79	1.96	C9H7N1O1	8-QUINOLINOL
3161	I-PENT. ACETATE	410		2.24	2.14	C9H7N1O1	8-QUINOLINOL
3162	CCL4	412		2.06	1.89 8	C9H7N1O1	8-QUINOLINOL
3163	ME-I-BUT.KETONE	410		2.13	1.90	C9H7N1O1	8-QUINOLINOL
3164	O-DICL. BENZENE	410		2.48		C9H7N1O1	8-QUINOLINOL
3165	OCTANOL	10		1.18	1.18 =	C9H7N1O2	M-CYANOPHENYLPHENYLACETIC ACID
3166	CYCLOHEXANE	304		0.67		C9H7N1O2	PHTHALIMIDE, N-METHYL
3167	OCTANOL	10		0.93	0.93 =	C9H7N1O3	PHENOXYACETIC ACID, 4-CYANO
3168	OCTANOL	10		0.95	0.95 =	C9H7N1O3	PHENOXYACETIC ACID, 3-CYANO
3169	CYCLOHEXANE	141		1.41		C9H7N1O4	STYRENE, 3, 4-DIOXYMETHYLENE, 8-NITRO
3170	CHCL3	413		2.51	1.94 8	C9H7N1S1	8-QUINOLINETHIOL
3171	BENZENE	413		2.20	2.08 8	C9H7N1S1	8-QUINOLINETHIOL
3172	CCL4	413		1.91	1.76 8	C9H7N1S1	8-QUINOLINETHIOL
3173	OCTANE	413		1.02		C9H7N1S1	8-QUINOLINETHIOL
3174	OCTANOL	283		2.92	2.92 =	C9H8	INDENE
3175	CYCLOHEXANE	141		3.01		C9H8BR1N1O2	STYRENE, 2-BROMO, 8-NITRO, 8-METHYL
3176	CYCLOHEXANE	141		3.05		C9H8BR1N1O2	STYRENE, 3-BROMO, 8-NITRO, 8-METHYL
3177	CYCLOHEXANE	141		2.63		C9H8CL1N1O2	STYRENE, 3-CHLORO, 8-NITRO, 8-METHYL
3178	CYCLOHEXANE	141		2.97		C9H8CL1N1O2	STYRENE, 4-CHLORO, 8-NITRO, 8-METHYL
3179	CYCLOHEXANE	141		3.31		C9H8CL1N1O2	STYRENE, 2-CHLORO, 8-NITRO, 8-METHYL
3180	OCTANOL	235		2.35	2.35 =	C9H8CL3N1O2S1	CAPTAN
3181	OLEYL ALCOHOL	406		2.15	2.72	C9H8CL3N1O2S1	N-(TRICLMETHIO)-TETRAHYDROPHTHALIMIDE/CAPTAN/
3182	OLEYL ALCOHOL	406		1.65	2.22	C9H8CL3N1O3S1	N-TRICLMETHIO-3, 6-ENODOXOHEXAHYDROPHTHALIMIDE
3183	OLEYL ALCOHOL	406		0.85	1.42	C9H8CL3N1O3S1	N-TRICLMETHIO-4, 5-EPOXYHEXAHYDROPHTHALIMIDE
3184	CYCLOHEXANE	141		2.47		C9H8F1N1O2	STYRENE, 4-FLUORO, 8-NITRO, 8-METHYL
3185	CYCLOHEXANE	141		2.57		C9H8F1N1O2	STYRENE, 3-FLUORO, 8-NITRO, 8-METHYL
3186	CYCLOHEXANE	141		2.67		C9H8F1N1O2	STYRENE, 2-FLUORO, 8-NITRO, 8-METHYL
3187	OCTANOL	384		2.37	2.37 =	C9H8F3N1O2	N-METHYL-3-TRIFLUOROMETHYLPHENYL CARBAMATE
3188	OILS	382	24	3.99	4.82 A	C9H8I2O3	BENZOIC ACID, 4-OH, 3, 5-DI-1000, ETHYL ESTER
3189	OILS	382	24	2.30	3.28 A	C9H8I2O4	BENZOIC ACID, 3, 5-DI-1000, 4-OH, 8-HYDROXYETHYL ESTER
3190	OCTANOL	216		1.16	1.16 =	C9H8N2	5-AMINOQUINOLINE
3191	OCTANOL	216		1.79	1.79 =	C9H8N2	8-AMINOQUINOLINE
3192	HEXADECANE	314		-1.78		C9H8N2	O-PHENYLENE DIAMINE
3193	DECANE	314		-1.78		C9H8N2	O-PHENYLENE DIAMINE
3194	CYCLOHEXANE	280		1.28		C9H8N2	QUINOLINE, 3-AMINO
3195	OCTANOL	384		1.11	1.11 =	C9H8N2O2	N-METHYL-2-CYANOPHENYL CARBAMATE
3196	OCTANOL	384		0.97	0.97 =	C9H8N2O2	N-METHYL-3-CYANOPHENYL CARBAMATE
3197	OCTANOL	384		0.95	0.95 =	C9H8N2O2	N-METHYL-4-CYANOPHENYL CARBAMATE
3198	OCTANOL	216		0.36	0.36 =	C9H8N2O2S1	8-SULFONAMIDQUINOLINE
3199	CYCLOHEXANE	141		1.52		C9H8N2O4	STYRENE, 2-NITRO, 8-NITRO, 8-METHYL
3200	CYCLOHEXANE	141		1.59		C9H8N2O4	STYRENE, 4-NITRO, 8-NITRO, 8-METHYL

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3201	CYCLOHEXANE	141		1.62		C9H8N2O4	STYRENE, 3-NITRO, 8-NITRO, 8-METHYL
3202	OCTANOL	238			1.88 =	C9H8O1	ACRYLOPHENDONE
3203	CYCLOHEXANE	304		0.96		C9H8O1	1-INDANONE
3204	OCTANOL	218			2.13 =	C9H8O2	CINNAMIC ACID/TRANS/
3205	CHCL3	149		1.20	2.31 A	C9H8O2	CINNAMIC ACID/TRANS/
3206	CHCL3	29	12	1.97	3.01 A	C9H8O2	CINNAMIC ACID/TRANS/
3207	XYLENE	46		0.15	1.97 A	C9H8O2	CINNAMIC ACID/TRANS/
3208	TOLUENE	29	12	1.60	2.98 A	C9H8O2	CINNAMIC ACID/TRANS/
3209	ME-I-BUT.KETONE	149		2.33	2.08	C9H8O2	CINNAMIC ACID/TRANS/
3210	OCTANOL	268		3.25	3.25 =	C9H8O2S1	5,7-DIMETHYL-2-OXO-1,3-BENZOXTIOL
3211	OCTANOL	186			1.23 =	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3212	OCTANOL	218		1.19	1.19 =	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3213	DIETHYL ETHER	46		1.15	1.13 A	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3214	CHCL3	29		0.26	1.45 A	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3215	CHCL3	254		0.30	1.46 A	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3216	XYLENE	46		-0.57	1.16 A	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3217	TOLUENE	29		-0.49	1.12 A	C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3218	N-HEPTANE	254		-1.52		C9H8O4	ACETYSALICYLIC ACID/ASPIRIN/
3219	OCTANOL	10		1.14	1.14 =	C9H8O4	M-CARBOXYPHENYLACETIC ACID
3220	DIETHYL ETHER	414		0.40	0.46 A	C9H8O4	HOMOPHTHALIC ACID
3221	OCTANOL	10		1.83	1.83 =	C9H8O4	ISOPHTHALIC ACID, METHYL ESTER
3222	OCTANOL	10		1.11	1.11 =	C9H8O5	PHENOXYACETIC ACID, M-CARBOXY
3223	CYCLOHEXANOL	302		1.75		C9H8O5	PHENOXYACETIC ACID, M-CARBOXY
3224	OCTANOL	255		1.72	1.72 =	C9H9N1	BENZYLACETONITRILE
3225	OCTANOL	302		1.66	1.66 =	C9H9N1	BENZYLACETONITRILE
3226	OCTANOL	309		2.60	2.60 =	C9H9N1	INOOLE, 3-METHYL
3227	OCTANOL	309		2.68	2.68 =	C9H9N1	INOOLE, 5-METHYL
3228	CYCLOHEXANE	304		-2.21		C9H9N1O1	CINNAMAMIDE
3229	OCTANOL	141		2.52	2.52 =	C9H9N1O2	STYRENE, 8-METHYL-8-NITRO
3230	CYCLOHEXANE	141		2.69		C9H9N1O2	STYRENE, 8-METHYL-8-NITRO
3231	OCTANOL	141	26		2.28 =	C9H9N1O2	STYRENE, 4-METHYL-8-NITRO
3232	CYCLOHEXANE	141		2.40		C9H9N1O2	STYRENE, 2-METHYL, 8-NITRO
3233	CYCLOHEXANE	141		2.42		C9H9N1O2	STYRENE, 4-METHYL, 8-NITRO
3234	OCTANOL	56		1.88	1.88 =	C9H9N1O3	O-AMINOBENZOIC ACID, N-ACETYL
3235	DIETHYL ETHER	3		-0.41	-0.25 A	C9H9N1O3	GLYCINE, N-BENZOYL/HIPPURIC ACID/
3236	DIETHYL ETHER	46		-0.22	-0.07 A	C9H9N1O3	GLYCINE, N-BENZOYL/HIPPURIC ACID/
3237	OCTANOL	141		2.30	2.30 =	C9H9N1O3	STYRENE, 3-METHOXY-8-NITRO
3238	CYCLOHEXANE	141		1.73		C9H9N1O3	STYRENE, 4-METHOXY, 8-NITRO
3239	CYCLOHEXANE	141		1.89		C9H9N1O3	STYRENE, 3-METHOXY, 8-NITRO
3240	CYCLOHEXANE	141		2.15		C9H9N1O3	STYRENE, 2-METHOXY, 8-NITRO
3241	OCTANOL	141		1.88	1.88 =	C9H9N1O4	STYRENE, 4-HYDROXY-3-METHOXY-8-NITRO
3242	CYCLOHEXANE	141		0.04		C9H9N1O4	STYRENE, 4-HYDROXY, 3-METHOXY, 8-NITRO
3243	OCTANOL	393	63	0.35	0.35 =	C9H9N3O2S2	SULFATHIAZOLE
3244	OCTANOL	56		0.05	0.05 =	C9H9N3O2S2	SULFATHIAZOLE
3245	DIETHYL ETHER	342		-0.72	0.21 B	C9H9N3O2S2	SULFATHIAZOLE
3246	DIETHYL ETHER	113	15	-0.99	-0.03 B	C9H9N3O2S2	SULFATHIAZOLE
3247	CHCL3	343	2	-0.82	-0.16 N	C9H9N3O2S2	SULFATHIAZOLE
3248	CHCL3	113	15	-0.75	-0.09 N	C9H9N3O2S2	SULFATHIAZOLE
3249	CHCL3	326		-0.87	-0.21 N	C9H9N3O2S2	SULFATHIAZOLE
3250	CHCL3	344	44	-0.80	-0.14 N	C9H9N3O2S2	SULFATHIAZOLE
3251	CHCL3	393	63	-0.73	-0.68 N	C9H9N3O2S2	SULFATHIAZOLE
3252	CHCL3	415	44	-0.74	-0.08 N	C9H9N3O2S2	SULFATHIAZOLE
3253	BENZENE	343	2	-0.96	0.43 A	C9H9N3O2S2	SULFATHIAZOLE
3254	1-PENT. ACETATE	343	2	-0.28	-0.47	C9H9N3O2S2	SULFATHIAZOLE
3255	CCL4	343	2	-1.57	0.54 A	C9H9N3O2S2	SULFATHIAZOLE
3256	N-HEPTANE	415	44	-4.60		C9H9N3O2S2	SULFATHIAZOLE
3257	OCTANOL	235		3.23	3.23 =	C9H10	ALLYLBENZENE
3258	OCTANOL	9		3.35	3.35 =	C9H10	1-PROPENE, 1-PHENYL
3259	HEXANE	391		0.58		C9H10CL1N1O2	N-METHYL CARBAMATE, 3-METHYL, 4-CHLOROPHENYL
3260	OCTANOL	384		2.57	2.57 =	C9H10CL1N1O2	N-METHYL-3-METHYL-4-CHLOROPHENYL CARBAMATE
3261	N-HEPTANE	416	14	0.49		C9H10CL1N1O3	P-AMINOSALICYLIC ACID, 2-CHLOROETHYL ESTER
3262	OLEYL ALCOHOL	406		2.40	2.97	C9H10CL3N1O2S1	N-TRICL METHIOHEXAHYDROPHTHALIMIDE
3263	CHCL3	306		0.48	1.60 A	C9H10I1N1O4S1	N-(P-1000BENZENESULFONYL)ALANINE
3264	CCL4	306	12	-1.40	0.65 A	C9H10I1N1O4S1	N-(P-1000BENZENESULFONYL)ALANINE
3265	CLCH2CH2CL	306		0.74		C9H10I1N1O4S1	N-(P-1000BENZENESULFONYL)ALANINE
3266	DIETHYL ETHER	306		0.62	0.70 A	C9H10I1N1O5S1	N-(P-1000BENZENESULFONYL)SERINE
3267	CHCL3	306	12	-1.30	0.04 A	C9H10I1N1O5S1	N-(P-1000BENZENESULFONYL)SERINE
3268	ETHYL ACETATE	306		1.34	1.49 A	C9H10I1N1O5S1	N-(P-1000BENZENESULFONYL)SERINE
3269	CLCH2CH2CL	306		-0.82		C9H10I1N1O5S1	N-(P-1000BENZENESULFONYL)SERINE
3270	OCTANOL	206		2.35	2.35 =	C9H10N2	BENZIMIDAZOLE, 5, 6-DIMETHYL
3271	OCTANOL	10		0.26	0.26 =	C9H10N2O4	PHENOXYACETIC ACID, 3-UREIDIO
3272	OCTANOL	56		0.54	0.54 =	C9H10N4O2S2	SULFAMETHIZOLE
3273	CHCL3	343	2	-0.05	0.53 N	C9H10N4O2S2	SULFAMETHIZOLE
3274	CHCL3	415	44	-0.43	0.21 N	C9H10N4O2S2	SULFAMETHIZOLE
3275	BENZENE	343	2	-1.77	-0.36 A	C9H10N4O2S2	SULFAMETHIZOLE
3276	1-PENT. ACETATE	343	2	0.34	0.18	C9H10N4O2S2	SULFAMETHIZOLE
3277	CCL4	343	2	-1.82	0.33 A	C9H10N4O2S2	SULFAMETHIZOLE
3278	N-HEPTANE	415	44	-3.83		C9H10N4O2S2	SULFAMETHIZOLE
3279	OCTANOL	218		2.94	2.94 =	C9H10O1	ALLYLPHENYL ETHER
3280	OCTANOL	56		1.95	1.95 =	C9H10O1	CINNAMYL ALCOHOL
3281	CYCLOHEXANE	325		0.61		C9H10O1	4-INDANOL
3282	CYCLOHEXANE	325		0.48		C9H10O1	5-INDANOL
3283	OCTANOL	255		1.44	1.44 =	C9H10O2	2-PROPANONE, I-PHENYL
3284	OCTANOL	255		1.96	1.96 =	C9H10O2	ACETIC ACID, BENZYL ESTER
3285	CHCL3	254		0.71	1.83 A	C9H10O2	P-HYDROXYPROPIOPHENONE
3286	N-HEPTANE	254		-0.92		C9H10O2	P-HYDROXYPROPIOPHENONE
3287	OCTANOL	10		1.95	1.95 =	C9H10O2	M-METHYLPHENYLACETIC ACID
3288	OCTANOL	10		1.86	1.86 =	C9H10O2	P-METHYLPHENYLACETIC ACID
3289	OCTANOL	255		1.83	1.83 =	C9H10O2	PHENYLACETIC ACID, METHYL ESTER
3290	OILS	362		0.51	1.68 A	C9H10O2	A-PHENYLPROPIONIC ACID
3291	OILS	385		0.75	1.91 A	C9H10O2	A-PHENYLPROPIONIC ACID
3292	OCTANOL	255		1.84	1.84 =	C9H10O2	B-PHENYLPROPIONIC ACID
3293	CHCL3	46		1.10	2.22 A	C9H10O2	B-PHENYLPROPIONIC ACID
3294	OILS	361		0.72	1.91 A	C9H10O2	B-PHENYLPROPIONIC ACID
3295	OILS	417		0.82	1.92 A	C9H10O2	B-PHENYLPROPIONIC ACID
3296	XYLENE	46		0.46	2.29 A	C9H10O2	B-PHENYLPROPIONIC ACID
3297	DIETHYL ETHER	248		1.34	1.29 A	C9H10O3	BENZALDEHYDE, 3-ETHOXY-4-HYDROXY/ETHYL VANILLIN/
3298	CYCLOHEXANE	248		0.03		C9H10O3	BENZALDEHYDE, 3-ETHOXY-4-HYDROXY/ETHYL VANILLIN/
3299	BENZENE	248		1.43	2.81 A	C9H10O3	BENZALDEHYDE, 3-ETHOXY-4-HYDROXY/ETHYL VANILLIN/
3300	CLCH2CH2CL	248		1.86		C9H10O3	BENZALDEHYDE, 3-ETHOXY-4-HYDROXY/ETHYL VANILLIN/

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3301	OCTANOL	56		2.47	2.47 =	C9H10O3	P-HYDROXYBENZOIC ACID, ETHYL ESTER
3302	OCTANOL	10		1.50	1.50 =	C9H10O3	M-METHOXYPHENYLACETIC ACID
3303	OCTANOL	10		1.42	1.42 =	C9H10O3	P-METHOXYPHENYLACETIC ACID
3304	OILS	383		0.45	1.63 A	C9H10O3	P-METHOXYPHENYLACETIC ACID
3305	OCTANOL	10		1.78	1.78 =	C9H10O3	M-METHYLPHENOXYACETIC ACID
3306	OCTANOL	10		2.10	2.10 =	C9H10O3	O-METHYLPHENOXYACETIC ACID
3307	OCTANOL	268	19	1.86	1.86 =	C9H10O3	P-METHYLPHENOXYACETIC ACID
3308	CYCLOHEXANONE	302		2.46	2.46 =	C9H10O3	P-METHYLPHENOXYACETIC ACID
3309	CYCLOHEXANOL	302		2.05	2.05 =	C9H10O3	P-METHYLPHENOXYACETIC ACID
3310	OCTANOL	10		1.90	1.90 =	C9H10O3S1	PHENOXYACETIC ACID, 3-METHYLTHIO
3311	OILS	173		0.86	1.98 A	C9H10O4	GLYCOL SALICYLATE
3312	OCTANOL	10		0.93	0.93 =	C9H10O4	PHENOXYACETIC ACID, 2-METHOXY
3313	OCTANOL	10		1.23	1.23 =	C9H10O4	PHENOXYACETIC ACID, 4-METHOXY
3314	OCTANOL	10		1.38	1.38 =	C9H10O4	PHENOXYACETIC ACID, 3-METHOXY
3315	CYCLOHEXANONE	302		2.40		C9H10O4	PHENOXYACETIC ACID, 3-METHOXY
3316	CYCLOHEXANOL	302		1.80		C9H10O4	PHENOXYACETIC ACID, 3-METHOXY
3317	OCTANOL	10		0.06	0.06 =	C9H10O4S1	M-METHYLSULFONYLPHENYLACETIC ACID
3318	DIETHYL ETHER	323		1.07	1.05 A	C9H10O5	BENZOIC ACID, 4-HYDROXY, 3,5-DIMETHOXY (ME-SYRINGATE)
3319	OCTANOL	10		0.01	0.01 =	C9H10O5S1	PHENOXYACETIC ACID, M-METHYLSULFONYL
3320	CYCLOHEXANOL	302		0.88		C9H10O5S1	PHENOXYACETIC ACID, M-METHYLSULFONYL
3321	OCTANOL	255		3.72	3.72 =	C9H11BR1	PROPYLBROMIDE, G-PHENYL
3322	OCTANOL	255		3.55	3.55 =	C9H11CL1	PROPYLCHLORIDE, G-PHENYL
3323	HEXANE	391		1.41		C9H11CL3N1O3P1	ETHYLPHOSPHORAMIDATE, O-ME, O-(2,4,5-TRICHLOROPHENYL)
3324	OCTANOL	255		2.95	2.95 =	C9H11F1	PROPYLFLUORIDE, G-PHENYL
3325	OCTANOL	226		-1.38	-1.38 =	C9H11FIN2O5	2'-DEOXY-5-FLUOROURIDINE (27640)
3326	OCTANOL	56		3.90	3.90 =	C9H11I1	PROPYLIODIDE, G-PHENYL
3327	BENZENE	72		0.18	1.55 A	C9H11N1O1	O-ACETAMIDOTOLUENE
3328	OCTANOL	255		0.91	0.91 =	C9H11N1O1	PROPIONAMIDE, 3-PHENYL
3329	OILS	173		-0.20	1.01 A	C9H11N1O2	ACETANILIDE, P-METHOXY/METHACETIN/
3330	OILS	224		0.30	1.47 A	C9H11N1O2	ACETANILIDE, P-METHOXY/METHACETIN/
3331	OCTANOL	349		2.57	2.57 =	C9H11N1O2	O-AMINOBENZOIC ACID, ETHYL ESTER
3332	1-PENT. ACETATE	418	3	2.50	2.41	C9H11N1O2	P-AMINOBENZOIC ACID, ETHYL ESTER
3333	OLEYL ALCOHOL	390	44	1.61	2.15	C9H11N1O2	P-AMINOBENZOIC ACID, ETHYL ESTER
3334	OCTANOL	186		2.30	2.30 =	C9H11N1O2	ETHYLCARBAMATE, N-PHENYL
3335	OILS	173		1.99	3.00 A	C9H11N1O2	ETHYLCARBAMATE, N-PHENYL
3336	OILS	224		2.18	3.26 A	C9H11N1O2	ETHYLCARBAMATE, N-PHENYL
3337	OCTANOL	276		0.98	0.98 =	C9H11N1O2	O-METHOXYACETANILIDE
3338	OCTANOL	276		1.14	1.14 =	C9H11N1O2	P-METHOXYACETANILIDE
3339	HEXANE	391		0.04		C9H11N1O2	N-METHYLCARBAMATE, 3-METHYLPHENYL
3340	OCTANOL	384		1.70	1.70 =	C9H11N1O2	N-METHYL-M-TOLYLCARBAMATE
3341	OCTANOL	384		1.46	1.46 =	C9H11N1O2	N-METHYL-O-TOLYLCARBAMATE
3342	OCTANOL	384		1.66	1.66 =	C9H11N1O2	N-METHYL-P-TOLYLCARBAMATE
3343	OCTANOL	56		-1.43	-1.43 =	C9H11N1O2	PHENYLALANINE, DL
3344	OCTANOL	384		1.92	1.92 =	C9H11N1O2S1	N-METHYL-4-METHYLTHIOPHENYLCARBAMATE
3345	N-HEPTANE	370	14	0.98		C9H11N1O3	P-AMINOSALICYLIC ACID, ETHYL ESTER
3346	OCTANOL	384		0.81	0.81 =	C9H11N1O3	N-METHYL-2-METHOXYPHENYLCARBAMATE
3347	OCTANOL	384		1.30	1.30 =	C9H11N1O3	N-METHYL-3-METHOXYPHENYLCARBAMATE
3348	OCTANOL	384		1.20	1.20 =	C9H11N1O3	N-METHYL-4-METHOXYPHENYLCARBAMATE
3349	OCTANOL	56		-2.26	-2.26 =	C9H11N1O3	TYROSINE, L
3350	N-HEPTANE	370	14	-0.82		C9H11N1O4	P-AMINOSALICYLIC ACID, 2-HYDROXYETHYL ESTER
3351	OCTANOL	56		3.66	3.66 =	C9H12	ISOPROPYLBENZENE
3352	OCTANOL	298		3.66	3.66 =	C9H12	ISOPROPYLBENZENE
3353	OCTANOL	255		3.68	3.68 =	C9H12	PROPYLBENZENE
3354	OCTANOL	218		3.57	3.57 =	C9H12	PROPYLBENZENE
3355	BENZENE	311	6	-1.15		C9H12B1N1O4	PHENYLBORONIC ACID, M-ETHOXYACETAMID
3356	BENZENE	311	6	-2.41		C9H12B1N1O4	PHENYLBORONIC ACID, P-8-ALANINYL
3357	CHCL3	396	31	2.31	1.75 B	C9H12CL1N1	4-CHLOROAMPHETAMINE
3358	N-HEPTANE	396	31	0.96		C9H12CL1N1	4-CHLOROAMPHETAMINE
3359	N-BUTANOL	295	52	0.00	-0.51	C9H12CL1N1O2	PHENYLALANINE HYDROCHLORIDE
3360	N-BUTANOL	295	52	-0.25	-0.86	C9H12CL1N1O3	TRYROSINE HYDROCHLORIDE
3361	OCTANOL	341	60	0.17	0.17 =	C9H12N2	NORNICOTINE
3362	OCTANOL	186	27	0.98		C9H12N2O1	UREA, 1,1-DIMETHYL-3-PHENYL
3363	OCTANOL	218		1.02	1.02 =	C9H12N2O1	UREA, 1,3-DIMETHYL PHENYL
3364	N-HEPTANE	419		-2.52		C9H12N2O1	UREA, ETHYLPHENYL-
3365	N-HEPTANE	419		-2.16		C9H12N2O1	UREA, METHYL, M-TOLYL-
3366	N-HEPTANE	419		-1.85		C9H12N2O1	UREA, METHYL, O-TOLYL-
3367	N-HEPTANE	419		-1.89		C9H12N2O1	UREA, METHYL, P-TOLYL-
3368	CHCL3	399	1	2.49	2.97 N	C9H12N2O2S1	BARBITURIC ACID, 5-ALLYL, 5-ETHYL, 2-THIO
3369	1-PENT. ACETATE	399	1	2.92	2.85	C9H12N2O2S1	BARBITURIC ACID, 5-ALLYL, 5-ETHYL, 2-THIO
3370	CCL4	399	1	1.36	3.02 A	C9H12N2O2S1	BARBITURIC ACID, 5-ALLYL, 5-ETHYL, 2-THIO
3371	OCTANOL	399		0.95	0.95 =	C9H12N2O3	BARBITURIC ACID, 5-ALLYL, 5-ETHYL
3372	CHCL3	399	1	0.12	0.69 N	C9H12N2O3	BARBITURIC ACID, 5-ALLYL, 5-ETHYL
3373	BENZENE	399	1	-0.51	0.87 A	C9H12N2O3	BARBITURIC ACID, 5-ALLYL, 5-ETHYL
3374	1-PENT. ACETATE	399	1	0.98	0.84	C9H12N2O3	BARBITURIC ACID, 5-ALLYL, 5-ETHYL
3375	CCL4	399	1	-1.20	0.84 A	C9H12N2O3	BARBITURIC ACID, 5-ALLYL, 5-ETHYL
3376	N-BUTANOL	420	37	-0.80	-1.62	C9H12N2O6	URIOINE
3377	N-BUTANOL	253	36	-0.92	-1.79	C9H12N2O6	URIOINE
3378	CCL4	234	12	0.74		C9H12N4O3	8-METHOXYCAFFEINE
3379	CYCLOHEXANE	132		0.89		C9H12O1	PHENOL, 5-ETHYL, 3-METHYL
3380	CYCLOHEXANE	325		0.73		C9H12O1	PHENOL, 5-ETHYL, 3-METHYL
3381	CYCLOHEXANE	325		0.74		C9H12O1	PHENOL, 3-ETHYL, 4-METHYL
3382	CYCLOHEXANE	325		0.97		C9H12O1	PHENOL, 3-ETHYL, 2-METHYL
3383	CYCLOHEXANE	325		1.01		C9H12O1	PHENOL, 4-ETHYL, 2-METHYL
3384	CYCLOHEXANE	325		1.02		C9H12O1	PHENOL, 5-ETHYL, 2-METHYL
3385	CYCLOHEXANE	325		1.06		C9H12O1	PHENOL, 2-ETHYL, 5-METHYL
3386	OCTANOL	255		1.88	1.88 =	C9H12O1	PROPANOL, 3-PHENYL
3387	HEXANE	372		0.08		C9H12O1	PROPANOL, 3-PHENYL
3388	CYCLOHEXANE	325		0.83		C9H12O1	M-PROPYLPHENOL
3389	CYCLOHEXANE	325		1.18		C9H12O1	O-PROPYLPHENOL
3390	CYCLOHEXANE	133		1.08		C9H12O1	O-1-PROPYLPHENOL
3391	CYCLOHEXANE	325		0.86		C9H12O1	P-PROPYLPHENOL
3392	CYCLOHEXANE	325		0.77		C9H12O1	P-1-PROPYLPHENOL
3393	CYCLOHEXANE	133		0.81		C9H12O1	P-1-PROPYLPHENOL
3394	CYCLOHEXANE	325		0.97		C9H12O1	2,3,5-TRIMETHYLPHENOL
3395	CYCLOHEXANE	325		0.94		C9H12O1	2,4,5-TRIMETHYLPHENOL
3396	CYCLOHEXANE	325		1.24		C9H12O1	2,4,6-TRIMETHYLPHENOL
3397	CYCLOHEXANE	325		0.63		C9H12O1	3,4,5-TRIMETHYLPHENOL
3398	DIETHYL ETHER	332		2.37	2.29 A	C9H12O2	BENZENE, 1,2-DIHYDROXY-4-PROPYL
3399	DI-BUTYL ETHER	332		1.65		C9H12O2	BENZENE, 1,2-DIHYDROXY, 4-PROPYL
3400	OI-1-PR. ETHER	332		2.03	2.94	C9H12O2	BENZENE, 1,2-DIHYDROXY, 4-PROPYL



NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3401	DIETHYL ETHER	323		-1.17	-0.91 A	C9H12O2	OIMETHYLGLUAIACOL
3402	OILS	327		1.78	2.80 A	C9H12O2	PHENOL, 2-METHOXY-4-ETHYL/P-ETHYLGLUAIACOL//
3403	PARAFFINS	327		1.20		C9H12O2	PHENOL, 2-METHOXY-4-ETHYL/P-ETHYLGLUAIACOL/
3404	OCTANOL	238		1.53	1.53 =	C9H12O3	BENZENE, 1,2,3-TRIMETHOXY
3405	OILS	327		1.04	2.13 A	C9H12O3	PHENOL, 2,6-DIMETHOXY-4-METHYL
3406	PARAFFINS	327		0.15		C9H12O3	PHENOL, 2,6-DIMETHOXY-4-METHYL
3407	OCTANOL	238		0.70	0.70 =	C9H12O3	PHENYLGLYCEROL
3408	DIETHYL ETHER	323		-0.45	-0.28 A	C9H12O4	BENZYLALCOHOL, 3,5-DIMETHOXY-4-HYDROXY/SYRINGYL ALCOHOL/
3409	BENZENE	311	6	0.35		C9H1381O2	PHENYLBORONIC ACID, 2,4,6-TRIMETHYL
3410	OCTANOL	373		-1.43	-1.43 =	C9H13CL1N2O1	N1-PROPYLNICOTINAMIDE CHLORIDE
3411	CHCL3	396	31	2.17	1.63 B	C9H13N1	AMPHETAMINE
3412	N-HEPTANE	138		0.53		C9H13N1	AMPHETAMINE
3413	N-HEPTANE	396	31	0.28		C9H13N1	AMPHETAMINE
3414	N-HEPTANE	421	44	1.57		C9H13N1	BENZYL OIMETHYLAMINE
3415	DIETHYL ETHER	46		1.08	1.82 B	C9H13N1	BENZYLETHYLAMINE
3416	DIETHYL ETHER	374		1.21	1.92 B	C9H13N1	BENZYLETHYLAMINE
3417	XYLENE	46		1.72	2.37 B	C9H13N1	BENZYLETHYLAMINE
3418	XYLENE	422		0.96	1.60 B	C9H13N1	ETHYL AMINE, 1-METHYL, 2-PHENYL
3419	DIETHYL ETHER	374		1.08	1.80 B	C9H13N1	PHENYL-I-PROPYLAMINE
3420	OCTANOL	255		1.83	1.83 =	C9H13N1	PROPYLAMINE, 3-PHENYL
3421	OCTANOL	312		2.45	2.45 =	C9H13N1	N-PROPYLANILINE
3422	CYCLOHEXANE	337		2.95		C9H13N1	O-TOLUIDINE, N,N-DIMETHYL
3423	CHCL3	396	31	-1.45	-1.46 B	C9H13N1O1	NOREPHEORINE
3424	N-HEPTANE	396	31	-3.00		C9H13N1O1	NOREPHEORINE
3425	CHCL3	396	31	-1.00	-1.07 B	C9H13N1O1	NORPSEUODEPHEORINE
3426	N-HEPTANE	396	31	-2.00		C9H13N1O1	NORPSEUODEPHEORINE
3427	HEXANE	376		1.53		C9H13N1O4	N-ME-N-ACETYLCARBAMIC ACID, 2,3-DI-H-2-MEFURANYL ESTER
3428	OCTANOL	283	65	0.37	0.37 =	C9H13N3O1.H3PO4	IPRONIAZIO PHOSPHATE
3429	OCTANOL	227		-2.13	-2.13 =	C9H13N3O5	I-8-O-ARABINOFURANOSYLCYTOSINE HCL(63878)(PKA=4.21)
3430	N-BUTANOL	420	37	-0.97	-1.86	C9H13N3O5	CYTIDINE
3431	OCTANOL	227		-0.79	-0.79 =	C9H13N3O5	CYTOSINE ARABINOSIDE (63878)
3432	OCTANOL	397		1.25	1.25 =	C9H13N5	ADENINE, 9-BUTYL
3433	OCTANOL	397		0.14	0.14 =	C9H13N5O1	ADENINE, 9-(1-HYDROXYMETHYL-PROPYL)
3434	OCTANOL	65	53	-2.69	-2.69 =	C9H148R1N1	BUTYLPIRIDINIUM BROMIDE
3435	OCTANOL	65	46	-2.07	-2.07 =	C9H148R1N1	PHENYLTRIMETHYLAMMONIUM BROMIDE
3436	OCTANOL	268	46	-1.09	-1.09 =	C9H14CL1N1	3-PHENYLPROPYLAMINE HYDROCHLORIDE
3437	OCTANOL	341	60	0.82	0.82 =	C9H14N2	N,N-DIMETHYL-2-(3-PYRIDYL)ETHYLAMINE
3438	OCTANOL	341	60	0.54	0.54 =	C9H14N2	N-ETHYL-2-(3-PYRIDYL)ETHYLAMINE
3439	OCTANOL	341	60	0.90	0.90 =	C9H14N2	N-PROPYL-3-(3-PYRIDYL)METHYLAMINE
3440	OCTANOL	341	60	0.82	0.82 =	C9H14N2	N-I-PROPYL-3-PYRIDYLMETHYLAMINE
3441	CHCL3	399	I	1.54	1.09 B	C9H14N2O3	BARBITURIC ACID, 5,5-DIETHYL, 1-METHYL/METHARBITAL/
3442	1-PENT. ACETATE	399	I	1.31	1.18	C9H14N2O3	BARBITURIC ACID, 5,5-DIETHYL, 1-METHYL/METHARBITAL/
3443	CCL4	399	I	0.31	0.23 B	C9H14N2O3	BARBITURIC ACID, 5,5-DIETHYL, 1-METHYL/METHARBITAL/
3444	OCTANOL	399		0.97	0.97 =	C9H14N2O3	BARBITURIC ACID, 5-ETHYL-5-I-PROPYL/PROBARBITAL/
3445	CHCL3	399	I	0.20	0.77 N	C9H14N2O3	BARBITURIC ACID, 5-ETHYL-5-I-PROPYL/PROBARBITAL/
3446	OILS	345		-0.14	1.07 A	C9H14N2O3	BARBITURIC ACID, 5-ETHYL-5-I-PROPYL/PROBARBITAL/
3447	BENZENE	399	I	-0.58	0.80 A	C9H14N2O3	BARBITURIC ACID, 5-ETHYL-5-I-PROPYL/PROBARBITAL/
3448	1-PENT. ACETATE	399	I	0.95	0.81	C9H14N2O3	BARBITURIC ACID, 5-ETHYL-5-I-PROPYL/PROBARBITAL/
3449	CCL4	399	I	-1.21	-0.85 N	C9H14N2O3	BARBITURIC ACID, 5-ETHYL-5-I-PROPYL/PROBARBITAL/
3450	OCTANOL	181	10	0.40	0.40 =	C9H14N3O8P1	CYTIOLYLIC ACID
3451	N-BUTANOL	181	10	-0.15		C9H14N3O8P1	CYTIOLYLIC ACID
3452	PRIM. PENTANOLS	181	10	0.43		C9H14N3O8P1	CYTIOLYLIC ACID
3453	HEXANOL	181	18	-0.15		C9H14N3O8P1	CYTIOLYLIC ACID
3454	OCTANOL	134		0.38	0.38 =	C9H14N4O2S1	6-(2-PENHYDROXYPRANYL)-4-AM-3-METHIO-1,2,4-TRIAZINONE
3455	DIETHYL ETHER	423		2.63	2.42 A	C9H14O1S1	A-CYCLOHEXYLTHIOACRYLIC ACID
3456	OCTANOL	186		3.84	3.84 =	C9H14O1S1	PHENOL, P-(TRIMETHYLSILYL)
3457	OILS	347		1.94	2.96 A	C9H14O2	SORBIC ACID, PROPYL ESTER
3458	DIETHYL ETHER	3		0.15	0.25 A	C9H14O6	GLYCERYL TRIACETATE
3459	OILS	2		-0.36	0.14 B	C9H14O6	GLYCERYL TRIACETATE
3460	OILS	214		-0.52	0.01 B	C9H14O6	GLYCERYL TRIACETATE
3461	DIETHYL ETHER	3		-0.37	-0.21 A	C9H14O7	TRIMETHYL CITRATE
3462	OILS	2		-1.33	0.03 A	C9H14O7	TRIMETHYL CITRATE
3463	OCTANOL	298		4.72	4.72 =	C9H14S1	SILANE, PHENYL-TRIMETHYL
3464	BENZENE	311	6	1.52		C9H1581O2S1	PHENYLBORONIC ACID, P-TRIMETHYLSILYL
3465	OCTANOL	348		0.41	0.41 =	C9H15N1O2	N-BUTYROYLCYCLOBUTANECARBOXAMIDE
3466	OCTANOL	348		0.26	0.26 =	C9H15N1O2	N-I-BUTYROYLCYCLOBUTANECARBOXAMIDE
3467	OCTANOL	227		2.83	2.83 =	C9H16CL1N3O2	1-(2-CLET)-3-CYCLOHEXYL-1-NITROSUREA(79037)
3468	DECANOL	289		2.69		C9H16CL1N3O2	1-(2-CLET)-3-CYCLOHEXYL-1-NITROSUREA(79037)
3469	OCTANOL	80		1.40	1.40 =	C9H16N1O3	UREA, 1,3-DIBUTYRYL
3470	OILS	168		-0.23	0.25 B	C9H16N2O2	OIPROPYLHYDANTOIN
3471	OCTANOL	134		1.85	1.85 =	C9H16N4O1S1	3-METHIO-4-AMINO-6-1-PENT-1,2,4-TRIAZINE-5-ONE
3472	OCTANOL	134		2.06	2.06 =	C9H16N4O1S1	3-I-PRTHIO-4-AMINO-6-1-PR-1,2,4-TRIAZINE-5-ONE
3473	OCTANOL	134		2.12	2.12 =	C9H16N4O1S1	3-N-PRTHIO-4-AMINO-6-1-PR-1,2,4-TRIAZINE-5-ONE
3474	OCTANOL	5		1.57	1.57 =	C9H16O4	AZELAIC ACID
3475	DIETHYL ETHER	212		1.20	1.17 A	C9H16O4	AZELAIC ACID
3476	DIETHYL ETHER	194	12	0.97	1.00 A	C9H16O4	AZELAIC ACID
3477	CHCL3	194	12	-0.58	0.71 A	C9H16O4	AZELAIC ACID
3478	1-BUTANOL	4		1.66	1.83	C9H16O4	AZELAIC ACID
3479	OCTANOL	235	67	2.29	2.29 =	C9H17N1	METHYL-1-PROPYL-(1,1-DIMETHYLPROPYN-3-YL)AMINE
3480	OILS	290		0.26	1.43 A	C9H17N1O3	DIETHYL ACETURETHANE/OETONAL/
3481	N-BUTANOL	377		-0.74	-1.56	C9H17N1O4	ACETYLCARNITINE
3482	CHCL3	424	46	-3.76		C9H1811N1O2	N-METHYL-4-ACETYL PIPERIDINE METHOIDE
3483	OCTANOL	218		0.70	0.70 =	C9H18N2O4	NEPROBAMATE
3484	PARAFFINS	241		-0.07		C9H18N2S1	N-HEXYLETHYLENETHIOUREA
3485	OCTANOL	226		2.63	2.63 =	C9H18N6	HEXAMETHYLMELAMINE (13875)
3486	CHCL3	425		-1.92	-1.19 N	C9H18O6	GLUCOSE, 2,3,6-TRIMETHYL
3487	CHCL3	425		-1.51	-0.80 N	C9H18O6	A-METHYLGLUCOSIDE, 2,3-DIMETHYL
3488	OILS	292		0.76	1.87 A	C9H19N1O1	N,N-DIETHYLVALERAMIDE
3489	CHCL3	424	46	-3.05		C9H2011N1	1,2,6-TRIMETHYLPYPERIDINE METHOIDE
3490	CHCL3	424	46	-2.94		C9H2011N1	1,3,5-TRIMETHYLPYPERIDINE METHOIDE
3491	DIETHYL ETHER	3		1.04	1.79 B	C9H20N2O1	TETRAETHYLUREA
3492	DIETHYL ETHER	378	44	-0.92	0.13 B	C9H20N2O2	N,N-DIMETHYLCARBAMIC ACID, DIETAMINOETHYL ESTER
3493	DIETHYL ETHER	378	44	-1.08	-0.01 B	C9H20N2O2	N-ETHYLCARBAMIC ACID, DIETAMINOETHYL ESTER
3494	OCTANOL	218		2.79	2.79 =	C9H21N1	TRIPROPYLAMINE
3495	TOLUENE	68		2.52	2.47 B	C9H21N1	TRIPROPYLAMINE
3496	OCTANOL	268		-0.88	-0.88 =	C9H21N3,2.H2S O4	DIETHYLGUANIDIUM SULFATE
3497	CCL4	426		1.86	2.53 N	C9H21O4P1	TRIPROPYLPHOSPHATE
3498	HEXANE	426		0.88		C9H21O4P1	TRIPROPYLPHOSPHATE
3499	OCTANOL	297	46	-1.84	-1.84 =	C9H2211N1	TRIMETHYL-HEXYL-AMMONIUM IODIDE
3500	DIETHYL ETHER	3		-0.24	0.65 B	C9H22N2	PENTANE, 2-AMINO, 5-DIETHYLAMINO

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3501	I-BUTANOL	4		1.08	1.01	C9H22N2	PENTANE, 2-AMINO, 5-DIETHYLAMINO
3502	OCTANOL	206	27	5.18	5.18 =	C10H3CL2F3N4	QUINOXALINE IMIDAZOLE, 2-TRIFLOROMETHYL-5,7-DICHLORO
3503	CYCLOHEXANE	141		2.84		C10H4BR2O2	1,4-NAPHTHOQUINONE, 2,3-DIBROMO
3504	OCTANOL	206	27	3.91	3.91 =	C10H4CL1F3N4	QUINOXALINE IMIDAZOLE, 2-TRIFLOROMETHYL-6-CL
3505	CYCLOHEXANE	304		2.28		C10H4CL2N2	MALONONITRILE, 3,4-DICHLOROBENZAL
3506	CYCLOHEXANE	304		2.45		C10H4CL2N2	MALONONITRILE, 2,6-DICHLOROBENZAL
3507	CYCLOHEXANE	304		2.71		C10H4CL2N2	MALONONITRILE, 2,4-DICHLOROBENZAL
3508	CYCLOHEXANE	141		2.56		C10H4CL2O2	1,4-NAPHTHOQUINONE, 2,3-DICHLORO
3509	CYCLOHEXANE	304		1.97		C10H5BR1N2	MALONONITRILE, 3-BROMOBENZAL
3510	CYCLOHEXANE	304		2.03		C10H5BR1N2	MALONONITRILE, 4-BROMOBENZAL
3511	CYCLOHEXANE	304		2.26		C10H5BR1N2	MALONONITRILE, 2-BROMOBENZAL
3512	CYCLOHEXANE	141		2.12		C10H5BR1O2	1,4-NAPHTHOQUINONE, 2-BROMO
3513	CYCLOHEXANE	304		1.79		C10H5CL1N2	MALONONITRILE, 3-CHLOROBENZAL
3514	CYCLOHEXANE	304		1.82		C10H5CL1N2	MALONONITRILE, 4-CHLOROBENZAL
3515	CYCLOHEXANE	304		2.10		C10H5CL1N2	MALONONITRILE, 2-CHLOROBENZAL
3516	OCTANOL	141		2.15	2.15 =	C10H5CL1O2	1,4-NAPHTHOQUINONE, 2-CHLORO
3517	CYCLOHEXANE	141		1.91		C10H5CL1O2	1,4-NAPHTHOQUINONE, 2-CHLORO
3518	HEXANE	317		5.05		C10H5CL7	HEPTACHLOR
3519	HEXANE	317		4.60		C10H5CL7O1	HEPTACHLOR EPOXIDE
3520	CYCLOHEXANE	304		1.20		C10H5F1N2	MALONONITRILE, 3-FLUOROBENZAL
3521	CYCLOHEXANE	304		1.22		C10H5F1N2	MALONONITRILE, 4-FLUOROBENZAL
3522	CYCLOHEXANE	304		1.55		C10H5F1N2	MALONONITRILE, 2-FLUOROBENZAL
3523	OCTANOL	206	27	3.08	3.08 =	C10H5F3N4	QUINOXALINE IMIDAZOLE, 2-TRIFLUOROMETHYL
3524	HEXANE	299		0.87		C10H5F3N4O1	CARBONYL CYANIDE, P-TRIFLUOROMETHOXYPHENYLHYDRAZONE
3525	OCTANOL	141		-1.08	-1.08 =	C10H5K1S1O5	1,4-NAPHTHOQUINONE-2-SULFONATE, POTASSIUM SALT
3526	CYCLOHEXANE	304		-0.56		C10H5N1O2	COUMARIN, 3-CYANO
3527	CYCLOHEXANE	304		-0.07		C10H5N3O2	MALONONITRILE, 3-NITROBENZAL
3528	CYCLOHEXANE	304		-0.02		C10H5N3O2	MALONONITRILE, 4-NITROBENZAL
3529	CYCLOHEXANE	304		0.30		C10H5N3O2	MALONONITRILE, 2-NITROBENZAL
3530	CYCLOHEXANE	141		0.72		C10H6BR1N1O2	1,4-NAPHTHOQUINONE, 2-BROMO, 3-AMINO
3531	OCTANOL	141		2.12	2.12 =	C10H6CL1N1O2	1,4-NAPHTHOQUINONE, 2-CHLORO, 3-AMINO
3532	CYCLOHEXANE	141		0.41		C10H6CL1N1O2	1,4-NAPHTHOQUINONE, 2-CHLORO, 3-AMINO
3533	OCTANOL	216		2.50	2.50 =	C10H6F3N1	8-TRIFLUOROMETHYLQUINOLINE
3534	OCTANOL	216		2.05	2.05 =	C10H6F3N1O1	4-HYDROXY-7-TRIFLUOROMETHYLQUINOLINE
3535	CYCLOHEXANE	304		1.41		C10H6N2	MALONONITRILE, BENZAL
3536	CYCLOHEXANE	304		-1.62		C10H6N2O1	3-HYDROXYBENZALMALONONITRILE
3537	CYCLOHEXANE	141		-2.15		C10H6N2O1	4-HYDROXYBENZALMALONONITRILE
3538	CYCLOHEXANE	304		-0.06		C10H6O2	1,2-NAPHTHOQUINONE
3539	OCTANOL	238		1.78	1.78 =	C10H6O2	1,4-NAPHTHOQUINONE
3540	OCTANOL	141		1.71	1.71 =	C10H6O2	1,4-NAPHTHOQUINONE
3541	CYCLOHEXANE	141		1.26		C10H6O2	1,4-NAPHTHOQUINONE
3542	OCTANOL	218	26	1.55	1.55 =	C10H6O3	1,4-NAPHTHOQUINONE, 2-HYDROXY
3543	OCTANOL	141		1.38	1.38 =	C10H6O3	1,4-NAPHTHOQUINONE, 2-HYDROXY
3544	CYCLOHEXANE	304		-0.56		C10H7CL1N2O1	CYANOACETAMIDE, 2-CHLOROBENZAL
3545	CYCLOHEXANE	304		-0.53		C10H7CL1N2O1	CYANOACETAMIDE, 4-CHLOROBENZAL
3546	OCTANOL	206		3.19	3.19 =	C10H7CL2F3N2	BENZIMIDAZOLE, 2-TRIFLUOROMETHYL-4,7-DICHLORO-5,6-DI-ME
3547	CYCLOHEXANE	304		-1.01		C10H7F1N2O1	CYANOACETAMIDE, 2-FLUOROBENZAL
3548	OCTANOL	141		1.88	1.88 =	C10H7N1O2	1,4-NAPHTHOQUINONE, 2-AMINO
3549	CYCLOHEXANE	141		-1.90		C10H7N1O2	1,4-NAPHTHOQUINONE, 2-AMINO
3550	CYCLOHEXANE	304		-1.49		C10H7N1O3	COUMARIN, 3-CARBAMOYL
3551	OCTANOL	349		3.20	3.20 =	C10H8	AZULENE
3552	OCTANOL	427		3.37	3.37 =	C10H8	NAPHTHALENE
3553	OCTANOL	309		3.01	3.01 =	C10H8	NAPHTHALENE
3554	OCTANOL	428		3.45	3.45 =	C10H8	NAPHTHALENE
3555	CYCLOHEXANE	304		-3.32		C10H8CL2N2O2	MALONAMIDE, 2,4-DICHLOROBENZAL
3556	CYCLOHEXANE	304		-1.09		C10H8N2O1	CYANOACETAMIDE, BENZAL
3557	CYCLOHEXANE	141		1.18		C10H8N2O2	STYRENE, 3-CYANO, 8-NITRO, 8-METHYL
3558	CYCLOHEXANE	141		1.18		C10H8N2O2	STYRENE, 4-CYANO, 8-NITRO, 8-METHYL
3559	CHCL3	265		-0.45	0.19 N	C10H8N2O4	4-FURFURIOXIME
3560	OCTANOL	186		2.98	2.98 =	C10H8O1	1-NAPHTHOL
3561	CYCLOHEXANE	325		0.52		C10H8O1	1-NAPHTHOL
3562	OCTANOL	186		2.84	2.84 =	C10H8O1	2-NAPHTHOL
3563	DIEETHYL ETHER	359		1.77	1.67 A	C10H8O1	2-NAPHTHOL
3564	CYCLOHEXANE	325		0.29		C10H8O1	2-NAPHTHOL
3565	DIEETHYL ETHER	3		-2.00	-1.63 A	C10H8O3S1	NAPHTHALENE SULFONIC ACID
3566	CYCLOHEXANE	304		-3.52		C10H9CL1N2O2	MALONAMIDE, 4-CHLOROBENZAL
3567	CYCLOHEXANE	304		-2.69		C10H9CL1N2O2	MALONAMIDE, 3-CHLOROBENZAL
3568	CYCLOHEXANE	304		-2.58		C10H9CL1N2O2	MALONAMIDE, 2-CHLOROBENZAL
3569	CYCLOHEXANE	141		4.40		C10H9CL2N1O2	STYRENE, 2,4-DICHLORO, 8-NITRO, 8-ETHYL
3570	CYCLOHEXANE	141		4.40		C10H9CL2N1O2	STYRENE, 3,4-DICHLORO, 8-NITRO, 8-ETHYL
3571	CYCLOHEXANE	304		-3.16		C10H9F1N2O2	MALONAMIDE, 3-FLUOROBENZAL
3572	CYCLOHEXANE	280		1.64		C10H9N1	2-METHYLQUINOLINE
3573	CYCLOHEXANE	280		1.53		C10H9N1	4-METHYLQUINOLINE
3574	OCTANOL	216		2.57	2.57 =	C10H9N1	6-METHYLQUINOLINE
3575	OCTANOL	216		2.47	2.47 =	C10H9N1	7-METHYLQUINOLINE
3576	OCTANOL	216		2.60	2.60 =	C10H9N1	8-METHYLQUINOLINE
3577	CYCLOHEXANE	280		2.22		C10H9N1	8-METHYLQUINOLINE
3578	BENZENE	72		2.40	2.22 B	C10H9N1	A-NAPHTHYLAMINE
3579	PARAFFINS	316		0.99		C10H9N1	A-NAPHTHYLAMINE
3580	BENZENE	72		2.45	2.25 B	C10H9N1	B-NAPHTHYLAMINE
3581	PARAFFINS	316		0.98		C10H9N1	B-NAPHTHYLAMINE
3582	OCTANOL	216		2.20	2.20 =	C10H9N1O1	6-METHOXYQUINOLINE
3583	OCTANOL	216		1.84	1.84 =	C10H9N1O1	8-METHOXYQUINOLINE
3584	OCTANOL	410		2.33	2.33 =	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3585	OCTANOL	410		2.41	2.41 =	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3586	CHCL3	412		3.22	2.56 B	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3587	CHCL3	412		3.27	2.57 B	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3588	N-BUTANOL	410		1.92	2.15	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3589	N-BUTANOL	410		1.96	2.21	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3590	TOLUENE	410		2.75	2.67 B	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3591	TOLUENE	410		2.77	2.69 B	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3592	PRIM. PENTANOLS	410		2.13	2.40	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3593	PRIM. PENTANOLS	410		2.19	2.47	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3594	1-PENT. ACETATE	410		2.61	2.53	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3595	1-PENT. ACETATE	410		2.69	2.61	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3596	CCL4	412		2.64	2.34 B	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3597	CCL4	412		2.73	2.41 B	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3598	ME-1-BUT.KETONE	410		2.50	2.27	C10H9N1O1	8-QUINOLINOL, 2-METHYL
3599	ME-1-BUT.KETONE	410		2.63	2.45	C10H9N1O1	8-QUINOLINOL, 4-METHYL
3600	O-DICHL. BENZENE	410		3.00		C10H9N1O1	8-QUINOLINOL, 2-METHYL



NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3701	OCTANOL	399		1.19	1.19 =	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3702	CHCL3	399	1	0.33	0.89 N	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3703	OILS	345		-0.07	1.13 A	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3704	OILS	296		-0.12	1.08 A	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3705	OILS	168		-0.07	1.13 A	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3706	BENZENE	399	1	-0.35	1.07 A	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3707	1-PENT. ACETATE	399	1	1.23	1.10	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3708	CCL4	399	1	-0.96	1.05 A	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3709	OLEYL ALCOHOL	82		0.38	0.94	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3710	MIXED SOLV#1	433		0.38		C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3711	50%ETHER+50%OMF	125		0.23	1.35	C10H12N2O3	BARBITURIC ACID, O1ALLYL/O1AL/
3712	HEXANE	391		1.87		C10H12N3O3P1S2	METHYLAZINPHOS/GUTHION/
3713	CHCL3	343	2	0.49	1.10 N	C10H12N4O2S2	SULFAETHIOOLE
3714	CHCL3	415	44	0.09	0.69 N	C10H12N4O2S2	SULFAETHIOOLE
3715	BENZENE	343	2	-0.66	0.77 A	C10H12N4O2S2	SULFAETHIOOLE
3716	1-PENT. ACETATE	343	2	0.90	0.76	C10H12N4O2S2	SULFAETHIOOLE
3717	CCL4	343	2	-1.27	0.78 A	C10H12N4O2S2	SULFAETHIOOLE
3718	N-HEPTANE	415	44	-2.54		C10H12N4O2S2	SULFAETHIOOLE
3719	OCTANOL	227		-0.60	-0.60 =	C10H12N4O4S1	6-MERCAPTOPURINE RIBOSIDE (4911)
3720	OCTANOL	227		-0.57	-0.57 =	C10H12N4O4S1	9H-PURINE-6-THIOL, 9-8-O-ARABINOFURANOSYL (PKA= 787)
3721	OCTANOL	277	14	-2.08	-2.08 =	C10H12N4O5	INOSINE
3722	N-BUTANOL	253	36	-0.92	-1.79	C10H12N4O5	INOSINE
3723	N-BUTANOL	253	36	-1.30	-2.32	C10H12N4O6	XANTHOSINE
3724	CYCLOHEXANE	325		0.97		C10H12O1	4-INDANOL, 1-METHYL
3725	CYCLOHEXANE	325		1.00		C10H12O1	4-INDANOL, 6-METHYL
3726	CYCLOHEXANE	325		1.06		C10H12O1	4-INDANOL, 7-METHYL
3727	CYCLOHEXANE	325		1.21		C10H12O1	4-INDANOL, 5-METHYL
3728	CYCLOHEXANE	325		0.87		C10H12O1	5-INDANOL, 7-METHYL
3729	OCTANOL	56		1.95	1.95 =	C10H12O1	TR-2-PHENYLCYCLOPROPYLCARBINOL
3730	OCTANOL	255		2.30	2.30 =	C10H12O2	ACETIC ACID, 8-PHENYLETHYL ESTER
3731	OILS	383		1.56	2.65 A	C10H12O2	P-ETHYLPHENYLACETIC ACID
3732	OILS	327		1.99	2.99 A	C10H12O2	PHENOL, 2-METHOXY-4-ALLYL/EUGENOL/
3733	PARAFFINS	327		1.34		C10H12O2	PHENOL, 2-METHOXY-4-ALLYL/EUGENOL/
3734	OILS	362		0.74	1.89 A	C10H12O2	A-PHENYLBUTYRIC ACID
3735	OILS	385		1.16	2.25 A	C10H12O2	A-PHENYLBUTYRIC ACID
3736	OILS	417		1.06	2.15 A	C10H12O2	B-PHENYLBUTYRIC ACID
3737	OCTANOL	255		2.42	2.42 =	C10H12O2	4-PHENYLBUTYRIC ACID
3738	OILS	361		0.92	2.08 A	C10H12O2	4-PHENYLBUTYRIC ACID
3739	OILS	417		1.17	2.35 A	C10H12O2	4-PHENYLBUTYRIC ACID
3740	OCTANOL	255		2.32	2.32 =	C10H12O2	B-PHENYLPROPIONIC ACID, METHYL ESTER
3741	OILS	383		0.92	2.06 A	C10H12O3	P-ETHOXYPHENYLACETIC ACID
3742	OCTANOL	56		3.04	3.04 =	C10H12O3	P-HYDROXYBENZOIC ACID, PROPYL ESTER
3743	OCTANOL	10		2.25	2.25 =	C10H12O3	PHENOXYACETIC ACID, 3-ETHYL
3744	OCTANOL	10		2.65	2.65 =	C10H12O3	PHENOXYACETIC ACID, 2-ETHYL
3745	CYCLOHEXANOL	302		2.55		C10H12O3	PHENOXYACETIC ACID, 3-ETHYL
3746	50%ETHER+50%OMF	125		0.32	1.60	C10H13BR1N2O3	BARBITURIC ACID, 5-(2-BROMALLYL)-5-1-PROPYL
3747	OCTANOL	227		2.90	2.90 =	C10H13CL2N1	N, N-O1-8-CHLOROETHYLAMINE
3748	DIETHYL ETHER	374		1.46	2.16 B	C10H13N1	N-METHYL-1-PHENYLPROPYLAMINE-2
3749	OCTANOL	255		1.41	1.41 =	C10H13N1O1	BUTYRAMIDE, 4-PHENYL
3750	OCTANOL	186		1.58	1.58 =	C10H13N1O2	ACETANILIDE, 4-ETHOXY/PHENACETIN/
3751	OILS	173		0.43	1.58 A	C10H13N1O2	ACETANILIDE, 4-ETHOXY/PHENACETIN/
3752	OILS	224		0.60	1.77 A	C10H13N1O2	ACETANILIDE, 4-ETHOXY/PHENACETIN/
3753	1-PENT. ACETATE	418	3	2.81	2.73	C10H13N1O2	P-AMINOBENZOIC ACID, 1-PROPYL ESTER
3754	1-PENT. ACETATE	418	3	3.17	3.10	C10H13N1O2	P-AMINOBENZOIC ACID, N-PROPYL ESTER
3755	OLEYL ALCOHOL	390	44	2.28	2.82	C10H13N1O2	P-AMINOBENZOIC ACID, PROPYL ESTER
3756	OCTANOL	276		1.00	1.00 =	C10H13N1O2	M-METHOXY-N, N-DIMETHYLBENZAMIDE
3757	OCTANOL	276		0.71	0.71 =	C10H13N1O2	O-METHOXY-N, N-DIMETHYLBENZAMIDE
3758	OCTANOL	276		0.96	0.96 =	C10H13N1O2	P-METHOXY-N, N-DIMETHYLBENZAMIDE
3759	HEXANE	391		0.56		C10H13N1O2	N-METHYL CARBAMATE, 3,5-DIMETHYLPHENYL
3760	HEXANE	391		0.60		C10H13N1O2	N-METHYL CARBAMATE, 3,4-DIMETHYLPHENYL
3761	HEXANE	391		0.61		C10H13N1O2	N-METHYL CARBAMATE, 3-ETHYLPHENYL
3762	OCTANOL	384		1.93	1.93 =	C10H13N1O2	N-METHYL-2-ETHYLPHENYL CARBAMATE
3763	OCTANOL	384		1.95	1.95 =	C10H13N1O2	N-METHYL-2,3-DIMETHYLPHENYL CARBAMATE
3764	OCTANOL	384		2.03	2.03 =	C10H13N1O2	N-METHYL-2,5-DIMETHYLPHENYL CARBAMATE
3765	OCTANOL	384		2.20	2.20 =	C10H13N1O2	N-METHYL-3-ETHYLPHENYL CARBAMATE
3766	OCTANOL	384		2.09	2.09 =	C10H13N1O2	N-METHYL-3,4-DIMETHYLPHENYL CARBAMATE
3767	OCTANOL	384		2.23	2.23 =	C10H13N1O2	N-METHYL-3,5-DIMETHYLPHENYL CARBAMATE
3768	OCTANOL	384		2.23	2.23 =	C10H13N1O2	N-METHYL-4-ETHYLPHENYL CARBAMATE
3769	HEXANE	391		0.62		C10H13N1O2S1	N-METHYL CARBAMATE, 3-METHYL, 4-METHYLTHIOPHENYL
3770	OCTANOL	384		2.47	2.47 =	C10H13N1O2S1	N-METHYL-3-METHYL-4-METHYLTHIOPHENYL CARBAMATE
3771	N-HEPTANE	370	14	1.02		C10H13N1O3	P-AMINOSALICYLIC ACID, N-PROPYL ESTER
3772	OCTANOL	384		1.24	1.24 =	C10H13N1O3	N-METHYL-2-ETHOXYPHENYL CARBAMATE
3773	OCTANOL	384		1.75	1.75 =	C10H13N1O3	N-METHYL-3-ETHOXYPHENYL CARBAMATE
3774	OCTANOL	384		1.63	1.63 =	C10H13N1O3	N-METHYL-4-ETHOXYPHENYL CARBAMATE
3775	N-HEPTANE	370	14	-0.68		C10H13N1O4	P-AMINOSALICYLIC ACID, 3-HYDROXYPROPYL ESTER
3776	OCTANOL	227		-0.56	-0.56 =	C10H13N5O3S1	8-2'-DEOXYTHIOGUANOSINE (71261)
3777	OCTANOL	227		-0.79	-0.79 =	C10H13N5O3S1	A-2'-DEOXYTHIOGUANOSINE (71851)
3778	OCTANOL	277	14	-1.10	-1.10 =	C10H13N5O4	ADENOSINE
3779	OCTANOL	218		-1.23	-1.23 =	C10H13N5O4	ADENOSINE
3780	N-BUTANOL	253	36	-0.18	-0.76	C10H13N5O4	ADENOSINE
3781	N-BUTANOL	253	36	-0.92	-1.79	C10H13N5O5	GUANOSINE
3782	OCTANOL	56		4.11	4.11 =	C10H14	BENZENE, T-BUTYL
3783	OCTANOL	298		4.11	4.11 =	C10H14	BENZENE, T-BUTYL
3784	CHCL3	396	31	2.90	2.26 B	C10H14CL1N1	CHLORPHENTERMINE
3785	N-HEPTANE	396	31	1.24		C10H14CL1N1	CHLORPHENTERMINE
3786	OCTANOL	392		2.15	2.15 =	C10H14N1O5P1S1	PARATHION
3787	OCTANOL	392		1.69	1.69 =	C10H14N1O6P1	PARA-DXON
3788	OCTANOL	341	60	0.97	0.97 =	C10H14N2	ANABASINE
3789	DIETHYL ETHER	434		-0.23	0.66 B	C10H14N2	ANABASINE
3790	CYCLOHEXANE	434		-0.58		C10H14N2	ANABASINE
3791	CHCL3	434		0.82	0.54 B	C10H14N2	ANABASINE
3792	BENZENE	434		0.30	0.76 B	C10H14N2	ANABASINE
3793	TOLUENE	434		0.20	0.81 B	C10H14N2	ANABASINE
3794	CCL4	434		-0.01		C10H14N2	ANABASINE
3795	CLCH2CH2CL	434		0.52		C10H14N2	ANABASINE
3796	PARAFFINS	434		-0.60		C10H14N2	ANABASINE
3797	OCTANOL	341	60	1.13	1.13 =	C10H14N2	4-(N-METHYL)-3-PYRIDYL BUTENE-1-YLAMINE
3798	OCTANOL	341	60	1.17	1.17 =	C10H14N2	NICOTINE
3799	CYCLOHEXANE	435		0.25		C10H14N2	NICOTINE
3800	CHCL3	435		1.89	1.38 B	C10H14N2	NICOTINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SDLV	LOGP OCT	EMPIRICAL FORMULA	NAME
3801	BENZENE	435		0.98	1.23 8	C10H14N2	NICOTINE
3802	XYLENE	435		0.75	1.41 8	C10H14N2	NICOTINE
3803	TOLUENE	435		0.86	1.25 8	C10H14N2	NICOTINE
3804	NITROBENZENE	435		0.91	1.62	C10H14N2	NICOTINE
3805	N-BUTYL ACETATE	435		0.78	1.06	C10H14N2	NICOTINE
3806	CCL4	435		0.94	0.80 8	C10H14N2	NICOTINE
3807	CLCH2CH2CL	435		1.17		C10H14N2	NICOTINE
3808	N-HEPTANE	435		0.03		C10H14N2	NICOTINE
3809	N-HEPTANE	400	14	-0.80		C10H14N2	NICOTINE
3810	O-DICL. BENZENE	435		1.03		C10H14N2	NICOTINE
3811	PARAFFINS	435		0.05		C10H14N2	NICOTINE
3812	OCTANOL	341	60	1.10	1.10 =	C10H14N2	3-PYRIDYLMETHYL-N-PYRROLIDINE
3813	OCTANOL	218		0.33	0.33 =	C10H14N2O1	NIKETHAMIOE
3814	OCTANOL	341	60	0.04	0.04 =	C10H14N2O1	3-PYRIDYLMETHYL-N-MORPHOLINE
3815	N-HEPTANE	419		-0.85		C10H14N2O1	UREA, ETHYL, M-TOLYL-
3816	N-HEPTANE	419		-1.18		C10H14N2O1	UREA, ETHYL, O-TOLYL-
3817	N-HEPTANE	419		-0.89		C10H14N2O1	UREA, ETHYL, P-TOLYL-
3818	N-HEPTANE	419		-1.80		C10H14N2O1	UREA, METHYL, O-PHENETYL-
3819	N-HEPTANE	419		-0.96		C10H14N2O1	UREA, N-PROPYLPHENYL-
3820	OCTANOL	384		1.43	1.43 =	C10H14N2O2	N-METHYL-3-DIMETHYLAMINOPHENYL CARBAMATE
3821	N-HEPTANE	419		-1.66		C10H14N2O2	UREA, ETHYL, O-ANISYL-
3822	N-HEPTANE	419		-1.55		C10H14N2O2	UREA, ETHYL, P-ANISYL-
3823	OCTANOL	218		2.19	2.19 =	C10H14N2O2S1	BARBITURIC ACID, 5-ETHYL-5-METHYLLYL-2-THIO
3824	OILS	345		0.05	1.24 A	C10H14N2O3	BARBITURIC ACID, 5-ALLYL-5-I-PROPYL
3825	OILS	371		0.24	0.64 8	C10H14N4O3	CAFFEINE, ETHOXY
3826	OCTANOL	181	10	-0.22	-0.22 =	C10H14N5O7P1	3-AOENYLIC ACID
3827	N-BUTANOL	181	10	-0.52		C10H14N5O7P1	3-AOENYLIC ACID
3828	PRIM. PENTANOLS	181	10	-0.10		C10H14N5O7P1	3-AOENYLIC ACID
3829	HEXANOL	181	18	-0.22		C10H14N5O7P1	3-AOENYLIC ACID
3830	OCTANOL	181	10	0.28	0.28 =	C10H14N5O7P1	5-AOENYLIC ACID
3831	N-BUTANOL	181	10	-0.70		C10H14N5O7P1	5-AOENYLIC ACID
3832	PRIM. PENTANOLS	181	10	-0.40		C10H14N5O7P1	5-AOENYLIC ACID
3833	HEXANOL	181	18	-0.30		C10H14N5O7P1	5-AOENYLIC ACID
3834	OCTANOL	181	10	0.68	0.68 =	C10H14N5O8P1	GUANYLIC ACID
3835	N-BUTANOL	181	10	-0.70		C10H14N5O8P1	GUANYLIC ACID
3836	PRIM. PENTANOLS	181	10	-0.40		C10H14N5O8P1	GUANYLIC ACID
3837	HEXANOL	181	18	-0.40		C10H14N5O8P1	GUANYLIC ACID
3838	HEXANE	372		0.51		C10H14O1	BUTANOL, 4-PHENYL
3839	OCTANOL	56		3.31	3.31 =	C10H14O1	P-T-BUTYLPHENOL
3840	CYCLOHEXANE	325		1.12		C10H14O1	P-T-BUTYLPHENOL
3841	CYCLOHEXANE	325		1.29		C10H14O1	P-T-BUTYLPHENOL
3842	OCTANOL	65		1.97	1.97 =	C10H14O1	2-DECALONE
3843	CYCLOHEXANE	325		1.30		C10H14O1	PHENOL, 2-METHYL, 5-1-PROPYL
3844	OCTANOL	255		2.70	2.70 =	C10H14O1	PROPANE, 1-METHOXY-3-PHENYL
3845	OCTANOL	186		3.30	3.30 =	C10H14O1	THYMOL
3846	OILS	173		2.79	3.73 A	C10H14O1	THYMOL
3847	OILS	82		2.78	3.72 A	C10H14O1	THYMOL
3848	OILS	436		2.65	3.68 A	C10H14O1	THYMOL
3849	OLEYL ALCOHOL	82		2.98	3.52	C10H14O1	THYMOL
3850	OCTANOL	186		1.52	1.52 =	C10H14O2	CAMPHORQUINONE
3851	OILS	327		2.16	3.15 A	C10H14O2	PHENOL, 2-METHOXY-4-PROPYL/P-PROPYLGUAICOL/
3852	PARAFFINS	327		1.78		C10H14O2	PHENOL, 2-METHOXY-4-PROPYL/P-PROPYLGUAICOL
3853	OCTANOL	218		1.41	1.41 =	C10H14O3	1,2-PROPANEDIOL, 3-(2-TOLYLOXY)
3854	OCTANOL	373		-1.39	-1.39 =	C10H15CLIN2O1	N1-BUTYLNICOTINAMIOE CHLORIDE
3855	DIETHYL ETHER	374		1.49	2.17 8	C10H15N1	BENZYL PROPYLAMINE
3856	XYLENE	422		1.32	1.96 8	C10H15N1	1-BENZYL PROPYLAMINE
3857	OCTANOL	312	12	3.58	3.58 =	C10H15N1	N-BUTYLANILINE
3858	CHCL3	396	31	2.75	2.12 8	C10H15N1	METHAMPHETAMINE/OESOXYPHEORINE/
3859	XYLENE	422		1.58	2.23 8	C10H15N1	METHAMPHETAMINE/OESOXYPHEORINE/
3860	N-HEPTANE	138		1.24		C10H15N1	METHAMPHETAMINE/OESOXYPHEORINE/
3861	N-HEPTANE	396	31	0.71		C10H15N1	METHAMPHETAMINE/OESOXYPHEORINE/
3862	DIETHYL ETHER	374		1.46	2.14 8	C10H15N1	N-METHYL-G-PHENYL PROPYLAMINE
3863	N-HEPTANE	421	44	1.63		C10H15N1	PHENETHYLOIMETHYLAMINE
3864	CHCL3	396	31	2.71	2.10 8	C10H15N1	PHENTERMINE
3865	N-HEPTANE	396	31	1.80		C10H15N1	PHENTERMINE
3866	OCTANOL	218		0.93	0.93 =	C10H15N1O1	EPHEORINE
3867	DIETHYL ETHER	3		0.30	1.12 8	C10H15N1O1	EPHEORINE
3868	CYCLOHEXANE	357		-0.39		C10H15N1O1	EPHEORINE
3869	CHCL3	405	31	1.05	0.75 8	C10H15N1O1	EPHEORINE
3870	CHCL3	396	31	0.38	0.10 8	C10H15N1O1	EPHEORINE
3871	1-BUTANOL	4		1.18	1.15	C10H15N1O1	EPHEORINE
3872	N-HEPTANE	396	31	-3.00		C10H15N1O1	EPHEORINE
3873	CHCL3	396	31	1.30	0.89 8	C10H15N1O1	PSEUDOEPHEORINE
3874	N-HEPTANE	396	31	-1.54		C10H15N1O1	PSEUDOEPHEORINE
3875	DIETHYL ETHER	113		2.22	2.05 A	C10H15N1O2S1	N, N-DIETHYL BENZENESULFONAMIDE
3876	CHCL3	113		3.65	4.08 N	C10H15N1O2S1	N, N-DIETHYL BENZENESULFONAMIDE
3877	OCTANOL	397		1.79	1.79 =	C10H15N5	ADENINE, 9-PENTYL
3878	OCTANOL	397		0.66	0.66 =	C10H15N5O1	ADENINE, 9-(1-HYDROXYMETHYL-BUTYL)
3879	OCTANOL	181	10	0.89	0.89 =	C10H15N5O1O2P2	AOP
3880	N-BUTANOL	181	10	-0.52		C10H15N5O1O2P2	AOP
3881	PRIM. PENTANOLS	181	10	0.85		C10H15N5O1O2P2	AOP
3882	HEXANOL	181	18	0.71		C10H15N5O1O2P2	AOP
3883	OCTANOL	437		3.46	3.46 =	C10H15O3P1S1	O, O-DIETHYL-O-PHENYL PHOSPHOROTHIOATE
3884	OCTANOL	437		1.64	1.64 =	C10H15O4P1	O, O-DIETHYL-O-PHENYL PHOSPHATE
3885	OCTANOL	341	60	1.34	1.34 =	C10H16N2	N-BUTYL-3-PYRIDYLMETHYLAMINE
3886	OCTANOL	341	60	1.01	1.01 =	C10H16N2	N, N-DIETHYL-3-PYRIDYLMETHYLAMINE
3887	OCTANOL	341	60	0.91	0.91 =	C10H16N2	4-(N-METHYL)-3-PYRIDYLBUTYLAMINE
3888	50%ETHER+50%OMF	125		0.71	2.57	C10H16N2O2S1	5-S-BUTYL-5-ET-2-THIOBARBITURIC ACID/INACTIN/
3889	OCTANOL	218		1.89	1.89 =	C10H16N2O3	BARBITURIC ACID, 5-BUTYL-5-ETHYL
3890	OILS	345		0.41	1.56 A	C10H16N2O3	BARBITURIC ACID, 5-BUTYL-5-ETHYL
3891	OILS	345		0.13	1.31 A	C10H16N2O3	BARBITURIC ACID, 5-ETHYL-5-5-BUTYL
3892	50%ETHER+50%OMF	125		0.29	1.52	C10H16N2O3	BARBITURIC ACID, 5-S-BUTYL-5-ETHYL
3893	OCTANOL	134		2.14	2.14 =	C10H16N4O1S1	3-METHIO-4-AMINO-6-CYCLOHEXYL-1,2,4-TRIAZINE-5-ONE
3894	OCTANOL	181	10	1.64	1.64 =	C10H16N5O13P3	ATP
3895	N-BUTANOL	181	10	0.15		C10H16N5O13P3	ATP
3896	PRIM. PENTANOLS	181	10	1.04		C10H16N5O13P3	ATP
3897	HEXANOL	181	18	1.18		C10H16N5O13P3	ATP
3898	OCTANOL	218		2.14	2.14 =	C10H16O1	ADAMANTANE, 1-HYDROXY
3899	DIETHYL ETHER	212		1.45	1.38 A	C10H16O4	CAMPHORIC ACID
3900	CHCL3	46		-1.30	0.04 A	C10H16O4	CAMPHORIC ACID











NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
4301	CYCLOHEXANE	304		1.67		C12H11CL102	ACETYL ACETONE, 4-CHLORO-8-BENZAL
4302	CYCLOHEXANE	304		1.69		C12H11CL102	ACETYL ACETONE, 3-CHLORO-8-BENZAL
4303	CYCLOHEXANE	304		1.99		C12H11CL102	ACETYL ACETONE, 2-CHLORO-8-BENZAL
4304	CYCLOHEXANE	304		0.95		C12H11F102	ACETYL ACETONE, 4-FLUORO-8-BENZAL
4305	CHCL3	444	30	2.47	2.71 N	C12H11I1N2O2S1	NI-(3-IDDOPHENYL)SULFANILAMIOE
4306	PARAFFINS	316		2.10		C12H11N1	2-AMINO8IPHENYL
4307	PARAFFINS	316		1.67		C12H11N1	3-AMINO8IPHENYL
4308	PARAFFINS	316		1.74		C12H11N1	4-AMINO8IPHENYL
4309	OCTANOL	276		3.34	3.34 =	C12H11N1	OIPHENYLAMINE
4310	OCTANOL	309		3.22	3.22 =	C12H11N1	OIPHENYLAMINE
4311	OCTANOL	235		3.50	3.50 =	C12H11N1	OIPHENYLAMINE
4312	CYCLOHEXANE	141		2.63		C12H11N102	BENZALCYANOACETIC ACIO, ETHYL ESTER
4313	CYCLOHEXANE	304		2.59		C12H11N102	BENZALCYANOACETIC ACIO, ETHYL ESTER
4314	HEXANE	391		0.42		C12H11N102	N-METHYL CARBAMATE, 1-NAPHTHYL
4315	OCTANOL	384		2.36	2.36 =	C12H11N102	N-METHYL-A-NAPHTHYLCARBAMATE
4316	OCTANOL	384		2.56	2.56 =	C12H11N102	N-METHYL-8-NAPHTHYLCARBAMATE
4317	DIETHYL ETHER	113		2.62	2.41 A	C12H11N102S1	BENZENESULFANILAMIOE
4318	CHCL3	113		2.87	3.29 N	C12H11N102S1	BENZENESULFANILAMIOE
4319	HEXANE	376		1.96		C12H11N102S1	N-ME-N-ACETYLCARBAMIC ACIO, 4-BENZOTHIENYL ESTER
4320	BENZENE	72		3.50	2.98 B	C12H11N3	P-AMINOAZOBENZENE
4321	CHCL3	444	30	2.44	2.88 N	C12H11N3O4S1	NI-(3-NITROPHENYL)SULFANILAMIOE
4322	CHCL3	444	30	1.52	2.02 N	C12H11N3O4S1	NI-(4-NITROPHENYL)SULFANILAMIOE
4323	OCTANOL	218		0.98	0.98 =	C12H11N7	PTERIOINE, 2,4,7-TRIAMINO-6-PHENYL
4324	OCTANOL	65	46	-2.62	-2.62 =	C12H12BR1N1	BENZYL PYRIDINIUM BROMIOE
4325	CHCL3	444	30	1.45	1.96 N	C12H12N2O2S1	NI-PHENYLSULFANILAMIOE
4326	OCTANOL	80		1.42	1.42 =	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4327	CHCL3	399	1	0.65	1.20 N	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4328	OILS	82		0.23	1.43 A	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4329	OILS	345		0.13	1.37 A	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4330	OILS	398	44	0.00	1.19 A	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4331	BENZENE	399	1	-0.01	1.40 A	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4332	I-PENT. ACETATE	399	1	1.54	1.42	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4333	CCL4	399	1	-0.63	1.31 A	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4334	OLEYL ALCOHOL	82		0.78	1.34	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4335	50%ETHER+50%OMF	125	12	-0.07	0.62	C12H12N2O3	BARBITURIC ACIO, 5-ETHYL-5-PHENYL/PHENOBARBITAL/
4336	CYCLOHEXANE	304		-1.63		C12H12N2O3	CYANOACETAMIOE, 3,4-DIMETHOXYBENZAL
4337	CYCLOHEXANE	304		0.96		C12H12O2	ACETYL ACETONE, 8-BENZAL
4338	DIETHYL ETHER	414		0.87	0.87 A	C12H12O5	ADIPIC ACIO, A-KETO-G-PHENYL
4339	N-HEPTANE	441		-2.13		C12H13CL1N2	8-CHLORO-9-METHYLTETRAHYDRO-8-CARBOLINE
4340	N-HEPTANE	441		-2.30		C12H13F1N2	6-FLUORO-9-METHYLTETRAHYDRO-8-CARBOLINE
4341	OCTANOL	206		4.27	4.27 =	C12H13F3N2	BENZIMIDAZOLE, 5-BUTYL-2-(TRIFLUOROMETHYL)
4342	CYCLOHEXANE	446		-0.62		C12H13N101	N-CYCLOPROPYLCINNAMAMIOE
4343	CYCLOHEXANE	141		3.60		C12H13N102	1-CYCLOHEXENE, 4-NITRO, 5-PHENYL
4344	OCTANOL	235		2.14	2.14 =	C12H13N102S1	VITAVAX
4345	OCTANOL	283	65	1.49	1.49 =	C12H13N302	ISOCARBOAZIOE
4346	OCTANOL	65	46	-2.52	-2.52 =	C12H14BR1N1	N-PROPYLQUINOLINIUM BROMIOE
4347	OILS	447		-0.03	1.22 A	C12H14BR1N103	A-BROMO-I-VALERYL-SALICYLAMIOE
4348	OILS	382	24	5.51	6.20 A	C12H14I2O3	BENZOIC ACIO, 4-OH, 3,5-DI-1000, AMYL ESTER
4349	OILS	382	24	2.76	3.70 A	C12H14I2O4	BENZOIC ACIO, 4-OH, 3,5-DI-1000, E-OH-AMYL ESTER
4350	N-HEPTANE	441		-1.99		C12H14N2	9-METHYLTETRAHYDRO-8-CARBOLINE
4351	50%ETHER+50%OMF	125		0.13	1.12	C12H14N2O4	5-FURFURYL-5-1-PROPYLBARBITURIC ACIO/DORMOVIT/
4352	CYCLOHEXANE	304		-2.81		C12H14N2O4	MALONAMIOE, 2,4-DIMETHOXYBENZAL
4353	MIXED SOLV#1	433		-2.70		C12H14N2O5	BARBITURIC ACIO, 1-CARBOXYMETHYL-5,5-DIALLYL
4354	OCTANOL	56		0.27	0.27 =	C12H14N4O2S1	SULFAMETHAZINE
4355	DIETHYL ETHER	113	15	-0.06	0.08 A	C12H14N4O2S1	SULFAMETHAZINE
4356	CHCL3	343	2	0.73	0.39 B	C12H14N4O2S1	SULFAMETHAZINE
4357	CHCL3	113	15	0.66	0.33 B	C12H14N4O2S1	SULFAMETHAZINE
4358	BENZENE	343	2	-0.43	0.03 B	C12H14N4O2S1	SULFAMETHAZINE
4359	I-PENT. ACETATE	343	2	0.56	0.40	C12H14N4O2S1	SULFAMETHAZINE
4360	CCL4	343	2	-1.35	0.72 A	C12H14N4O2S1	SULFAMETHAZINE
4361	OCTANOL	393	63	-0.30	-0.30 =	C12H14N4O2S1	SULFISOMIOINE
4362	DIETHYL ETHER	113	15	-1.06	0.71 B	C12H14N4O2S1	SULFISOMIOINE
4363	CHCL3	343	2	-0.55	0.09 N	C12H14N4O2S1	SULFISOMIOINE
4364	CHCL3	113	15	-0.69	-0.04 N	C12H14N4O2S1	SULFISOMIOINE
4365	CHCL3	393	63	-0.35	-0.33 N	C12H14N4O2S1	SULFISOMIOINE
4366	CHCL3	415	44	-0.52	0.12 N	C12H14N4O2S1	SULFISOMIOINE
4367	BENZENE	343	2	-1.21	0.18 A	C12H14N4O2S1	SULFISOMIOINE
4368	I-BUTANOL	130	13	1.74	1.94	C12H14N4O2S1	SULFISOMIOINE
4369	I-PENT. ACETATE	343	2	-0.40	-0.59	C12H14N4O2S1	SULFISOMIOINE
4370	CCL4	343	2	-1.89	0.25 A	C12H14N4O2S1	SULFISOMIOINE
4371	N-HEPTANE	415	44	-3.85		C12H14N4O2S1	SULFISOMIOINE
4372	OCTANOL	393	63	1.56	1.56 =	C12H14N4O4S1	SULFAOIMETHOXINE
4373	CHCL3	343	2	1.49	2.01 N	C12H14N4O4S1	SULFAOIMETHOXINE
4374	CHCL3	393	63	1.31	1.31 B	C12H14N4O4S1	SULFAOIMETHOXINE
4375	BENZENE	343	2	0.70	2.08 A	C12H14N4O4S1	SULFAOIMETHOXINE
4376	I-BUTANOL	130	13	2.48	2.93	C12H14N4O4S1	SULFAOIMETHOXINE
4377	I-PENT. ACETATE	343	2	1.89	1.78	C12H14N4O4S1	SULFAOIMETHOXINE
4378	CCL4	343	2	-0.63	1.31 A	C12H14N4O4S1	SULFAOIMETHOXINE
4379	OCTANOL	134		1.73	1.73 =	C12H14N5O1	3-PHENYLAMINO-4-AMINO-6-1-PR-1,2,4-TRIAZINE-5-ONE
4380	OCTANOL	10		2.67	2.67 =	C12H14O3	2-(5,6,7,8-TETRAHYDRONAPHTHYLOXY)-ACETIC ACIO
4381	CHCL3	194		-0.60	0.67 A	C12H14O4	ADIPIC ACIO, 8-PHENYL
4382	OCTANOL	438		0.26	0.26 =	C12H15CL106	GLUCOPYRANOSIOE, 4-CHLOROPHENYL (BETA)
4383	OCTANOL	438		0.27	0.27 =	C12H15I106	GLUCOPYRANOSIOE, 2-IDDOPHENYL (BETA)
4384	OCTANOL	438		0.75	0.75 =	C12H15I106	GLUCOPYRANOSIOE, 4-IDDOPHENYL (BETA)
4385	HEXANE	376		0.92		C12H15N102	N-MECARBAMIC ACIO, 5,6,7,8-TETRAHYDRO-1-NAPHTHYL ESTER
4386	CYCLOHEXANE	141		3.52		C12H15N102	STYRENE, 4-I-PROPYL, 8-NITRO, 8-METHYL
4387	HEXANE	391		2.20		C12H15N102S1	N-METHYL CARBAMATE, N-ACETYL, 3-ME-4-METHYLTHIOPHENYL
4388	CYCLOHEXANE	141		2.17		C12H15N104	STYRENE, 3,4-DIMETHOXY, 8-NITRO, 8-ETHYL
4389	CYCLOHEXANE	141		2.68		C12H15N104	STYRENE, 2,4-DIMETHOXY, 8-NITRO, 8-ETHYL
4390	CYCLOHEXANE	141		2.68		C12H15N104	STYRENE, 2,5-DIMETHOXY, 8-NITRO, 8-ETHYL
4391	CYCLOHEXANE	141		3.22		C12H15N104	STYRENE, 2,3-DIMETHOXY, 8-NITRO, 8-ETHYL
4392	CYCLOHEXANE	141		2.24		C12H15N104	STYRENE, 4-HYDROXY, 3-ETHOXY, 8-NITRO, 8-ETHYL
4393	OCTANOL	438		-0.59	-0.59 =	C12H15N108	GALACTOPYRANOSIOE, 4-NITROPHENYL (BETA)
4394	OCTANOL	438		-0.39	-0.39 =	C12H15N108	GLUCOPYRANOSIOE, 4-NITROPHENYL (ALPHA)
4395	OCTANOL	438		-0.78	-0.78 =	C12H15N108	GLUCOPYRANOSIOE, 2-NITROPHENYL (BETA)
4396	OCTANOL	438		-0.51	-0.51 =	C12H15N108	GLUCOPYRANOSIOE, 3-NITROPHENYL (BETA)
4397	OCTANOL	438		-0.44	-0.44 =	C12H15N108	GLUCOPYRANOSIOE, 4-NITROPHENYL (BETA)
4398	OCTANOL	438		-0.18	-0.18 =	C12H15N108	MANNOPYRANOSIOE, 4-NITROPHENYL (ALPHA)
4399	MIXED SOLV#1	433		-0.82		C12H15N3O4	BARBITURIC ACIO, 1-CARBAMYL METHYL-5,5-DIALLYL
4400	OILS	447		-0.02	1.23 A	C12H16BR1N102	A-BROMO-I-VALERYL-O-ANISIOINE



NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
4501	CHCL3	451	12	2.05	1.52	C12H27N1	TRIBUTYLAMINE
4502	TOLUENE	452		0.58	1.04	C12H27O1P1	TRIBUTYL PHOSPHINE OXIDE
4503	OCTANOL	268	46	1.85	1.85 =	C12H28CLIN1	ODOCYLAMINE HYDROCHLORIDE
4504	50%ETHER+50%OMF	125		0.34	1.65	C13N14N2O3	8ARBITURIC ACID, 5-ETHYL-5-PHENYL-N-METHYL
4505	CYCLOHEXANE	304		2.28		C13H7F3N2	MALONONITRILE, 2-TRIFLUOROMETHYL CINNAMAL
4506	CYCLOHEXANE	304		2.98		C13H8O1	9-FLUORENONE
4507	OCTANOL	427		3.40	3.40 =	C13H9N1	ACRIDINE
4508	OILS	453	50	2.30	3.29	C13H9N1	ACRIDINE
4509	OCTANOL	283	71	-0.27	-0.27 =	C13H9NA1O2	P-8IPHENYL CARBOXYLIC ACID, SODIUM SALT
4510	OCTANOL	283	72	0.77	0.77 =	C13H9NA1O2	8IPHENYL CARBOXYLIC ACID, SODIUM SALT
4511	OCTANOL	283	73	-0.38	-0.38 =	C13H9NA1O2	8IPHENYL CARBOXYLIC ACID, SODIUM SALT
4512	OCTANOL	216	46	-0.50	-0.50 =	C13H10CLIN1	ACRIDINE HYDROCHLORIDE
4513	N-HEPTANE	443		1.42		C13H10CLIN1D1S1	PHENOTHIAZINE, 2-CHLORO, 7-METHOXY
4514	OCTANOL	218		4.70	4.70 =	C13H10CL2N2O1	UREA, 1-(3,4-DICHLOROPHENYL)-3-PHENYL
4515	OCTANOL	346		2.47	2.47 =	C13H10N2	1-AMINOACRIDINE
4516	OILS	453		1.79	2.92	C13H10N2	1-AMINOACRIDINE
4517	OCTANOL	346		2.62	2.62 =	C13H10N2	2-AMINOACRIDINE
4518	OILS	453		1.97	3.08	C13H10N2	2-AMINOACRIDINE
4519	OCTANOL	346		2.19	2.19 =	C13H10N2	3-AMINOACRIDINE
4520	OILS	453	12	1.87	3.00	C13H10N2	3-AMINOACRIDINE
4521	OCTANOL	346		3.26	3.26 =	C13H10N2	4-AMINOACRIDINE
4522	OILS	453	12	3.08	4.00	C13H10N2	4-AMINOACRIDINE
4523	OCTANOL	216		2.74	2.74 =	C13H10N2	9-AMINOACRIDINE
4524	PARAFFINS	439		0.85		C13H10N2	9-AMINOPHENANTHRINE
4525	CYCLOHEXANE	304		1.29		C13H10N2O2	ETHYL CYANOACETATE, 4-CYANO BENZAL
4526	OCTANOL	218		0.33	0.33 =	C13H10N2O4	PHTHALIMIDE, N-(2,6-DIOXO-3-PIPERIDYL)
4527	OCTANOL	235		3.18	3.18 =	C13H10O1	BENZOPHENONE
4528	OCTANOL	235		3.18	3.18 =	C13H10O1	BENZOPHENONE
4529	CHCL3	388		3.90	4.76	A C13H10O2SE1	1-(2-SELENOFENYL)-3-PHENYL-1,3-PROPANEDIONE
4530	BENZENE	388		3.66	4.94	A C13H10O2SE1	1-(2-SELENOFENYL)-3-PHENYL-1,3-PROPANEDIONE
4531	TOLUENE	148		2.52	2.50	B C13H11CUIN4O1	CUPROUS-CARBAZONE COMPLEX
4532	TOLUENE	148		0.81	1.21	B C13H11HGIN4O1	MERCURIC-CARBAZONE COMPLEX
4533	TOLUENE	148		2.00	2.10	B C13H11HG2N4O1	MERCUROUS-CARBAZONE COMPLEX
4534	PARAFFINS	316		1.76		C13H11N1	2-AMINOFLOURENE
4535	OCTANOL	56		2.62	2.62 =	C13H11N1O1	BENZANILIDE
4536	OCTANOL	9	26	3.09	3.09 =	C13H11N1O1	SALICYLALDEHYDE-ANIL
4537	N-HEPTANE	443		2.43		C13H11N1O1S1	PHENOTHIAZINE, 3-METHOXY
4538	OCTANOL	238		3.27	3.27 =	C13H11N1O2	SALICYLANILIDE
4539	N-HEPTANE	443		3.23		C13H11N1S1	PHENOTHIAZINE, 3-METHYL
4540	N-HEPTANE	443		4.58		C13H11N1S1	PHENOTHIAZINE, 10-METHYL
4541	OCTANOL	346		1.10	1.10 =	C13H11N3	2,8-DIAMINOACRIDINE
4542	OCTANOL	235		4.14	4.14 =	C13H12	DIPHENYLMETHANE
4543	CYCLOHEXANE	304		1.91		C13H12CL2O3	ETHYLACETOACETATE, 2,6-DICHLOROBENZAL
4544	CYCLOHEXANE	304		2.98		C13H12CL2O3	ETHYLACETOACETATE, 2,4-DICHLOROBENZAL
4545	CYCLOHEXANE	304		4.00		C13H12CL2O3	ETHYLACETOACETATE, 3,4-DICHLOROBENZAL
4546	CYCLOHEXANE	304		3.33		C13H12N2O1	MALONONITRILE, 2-1-PROPOXYBENZAL
4547	TOLUENE	454		1.59		C13H12N4O1	OIPHENYL CARBAZONE
4548	CCL4	454		0.88		C13H12N4O1	OIPHENYL CARBAZONE
4549	CHCL3	455	12	5.90		C13H12N4S1	OIPHENYLTHIOCARBAZONE/OITHIZONE/
4550	CCL4	203		1.61		C13H12N4S1	OIPHENYLTHIOCARBAZONE/OITHIZONE/
4551	OCTANOL	276		2.03	2.03 =	C13H12O1	OIPHENYL CARBINOL
4552	OCTANOL	428		2.67	2.67 =	C13H12O1	OIPHENYL CARBINOL
4553	HEXANE	456		0.56		C13H12O3	GRISAN-3,4'-DIONE
4554	CYCLOHEXANE	304		2.23		C13H13F1O3	ETHYLACETOACETATE, 3-FLUOROBENZAL
4555	CYCLOHEXANE	304		3.26		C13H13N1O2	ETHYL CYANOACETATE, 2-METHYLBENZAL
4556	CYCLOHEXANE	304		3.62		C13H13N1O2	ETHYL CYANOACETATE, 4-METHYLBENZAL
4557	HEXANE	376		2.45		C13H13N1O2S1	N-ME-N-PROPIONYLCARBAMIC ACID, 4-BENZOTHENYL ESTER
4558	DIETHYL ETHER	113		0.67	0.70	A C13H13N1O2S1	N-P-TOLUENEBENZENESULFONAMIDE
4559	CHCL3	113		0.43	1.77	A C13H13N1O2S1	N-P-TOLUENEBENZENESULFONAMIDE
4560	CYCLOHEXANE	304		2.47		C13H13N1O3	ETHYL CYANOACETATE, 4-METHOXYBENZAL
4561	CYCLOHEXANE	304		2.68		C13H13N1O3	ETHYL CYANOACETATE, 2-METHOXYBENZAL
4562	CYCLOHEXANE	304		2.80		C13H13N1O3	ETHYL CYANOACETATE, 3-METHOXYBENZAL
4563	OCTANOL	65	46	-2.35	-2.35 =	C13H14BRIN1	8-PHENYLETHYL PYRIDINIUM BROMIDE
4564	DIETHYL ETHER	457	62	0.39	0.46	A C13H14N2O2	1,4-NAPHTHOQUINONE, 2-I-PROPYLHYDRAZINO
4565	CHCL3	444	30	2.00	2.47	N C13H14N2O2S1	N1-(4-METHYLPHENYL)SULFANILAMIDE
4566	CHCL3	399	1	1.98	1.37	B C13H14N2O3	8ARBITURIC ACID, 1-ME, 5-ET, 5-PHENYL
4567	1-PENT. ACETATE	399	1	1.75	1.64	B C13H14N2O3	8ARBITURIC ACID, 1-ME, 5-ET, 5-PHENYL
4568	CCL4	399	1	0.80		C13H14N2O3	8ARBITURIC ACID, 1-ME, 5-ET, 5-PHENYL
4569	CHCL3	444	30	1.64	2.13	N C13H14N2O3S1	N1-(3-METHOXYPHENYL)SULFANILAMIDE
4570	CYCLOHEXANE	304		1.52		C13H14O2	ACETYLACETONE, 2-METHYL BENZAL
4571	CYCLOHEXANE	304		1.57		C13H14O2	ACETYLACETONE, 4-METHYL BENZAL
4572	CYCLOHEXANE	304		0.91		C13H14O3	ACETYLACETONE, 4-METHOXY-BENZAL
4573	CYCLOHEXANE	304		1.04		C13H14O3	ACETYLACETONE, 2-METHOXY-BENZAL
4574	CYCLOHEXANE	304		1.06		C13H14O3	ACETYLACETONE, 3-METHOXY-BENZAL
4575	CYCLOHEXANE	304		2.03		C13H14O3	ETHYLACETOACETATE, BENZAL
4576	OCTANOL	438		0.49	0.49 =	C13H15F3O6	GLUCOPYRANOSIDE, 3-TRIFLUOROMETHYLPHENYL (BETA)
4577	OCTANOL	218		1.90	1.90 =	C13H15N1O2	GLUTARIMIDE, 2-ETHYL-2-PHENYL
4578	HEXANE	376		1.15		C13H15N1O2	N-MECARBAMIC ACID, O-CYCLOPENTENYLPHENYL ESTER
4579	CHCL3	67		-0.84		C13H15N1O5	O,L-TYROSINE, O,N-OIACETYL
4580	CHCL3	338	44	0.18	-0.08	B C13H15N3O2	N-ACETYL-4-AMINOANTIPYRINE
4581	BENZENE	338	44	-2.70		C13H15N3O2	N-ACETYL-4-AMINOANTIPYRINE
4582	N-HEPTANE	338	44	-2.40		C13H15N3O2	N-ACETYL-4-AMINOANTIPYRINE
4583	OILS	382	24	6.02	6.66	A C13H16I2O3	BENZOIC ACID, 4-OH, 3,5-DI-1000, HEXYL ESTER
4584	OILS	382	24	3.30	4.19	A C13H16I2O4	BENZOIC ACID, 3,5-DI-1000-4-OH, 6-OH-HEXYL ESTER
4585	MIXED SOLV#1	433		1.18		C13H16N2O3	8ARBITURIC ACID, 1-ALLYL-5,5-DIALLYL
4586	OCTANOL	10		3.41	3.41 =	C13H16O3	PHENOXYACETIC ACID, 4-CYCLOPENTYL
4587	HEXANE	376		1.38		C13H17N1O2	N-METHYL CARBAMIC ACID, O-CYCLOPENTYLPHENYL ESTER
4588	CYCLOHEXANE	141		2.89		C13H17N1O2	STYRENE, 4-I-PROPYL, 8-NITRO, 8-ETHYL
4589	OCTANOL	458		1.59	1.59 =	C13H17N1O3	5-(A, A-DIETHYLACETAMIDO)-1,3-BENZODIOXOLE
4590	HEXANE	376		2.53		C13H17N1O3	N-METHYL-N-ACETYLCARBAMIC ACID, M-I-PROPYLPHENYL ESTER
4591	HEXANE	376		1.84		C13H17N1O4	N-ME-N-ACETYLCARBAMIC ACID, O-I-PROPOXYPHENYL ESTER
4592	CYCLOHEXANE	141		2.45		C13H17N1O4	STYRENE, 3,4-DIETHOXY, 8-METHYL-8-NITRO
4593	OCTANOL	218		0.80	0.80 =	C13H17N3O1	AMINOPYRINE
4594	DIETHYL ETHER	3		-0.20	0.67	B C13H17N3O1	AMINOPYRINE
4595	CHCL3	338	44	1.86	1.36	B C13H17N3O1	AMINOPYRINE
4596	CHCL3	405		1.47	1.03	B C13H17N3O1	AMINOPYRINE
4597	OILS	2		-0.59	0.71	A C13H17N3O1	AMINOPYRINE
4598	BENZENE	338	44	-0.40		C13H17N3O1	AMINOPYRINE
4599	BENZENE	405		0.83	1.12	B C13H17N3O1	AMINOPYRINE
4600	N-HEPTANE	254		-0.68		C13H17N3O1	AMINOPYRINE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
4601	N-HEPTANE	338	44	-0.82		C13H17N3O1	AMINOPYRINE
4602	N-HEPTANE	340		-0.68		C13H17N3O1	AMINOPYRINE
4603	OLEYL ALCOHOL	82		0.11	0.67	C13H17N3O1	AMINOPYRINE
4604	N-HEPTANE	416	14	1.17		C13H18CL1N1O3	P-AMINOSALICYLIC ACID, 6-CHLOROHEXYL ESTER
4605	N-HEPTANE	138		3.45		C13H18F3N1	N-PROPYLNORFENFLURAMINE
4606	CHCL3	448	65	0.36		C13H18N2O1	N,N-DIMETHYLTRYPTAMINE, 4-METHOXY
4607	CHCL3	448	65	0.52		C13H18N2O1	N,N-DIMETHYLTRYPTAMINE, 5-METHOXY
4608	CHCL3	448	65	0.57		C13H18N2O1	N,N-DIMETHYLTRYPTAMINE, 6-METHOXY
4609	CHCL3	448	65	0.98		C13H18N2O1	N,N-DIMETHYLTRYPTAMINE, 7-METHOXY
4610	50%ETHER+50%DMF	125		0.26	1.45	C13H18N2O3	BARBITURIC ACID, 5-(1-CYCLOHEPTEN-1-YL)-5-ETHYL
4611	CHCL3	399	1	2.48	1.92 8	C13H18N2O3	CYCLOBARBITAL, N-METHYL
4612	I-PENT. ACETATE	399	1	2.27	2.18	C13H18N2O3	CYCLOBARBITAL, N-METHYL
4613	CCL4	399	1	1.49		C13H18N2O3	CYCLOBARBITAL, N-METHYL
4614	OCTANOL	56		4.35	4.35 =	C13H18O3	P-HYDROXYBENZOIC ACID, HEXYL ESTER
4615	OCTANOL	438		-0.70	-0.70 =	C13H18O6	GLUCOPYRANOSIDE, BENZYL (BETA)
4616	OCTANOL	438		-0.20	-0.20 =	C13H18O6	GLUCOPYRANOSIDE, 3-METHYLPHENYL (BETA)
4617	OCTANOL	438		-0.16	-0.16 =	C13H18O6	GLUCOPYRANOSIDE, 2-METHYLPHENYL (BETA)
4618	OCTANOL	438		-0.16	-0.16 =	C13H18O6	GLUCOPYRANOSIDE, 4-METHYLPHENYL (BETA)
4619	OCTANOL	438		-1.22	-1.22 =	C13H18O7	GLUCOPYRANOSIDE, 2-HYDROXYMETHYLPHENYL (BETA)
4620	OCTANOL	438		-1.04	-1.04 =	C13H18O7	GLUCOPYRANOSIDE, 2-METHOXYPHENYL (BETA)
4621	OCTANOL	438		-0.73	-0.73 =	C13H18O7	GLUCOPYRANOSIDE, 4-METHOXYPHENYL (BETA)
4622	OCTANOL	438		-0.52	-0.52 =	C13H18O7	GLUCOPYRANOSIDE, 3-METHOXYPHENYL (BETA)
4623	I-BUTANOL	4		-0.40	-1.07	C13H18O7	GLUCOPYRANOSIDE, SALICYL ALCOHOL
4624	OLEYL ALCOHOL	390	44	3.71	4.25	C13H19N1O2	P-AMINO BENZOIC ACID, HEXYL ESTER
4625	OCTANOL	384		3.38	3.38 =	C13H19N1O2	N-METHYL-3-METHYL-4-T-BUTYLPHENYL CARBAMATE
4626	OCTANOL	384		3.35	3.35 =	C13H19N1O2	N-METHYL-3-METHYL-5-T-BUTYLPHENYL CARBAMATE
4627	OCTANOL	384		3.14	3.14 =	C13H19N1O2	N-METHYL-3-METHYL-6-T-BUTYLPHENYL CARBAMATE
4628	N-HEPTANE	370	14	1.40		C13H19N1O3	P-AMINOSALICYLIC ACID, N-HEXYL ESTER
4629	OLEYL ALCOHOL	142		0.89	1.45	C13H19N1O3	2-METHOXY-PHENOXYACETAMIDE, N,N-DIETHYL
4630	N-HEPTANE	370	14	0.50		C13H19N1O4	P-AMINOSALICYLIC ACID, 6-HYDROXYHEXYL ESTER
4631	OCTANOL	276		4.14	4.14 =	C13H20CL1N2	N-DIETHYLAMINOETHYL ANILINE, 3-CL-4-METHYL /PKA= 9.6/
4632	OLEYL ALCOHOL	459	31	2.57	3.14	C13H20N2O1S1	THIOCAINE
4633	OLEYL ALCOHOL	460		1.90	2.45	C13H20N2O2	P-AMINO BENZOIC ACID, DIETHYLAMINO-ETHYL ESTER
4634	OCTANOL	449		2.62	2.62 =	C13H20N2O2	BENZOIC ACID, P-ET-AMINO, N,N-DIMETHYLAMINOETHYL ESTER
4635	OILS	449		1.46	2.52 A	C13H20N2O2	BENZOIC ACID, P-ET-AMINO, N,N-DIMETHYLAMINOETHYL ESTER
4636	XYLENE	449		2.20		C13H20N2O2	BENZOIC ACID, P-ET-AMINO, N,N-DIMETHYLAMINOETHYL ESTER
4637	DI-BUTYL ETHER	449		1.65		C13H20N2O2	BENZOIC ACID, P-ET-AMINO, N,N-DIMETHYLAMINOETHYL ESTER
4638	DIETHYL ETHER	378	44	0.50	1.38 8	C13H20N2O2	N-PHENYL CARBAMIC ACID, DIETHYLAMINOETHYL ESTER
4639	OCTANOL	218		1.87	1.87 =	C13H20N2O2	PROCAINE
4640	OCTANOL	218		1.92	1.92 =	C13H20N2O2	PROCAINE
4641	DIETHYL ETHER	461		1.81	1.71 A	C13H20N2O2	PROCAINE /NOVOCAINE/
4642	CHCL3	405	31	2.66	2.08 8	C13H20N2O2	PROCAINE /NOVOCAINE/
4643	OILS	462		1.82	1.93 8	C13H20N2O2	PROCAINE
4644	I-BUTANOL	4		1.80	2.03	C13H20N2O2	PROCAINE
4645	OLEYL ALCOHOL	459	31	1.79	2.35	C13H20N2O2	PROCAINE /NOVOCAINE/
4646	OCTANOL	235		-2.24	-2.24 =	C13H20N2O2	PROCAINE (PH=3.8; PKA(1)=8.96; PKA(2)=2.01)
4647	OCTANOL	235		0.16	0.16 =	C13H20N2O2	PROCAINE (PH=7.30; PKA=8.96)
4648	DIETHYL ETHER	3		0.97	1.70 8	C13H20O8	PENT AERITHRITOL TETRA-ACETATE
4649	I-BUTANOL	4		0.97	0.87	C13H20O8	PENT AERITHRITOL TETRAACETATE
4650	OCTANOL	373		-0.67	-0.67 =	C13H21CL1N2O1	N1-HEPTYLNICOTINAMIDE CHLORIDE
4651	DIETHYL ETHER	374		2.43	3.02 8	C13H21N1	N-BUTYL-G-PHENYL PROPYL AMINE
4652	N-HEPTANE	138		3.10		C13H21N1	N-BUTYL AMPHETAMINE
4653	CHCL3	396	31	4.05	3.24 8	C13H21N1	METHYL-1-PROPYLAMPHETAMINE
4654	N-HEPTANE	396	31	2.30		C13H21N1	METHYL-1-PROPYLAMPHETAMINE
4655	OLEYL ALCOHOL	459	31	1.27	1.84	C13H21N3O1	8-DIETAMINOPROPIONAMIDE, N-(P-AMINOPHENYL)
4656	OLEYL ALCOHOL	459	31	1.22	1.77	C13H21N3O1	PROCAINEAMIDE
4657	OCTANOL	65	46	-1.85	-1.85 =	C13H22BR1N1	BENZYL DIMETHYL BUTYLAMMONIUM BROMIDE
4658	OCTANOL	65	53	-0.95	-0.95 =	C13H22BR1N1	OCYLPYRROLINE BROMIDE
4659	OLEYL ALCOHOL	459	31	1.65	2.22	C13H22N2O1	P-AMINO BENZYL, DIETHYLAMINOETHYL ETHER
4660	OLEYL ALCOHOL	459	31	2.32	2.89	C13H22N2O1	P-AMINOPHENYL, DIETHYLAMINOPROPYL ETHER
4661	OLEYL ALCOHOL	459	31	1.13	1.68	C13H22N2O2S1	P-AMINOPHENYL, DIETHYLAMINOPROPYL SULFONE
4662	OLEYL ALCOHOL	459	31	2.90	3.47	C13H22N2S1	ANILINE, 4-OIETHYLAMINOPROPYL MERCAPTO
4663	OCTANOL	348		0.85	0.85 =	C13H23N1O2	N-OCTANOXYCYCLOBUTANECARBOXAMIDE
4664	CHCL3	424	46	-2.85		C13H2611N1O2	1,2,2,6,6-PENTAMETHYL-4-ACETYL PIPERIDINE ME1
4665	CHCL3	424	46	-2.00		C13H2611N1O2	1,3,3,5,5-PENTAMETHYL-4-ACETYL PIPERIDINE ME1
4666	DIETHYL ETHER	378	44	0.70	0.32 8	C13H26N2O2	N-CYCLOHEXYLCARBAMIC ACID, DIETHYLAMINOETHYL ESTER
4667	OCTANOL	268	46	1.15	1.15 =	C13H29N3.C2H4O2	ODOECYL GUANIDINE ACETATE
4668	OCTANOL	268	46	1.00	1.00 =	C13H30BR1N3	ODOECYL GUANIDINE HYDROBROMIDE
4669	OCTANOL	297	46	-0.16	-0.16 =	C13H3011N1	TRIMETHYL-DECYL-AMMONIUM IODIDE
4670	CYCLOHEXANE	304		3.01		C14H8O2	ANTHROQUINONE
4671	CYCLOHEXANE	141		1.39		C14H8O2	PHENANTHRENEQUINONE
4672	DIETHYL ETHER	143	62	4.35	3.93 A	C14H8O3S1	2-HYDROXYNAPHTHOQUINONE, 3-(W-A-THIENYLPROPYL)
4673	HEXANE	317		4.96		C14H9CL5	DOT
4674	OCTANOL	427		4.45	4.45 =	C14H10	ANTHRACENE
4675	OCTANOL	427		4.46	4.46 =	C14H10	PHENANTHRENE
4676	OILS	224		4.60	4.24 8	C14H10	PHENANTHRENE
4677	OCTANOL	463		2.69	2.69 =	C14H10O2	9-CARBOXYFLUORENE
4678	OCTANOL	463		2.46	2.46 =	C14H10O2S1	9-CARBOXYXTHIOXANTHENE
4679	OCTANOL	463		0.89	0.89 =	C14H10O3	9-CARBOXY-9-HYDROXYFLUORENE
4680	OCTANOL	463		2.12	2.12 =	C14H10O3	9-CARBOXYXANTHENE
4681	PARAFFINS	316		1.86		C14H11N1	9-AMINOPHENANTHRENE
4682	CYCLOHEXANE	141		4.40		C14H11N1O2	FLUORENE, 9-NITROMETHYLENE
4683	CHCL3	464	46	4.96		C14H12N1.C10H21O4S1	N-METHYLACRIDINIUM DECYL SULFATE
4684	CHCL3	464	46	5.86		C14H12N1.C12H23O4S1	N-METHYLACRIDINIUM DODECYL SULFATE
4685	PARAFFINS	439		1.36		C14H12N1	9-AMINO-3-METHYLPHENANTHRIDINE
4686	OCTANOL	10		2.99	2.99 =	C14H12N2O3	PHENOXYACETIC ACID, 4-PHENYLAZO
4687	CYCLOHEXANE	141		-2.31		C14H12N2O4	1,4-NAPHTHOQUINONE, 2,3-OIACETAMIDIO
4688	OCTANOL	235		3.97	3.97 =	C14H12O2	BENZYL BENZOATE
4689	OCTANOL	463		2.06	2.06 =	C14H12O2	A, A-OI PHENYLACETIC ACID
4690	DIETHYL ETHER	46		2.50	2.32 A	C14H12O3	BENZILIC ACID
4691	CHCL3	29		1.08	2.20 A	C14H12O3	BENZILIC ACID
4692	CHCL3	46		0.85	1.99 A	C14H12O3	BENZILIC ACID
4693	XYLENE	46		-0.04	1.74 A	C14H12O3	BENZILIC ACID
4694	TOLUENE	29		0.34	1.88 A	C14H12O3	BENZILIC ACID
4695	OCTANOL	10		3.18	3.18 =	C14H12O3	PHENOXYACETIC ACID, M-PHENYL
4696	OCTANOL	276		4.28	4.28 =	C14H12O3S1	2-OH-3-CARBOXYBENZOTHIOPHENYL ETHER /PKA = 3.00/
4697	DIETHYL ETHER	465	62	2.70	2.49 A	C14H12O5	2-HYDROXYNAPHTHOQUINONE, 3-(2-CARBOMETHOXYETHYL)
4698	OCTANOL	276		2.90	2.90 =	C14H13N1	OIHIDROMORPHANTHRIDINE /PKA = 3.00/
4699	N-HEPTANE	443		2.83		C14H13N1O2S1	PHENOTHIAZINE, 3,7-OIMETHOXY
4700	N-HEPTANE	370	14	1.52		C14H13N1O3	P-AMINOSALICYLIC ACID, BENZYL ESTER









NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5001	N-HEPTANE	479	31	5.31		C16H32O2	HEXADECANOIC ACID/PALMITIC ACID
5002	DIETHYL ETHER	236	17	2.88		C16H34O4P1	DIOCTYLPHOSPHATE
5003	ME-1-BUT.KETONE	236	17	2.03	1.81	C16H35O4P1	DIOCTYLPHOSPHATE
5004	BENZENE	480		0.11	1.51 A	C16H35O4P1	PHOSPHORIC ACID,DI(2-ETHYLHEXYL)
5005	CCL4	480		0.09		C16H35O4P1	PHOSPHORIC ACID,DI(2-ETHYLHEXYL)
5006	NITROBENZENE	92	46	0.07		C16H36I1N1	TETRA-(N-BUTYL) AMMONIUM IODIDE
5007	OCTANOL	268		-1.00	-1.00 =	C16H38BR2N2	DECAMETHONIUM BROMIDE
5008	CYCLOHEXANE	141		4.22		C17H12CL1N1O2	1,4-NAPHTHOQUINONE,2-CL,3-ANILINO,6-METHYL
5009	CYCLOHEXANE	304		3.83		C17H12O2	INDANE,1,3-DIONE,2(2-METHYL8ENZAL)
5010	CYCLOHEXANE	141		3.52		C17H12O2	1,4-NAPHTHOQUINONE,2-METHYL,3-PHENYL
5011	DIETHYL ETHER	143	62	3.16	2.89 A	C17H12O3	2-HYDROXYNAPHTHOQUINONE,3-PHENYL
5012	CYCLOHEXANE	304		3.44		C17H12O3	INDANE,1,3-DIONE,2(2-METHOXYBENZAL)
5013	CYCLOHEXANE	141		3.05		C17H13N1O2	1,4-NAPHTHOQUINONE,2-ANILINO,6-METHYL
5014	CYCLOHEXANE	141		4.22		C17H13N1O2	1,4-NAPHTHOQUINONE,2-METHYL,3-ANILINO
5015	PRIM. PENTANOLS	481		2.34	2.62	C17H14N2O2	5-PYRAZOLONE,1-PHENYL,3-METHYL,4-BENZOYL
5016	DIETHYL ETHER	143	62	4.35	3.93 A	C17H14O3S1	2-HYDROXYNAPHTHOQUINONE,3-(4-CARBOMETHOXYPROPYL)
5017	HEXANE	456		0.14		C17H17CL1O6	7-CL-4,6,4'-TRIMEO-6'-MEGRIS-3'-EN-3,2'-DIONE
5018	HEXANE	456		-0.10		C17H17CL1O6	OO-7-CL-4,6,2'-TRIMEO-6'-MEGRIS-2'-EN-3,4'-DIONE
5019	OCTANOL	238		2.18	2.18 =	C17H17CL1O6	GRISOFULVIN
5020	HEXANE	456		0.26		C17H17CL1O6	LO-7-CL-4,6,2'-TRIMEO-6'-MEGRIS-2'-EN-3,4'-DIONE
5021	N-HEPTANE	416	14	1.62		C17H18N2O6	BIS(P-AMINOSALICYLIC ACID) PROPYL ESTER
5022	DIETHYL ETHER	143	62	4.93	4.44 A	C17H18O3	2-HYDROXYNAPHTHOQUINONE,3-CYCLOHEXYLMETHYL
5023	DIETHYL ETHER	465	62	3.70	3.36 A	C17H18O5	2-HYDROXYNAPHTHOQUINONE,3-(4-CARBOMETHOXYPENTYL)
5024	HEXANE	456		-0.44		C17H18O6	4,6,2'-TRIMEO-6'-MEGRIS-2'-EN-3,4'DIONE
5025	CHCL3	482	68	-1.05	-0.37 N	C17H19CL1N2O1S1	CHLORPROMAZINE SULFOXIDE
5026	ODOECANE	475		-0.12		C17H19CL1N2O1S1	CHLORPROMAZINE-SULFOXIDE
5027	OCTANOL	475	46	-0.66	-0.66 =	C17H19CL1N2O1S1.HCL	CHLORPROMAZINE-SULFOXIDE.HCL
5028	OCTANOL	483	44	5.16	5.16 =	C17H19CL1N2S1	CHLORPROMAZINE
5029	OCTANOL	218		5.35	5.35 =	C17H19CL1N2S1	CHLORPROMAZINE
5030	OCTANOL	56		5.32	5.32 =	C17H19CL1N2S1	CHLORPROMAZINE
5031	CYCLOHEXANE	484		0.95		C17H19CL1N2S1	CHLORPROMAZINE
5032	CHCL3	482	68	1.09	1.62 N	C17H19CL1N2S1	CHLORPROMAZINE
5033	CHCL3	482	69	2.10	2.55 N	C17H19CL1N2S1	CHLORPROMAZINE
5034	N-HEPTANE	485	14	1.86		C17H19CL1N2S1	CHLORPROMAZINE
5035	ODOECANE	475		4.86		C17H19CL1N2S1	CHLORPROMAZINE
5036	OCTANOL	475	46	1.51	1.51 =	C17H19CL1N2S1.HCL	CHLORPROMAZINE HYDROCHLORIDE
5037	CHCL3	486	46	1.22	1.73 N	C17H19CL1N2S1.HCL	CHLORPROMAZINE HYDROCHLORIDE
5038	OCTANOL	475	46	1.23	1.23 =	C17H19CL1N2S1.HCL	1-CHLORPROMAZINE HYDROCHLORIDE
5039	OCTANOL	475	46	1.79	1.79 =	C17H19CL1N2S1.HCL	3-CHLORPROMAZINE HYDROCHLORIDE
5040	ODOECANE	475		4.79		C17H19CL1N2S1	1-CHLORPROMAZINE
5041	ODOECANE	475		4.67		C17H19CL1N2S1	3-CHLORPROMAZINE
5042	OCTANOL	186		0.76	0.76 =	C17H19N1O3	MORPHINE
5043	OCTANOL	218		0.70	0.70 =	C17H19N1O3	MORPHINE
5044	DIETHYL ETHER	3	17	-0.68	0.25 B	C17H19N1O3	MORPHINE
5045	1-BUTANOL	4		0.87	0.72	C17H19N1O3	MORPHINE
5046	CHCL3	466		4.04	3.22 B	C17H20N2	OESOMETHYLIMIPRAMINE
5047	HEXANE	466		2.38		C17H20N2	OESOMETHYLIMIPRAMINE
5048	DIETHYL ETHER	457	62	2.03	1.89 A	C17H20N2O2	1,4-NAPHTHOQUINONE,2-CYCLOHEXYLMETHYLHYDRAZINO
5049	DIETHYL ETHER	457	62	2.13	1.99 A	C17H20N2O2	1,4-NAPHTHOQUINONE,2-W-CYCLOPENTYLETHYLHYDRAZINO
5050	N-HEPTANE	477		-1.70		C17H20N2O2	TROPIC ACID,N-ET-N-G-PICOLYLAMIDE
5051	OCTANOL	127		2.28	2.28 =	C17H20N2O5S1	PENICILLIN,A-PHENOXETHYL
5052	1-BUTANOL	130		0.46	0.14	C17H20N2O5S1	PENICILLIN,A-PHENOXETHYL
5053	OCTANOL	127		1.22	1.22 =	C17H20N2O6S1	PENICILLIN,2,6-DIMETHOXYPHENYL
5054	OCTANOL	483	44	4.55	4.55 =	C17H20N2S1	PROMAZINE
5055	CHCL3	482	68	0.59	1.16 N	C17H20N2S1	PRCMAZINE
5056	CHCL3	482	69	1.43	1.94 N	C17H20N2S1	PROMAZINE
5057	N-HEPTANE	485	14	1.71		C17H20N2S1	PROMAZINE
5058	ODOECANE	475		4.02		C17H20N2S1	PRCMAZINE
5059	CYCLOHEXANE	484		1.50		C17H20N2S1	PROMETHAZINE
5060	CHCL3	482	68	-1.22	-0.53 N	C17H20N2S1	PROMETHAZINE
5061	CHCL3	482	69	1.76	2.25 N	C17H20N2S1	PROMETHAZINE
5062	DIETHYL ETHER	487		-3.80		C17H20N4O6	RIBOFLAVIN
5063	N-BUTANOL	487		-0.17	-0.75	C17H20N4O6	RIBOFLAVIN
5064	1-BUTANOL	487		-0.33	-0.97	C17H20N4O6	RIBOFLAVIN
5065	PRIM. PENTANOLS	487		-0.77	-1.28	C17H20N4O6	RIBOFLAVIN
5066	HEXANOL	487		-0.92	-1.25	C17H20N4O6	RIBOFLAVIN
5067	CYCLOHEXANOL	487		-0.27	-1.46	C17H20N4O6	RIBOFLAVIN
5068	PARAFFINS	487		-4.70		C17H20N4O6	RIBOFLAVIN
5069	DIETHYL ETHER	143	62	5.65	5.06 A	C17H20O3	2-HYDROXYNAPHTHOQUINONE,3-1-HEPTYL
5070	DIETHYL ETHER	465	62	2.24	2.09 A	C17H20O4	2-HYDROXYNAPHTHOQUINONE,3-(5-OH-5-METHYLHEXYL)
5071	OCTANOL	475	46	0.91	0.91 =	C17H21CL1N2S1	PROMAZINE HYDROCHLORIDE
5072	CHCL3	486	46	0.73	1.25 N	C17H21CL1N2S1	PROMAZINE HYDROCHLORIDE
5073	CHCL3	396	31	3.15	2.47 B	C17H21N1	BENZPHETAMINE
5074	N-HEPTANE	396	31	1.87		C17H21N1	BENZPHETAMINE
5075	OCTANOL	276		3.30	3.30 =	C17H21N1O1	BENADRYL /PKA= 8.98/
5076	OCTANOL	218		3.27	3.27 =	C17H21N1O1	OIPHENHYDRAMINE
5077	OCTANOL	218		3.40	3.40 =	C17H21N1O1	OIPHENHYDRAMINE
5078	N-HEPTANE	477		1.26		C17H21N1O1	OIPHENHYDRAMINE
5079	DIETHYL ETHER	3	17	2.14	2.73 B	C17H21N1O4	COCAINE
5080	OILS	462		2.33	1.92 B	C17H21N1O4	COCAINE
5081	1-BUTANOL	4		2.03	2.34	C17H21N1O4	COCAINE
5082	N-HEPTANE	477		-2.36		C17H21N1O4	SCOPOLAMINE
5083	DIETHYL ETHER	457	62	2.86	2.63 A	C17H22N2O2	1,4-NAPHTHOQUINONE,2-HEPTYLHYDRAZINO
5084	CYCLOHEXANE	304		4.00		C17H22O5	DIETHYLMALONATE,3-PROPOXYBENZAL
5085	CYCLOHEXANE	446		2.48		C17H23N1O1	N-CYCLOOCTYL CINNAMAMIDE
5086	CYCLOHEXANE	446		3.11		C17H23N1O1	N,N-OCTAMETHYLENE CINNAMAMIDE
5087	OCTANOL	218		1.79	1.79 =	C17H23N1O3	ATROPINE
5088	OCTANOL	218		1.83	1.83 =	C17H23N1O3	ATROPINE
5089	DIETHYL ETHER	3	17	0.61	1.39 B	C17H23N1O3	ATROPINE
5090	1-BUTANOL	4	12	1.94	2.22	C17H23N1O3	ATROPINE
5091	DI-1-PR. ETHER	488		-0.03		C17H23N1O3	ATROPINE
5092	N-HEPTANE	477		-3.25		C17H23N1O3	ATROPINE
5093	OLEYL ALCOHOL	142		2.20	2.74	C17H23N1O3	2-METHOXY-4-ALLYLPHENOXYACETYLPIPERIDINE
5094	OCTANOL	276		2.85	2.85 =	C17H23N3O1	MEPYRAMINE / PKA = 8.85/
5095	OLEYL ALCOHOL	489	27	2.15	2.70	C17H23N3O2	CINCHONINAMIDE,N-(2-DIETHYL-AMINOETHYL)-2-METHOXY
5096	N-HEPTANE	477		-2.89		C17H24N2O2	ATURBAN
5097	CHCL3	490	17	0.33	0.05 B	C17H25CL1N2O1.H8R	1-(M-CLBENZYL)-3-N-DIETCARBAMOYLPIPERIDINE
5098	CHCL3	490	17	0.40	0.11 B	C17H25CL1N2O1.H8R	1-(P-CLBENZYL)-3-N-DIETCARBAMOYLPIPERIDINE
5099	CYCLOHEXANE	446		3.21		C17H25N1C1	N-OCTYL CINNAMAMIDE
5100	OLEYL ALCOHOL	142		2.97	3.51	C17H25N1O3	2-METHOXY-4-ALLYLPHENOXYACETAMIDE,N-ME,N-BUTYL

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5101	OLEYL ALCOHOL	142		2.75	3.29	C17H25N103	2-METHOXY-4-ALLYLPHENOXYPROPIONAMIDE, N,N-DIETHYL
5102	CHCL3	491	46	-1.62		C17H25N107S1	ATROPINE SULFATE
5103	CHCL3	490	17	-0.12	8	C17H25N303.H8R	1-(M-NO2BENZYL)-3-(N-DIETCARBAMOYL)PIPERIDINE
5104	CHCL3	490	17	0.00	-0.23	C17H25N303.H8R	1-(P-NO2BENZYL)-3-(N-DIETCARBAMOYL)PIPERIDINE
5105	N-HEPTANE	416	14	1.68		C17H26CL1N1O3	P-AMINOSALICYLIC ACID, 10-CHLORODECYL ESTER
5106	CHCL3	490	17	-0.02	-0.25	C17H26N201.H8R	1-BENZYL-3-(N,N-DIETCARBAMOYL)PIPERIDINE-H8R
5107	MIXED SOLV#1	433		2.23		C17H26N203	BARBITURIC ACID, 1-N-HEPTYL-5,5-DIALLYL
5108	CYCLOHEXANE	474	14	-0.77		C17H26N4O3S2	THIAMINE TETRAHYDROFURFURYL DISULFIDE
5109	CHCL3	474	14	1.17	0.77	C17H26N4O3S2	THIAMINE TETRAHYDROFURFURYL DISULFIDE
5110	BENZENE	474	14	-2.52		C17H26N4O3S2	THIAMINE TETRAHYDROFURFURYL DISULFIDE
5111	ETHYL ACETATE	474	14	0.07	0.06	C17H26N4O3S2	THIAMINE TETRAHYDROFURFURYL DISULFIDE
5112	N-HEPTANE	370	14	2.08		C17H27N1O3	P-AMINOSALICYLIC ACID, OECYL ESTER
5113	OLEYL ALCOHOL	473		4.27	4.84	C17H27N1O3	4-BUTOXYBENZOIC ACID, DIETHYLAMINOETHYL ESTER
5114	N-HEPTANE	370	14	1.24		C17H27N1O4	P-AMINOSALICYLIC ACID, 10-HYDROXYOECYL ESTER
5115	OLEYL ALCOHOL	473		3.52	4.09	C17H27N1O4	2,4-DIETHOXYBENZOIC ACID, DIETHYLAMINOETHYL ESTER
5116	OLEYL ALCOHOL	473		3.37	3.90	C17H27N1O4	3,4-DIETHOXYBENZOIC ACID, DIETHYLAMINOETHYL ESTER
5117	OLEYL ALCOHOL	460		3.29	3.82	C17H28N2O2	P-AMINOBENZOIC ACID, TETRAME-8-(DIETAM)-ETHYL ESTER
5118	DIETHYL ETHER	378	44	1.10	1.90	C17H28N2O3	N-M-BUTOXYPHENYL CARBAMIC ACID, DIETAMINOE.T. ESTER
5119	DIETHYL ETHER	378	44	1.09	1.89	C17H28N2O3	N-O-BUTOXYPHENYL CARBAMIC ACID, DIETAMINOE.T. ESTER
5120	DIETHYL ETHER	378	44	1.07	2.00	C17H28N2O3	N-P-BUTOXYPHENYL CARBAMIC ACID, DIETAMINOE.T. ESTER
5121	CHCL3	464	46	2.70		C17H29N1O6S1	N-ME-3-METHOXYCARBONYLPYRIDINIUM NONYLSULFATE
5122	OCTANOL	65	46	-0.29	-0.29	C17H30BR1N1	BENZYL DIMETHYL OCTYLAMMONIUM BROMIDE
5123	OCTANOL	65	46	0.44	0.44	C17H30BR1N1	OEOECYL PYRIDINIUM BROMIDE
5124	OCTANOL	348		1.28	1.28	C17H31N1O2	N-DOECANOYL CYCLOBUTANECARBOXAMIDE
5125	BENZENE	478		-1.15	-0.25	C17H34N2O1	PIPERIDINE, 1-OECYL, 3-(N-METHYL CARBAMYL)
5126	OCTANOL	297	46	-0.22	-0.22	C17H3811N1	TRIPENTYL-ETHYL-AMMONIUM IODOIDE
5127	CCL4	412		2.05		C18H12CU1N2O2	8-QUINOLINOL(8IS)-CU(11)
5128	CHCL3	412		3.48		C18H12CU1N2O3	8-QUINOLINOL(8IS)-CU(11)
5129	OCTANOL	141		1.73	1.73	C18H14N2O3	1,4-NAPHTHOQUINONE, 2-ACETAMID-3-ANILINO
5130	CYCLOHEXANE	141		-0.71		C18H14N2O3	1,4-NAPHTHOQUINONE, 2-ACETAMID-3-ANILINO
5131	DIETHYL ETHER	143	62	4.04	3.68	C18H14O3	2-HYDROXYNAPHTHOQUINONE, 3-(W-PHENYLETHYL)
5132	CHCL3	96		-0.42		C18H15BR1O3S1	TRIPHENYLSULFONIUM BROMATE
5133	CHCL3	96		-0.25		C18H15BR1S1	TRIPHENYLSULFONIUM BROMIDE
5134	CHCL3	96		-0.63		C18H15CL1S1	TRIPHENYLSULFONIUM CHLORIDE
5135	CHCL3	96		-2.52		C18H1511O3S1	TRIPHENYLSULFONIUM IODATE
5136	CHCL3	96		1.12		C18H1511S1	TRIPHENYLSULFONIUM IODIDE
5137	CHCL3	96		-1.00		C18H15N1O2S1	TRIPHENYLSULFONIUM NITRITE
5138	CHCL3	96		-0.29		C18H15N1O3S1	TRIPHENYLSULFONIUM NITRATE
5139	OCTANOL	56		2.87	2.87	C18H15O1P1	PHOSPHINE OXIDE, TRIPHENYL
5140	CHCL3	96	32	1.01		C18H17CR1O4S1	TRIPHENYLSULFONIUM CHROMATE
5141	CHCL3	96	33	-0.15		C18H17CR1O4S1	TRIPHENYLSULFONIUM CHROMATE
5142	CHCL3	96		-1.00		C18H17O4P1S1	TRIPHENYLSULFONIUM PHOSPHATE
5143	OCTANOL	56		-0.89	-0.89	C18H18N2O7S1	CEPHALOSPORANIC ACID, 7(O-MANOELAMIDO)
5144	HEXANE	456		0.36		C18H19CL1O6	7-CL-2'-ETO-4,6-O1MEO-6'-MEGRIS-2'-EN-3,4'-O1ONE
5145	HEXANE	456		0.57		C18H19CL1O6	7-CL-4'-ETO-4,6-O1MEO-6'-MEGRIS-3'-EN-3,2'-O1ONE
5146	OCTANOL	483	44	5.19	5.19	C18H19F3N2S1	TRIFLUPROMAZINE
5147	CHCL3	482	68	1.30	1.82	C18H19F3N2S1	TRIFLUPROMAZINE
5148	CHCL3	482	69	1.76	2.25	C18H19F3N2S1	TRIFLUPROMAZINE
5149	N-HEPTANE	485	14	1.15		C18H19F3N2S1	TRIFLUPROMAZINE
5150	DODECANE	475		5.14		C18H19F3N2S1	TRIFLUPROMAZINE
5151	MIXED SOLV#1	433		0.30		C18H19N3O4	BARBITURIC ACID, 1-(N-PHENYL CARBAMOYL)-5,5-DIALLYL
5152	OCTANOL	475	46	1.78	1.78	C18H20CL1F3N2S1	TRIFLUPROMAZINE HYDROCHLORIDE
5153	CHCL3	486	46	1.46	1.92	C18H20CL1F3N2S1	TRIFLUPROMAZINE HYDROCHLORIDE
5154	MIXED SOLV#1	433		2.36		C18H20N2O2	BARBITURIC ACID, 1-B-PHENYLETHYL-5,5-DIALLYL
5155	N-HEPTANE	416	14	1.74		C18H20N2O6	8IS(P-AMINOSALICYLIC ACID) BUTYL ESTER
5156	CHCL3	482	68	0.88	1.43	C18H20N2S1	METHOFLAZINE
5157	CHCL3	482	69	1.92	2.40	C18H20N2S1	METHOFLAZINE
5158	CHCL3	482	68	1.14	1.67	C18H20N2S1	PYRATHIAZINE
5159	CHCL3	482	69	1.88	2.36	C18H20N2S1	PYRATHIAZINE
5160	OCTANOL	218		5.07	5.07	C18H20O2	4,4'-STILBENE DIOL, A,A'-DIETHYL
5161	DIETHYL ETHER	143	62	5.64	5.06	C18H20O3	2-HYDROXYNAPHTHOQUINONE, 3-(W-CYCLOHEXYLETHYL)
5162	OCTANOL	276		4.36	4.36	C18H20O3S1	2-OH-3-CARBOXY-5-ME-BENZTHIO-2'-1-PROPYLPHENYLETER
5163	OCTANOL	276		4.91	4.91	C18H20O4	2-OH-3-CARBOXY-5-ME-BENZYL-2'-1-PROPYLPHENYLETER
5164	DIETHYL ETHER	465	62	3.40	3.10	C18H20O5	2-HYDROXYNAPHTHOQUINONE, 3-(2-ME-5-CARBOMETHOXPENT)
5165	DIETHYL ETHER	143	62	3.82	3.47	C18H20O5	2-HYDROXYNAPHTHOQUINONE, 3-(W-ME-W-CARBOMETHOXPENT)
5166	DODECANE	475		5.07		C18H21CL1N2S1	BUTYL "CHLORPROMAZINE"
5167	DIETHYL ETHER	492	17	0.19	1.01	C18H21N1O3	CODEINE
5168	DIETHYL ETHER	3	17	-0.10	0.78	C18H21N1O3	CODEINE
5169	DIETHYL ETHER	359		0.03	0.88	C18H21N1O3	CODEINE
5170	CHCL3	493		1.94	1.42	C18H21N1O3	CODEINE
5171	CHCL3	359		2.17	1.63	C18H21N1O3	CODEINE
5172	1-BUTANOL	4		1.21	1.19	C18H21N1O3	CODEINE
5173	CCL4	492		-0.62		C18H21N1O3	CODEINE
5174	CLC2CH2CL	492		-1.32		C18H21N1O3	CODEINE
5175	ETHYL OLEATE	494		1.29		C18H21N1O3	DICODIOL / DIHYDROCODIENONE /
5176	ETHYL OLEATE	494		1.37		C18H21N1O4	EUCCOAL / OXYCOONE /
5177	CYCLOHEXANE	495		0.78		C18H21N3	BENZIMICAZOLE, 1-O1METHYLAMINOETHYL, 2-BENZYL
5178	OCTANOL	56		-0.15	-0.15	C18H22CL1N2S1	N-METHYLCHLORPROMAZINE CHLORIDE
5179	OCTANOL	483	44	4.28	4.28	C18H22N2	OESIPRAMINE
5180	DIETHYL ETHER	466		2.88	2.65	C18H22N2	OESIPRAMINE
5181	CHCL3	466		3.82	3.05	C18H22N2	OESIPRAMINE
5182	HEXANE	466		2.27		C18H22N2	OESIPRAMINE
5183	CHCL3	466		2.43	1.84	C18H22N2O1	10-HYDROXYOESIPRAMINE
5184	DIETHYL ETHER	466		2.00	1.87	C18H22N2O1	2-HYDROXYOESIPRAMINE
5185	CHCL3	466		1.99	1.48	C18H22N2O1	2-HYDROXYOESIPRAMINE
5186	HEXANE	466		0.72		C18H22N2O1	2-HYDROXYOESIPRAMINE
5187	OCTANOL	483	44	4.90	4.90	C18H22N2O1S1	METHOPROMAZINE
5188	N-HEPTANE	485	14	1.51		C18H22N2O1S1	METHOPROMAZINE
5189	CHCL3	482	68	0.71	1.27	C18H22N2O1S1	METHOXYPROMAZINE
5190	CHCL3	482	69	1.38	1.90	C18H22N2O1S1	METHOXYPROMAZINE
5191	OCTANOL	56		3.50	3.50	C18H22N2O2S2	PHENOTHIAZINE, 2-MESULFONYL-10-(3-O1MEAM)NOPROPYL
5192	OCTANOL	127		2.65	2.65	C18H22N2O5S1	PENICILLIN, 1-PHENOXYPROPYL/PROPCILLIN/
5193	OCTANOL	127		2.76	2.76	C18H22N2O5S1	PENICILLIN, 2-PHENOXY-2-PROPYL
5194	1-BUTANOL	130	12	0.66	0.42	C18H22N2O5S1	PENICILLIN, 1-PHENOXYPROPYL/PROPCILLIN/
5195	CHCL3	482	68	1.06	1.60	C18H22N2S1	TRIMEPRAZINE
5196	CHCL3	482	68	1.14	1.67	C18H22N2S2	THIOMETHYL-PROMAZINE
5197	CHCL3	482	69	1.88	2.36	C18H22N2S2	THIOMETHYL-PROMAZINE
5198	CYCLOHEXANE	141		3.45		C18H22O2S2	1,4-NAPHTHOQUINONE, 2,3-O1BUTYLTHIO
5199	DIETHYL ETHER	496		-0.18	-0.04	C18H22O4	6-OXOESTRIOL
5200	ETHYL ACETATE	496		0.75	0.75	C18H22O4	6-OXOESTRIOL

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5201	CHCL3	486	46	0.97	1.46 N	C18H23CL1N2O1S1	METHOXYPRMAZINE HYDROCHLORIDE
5202	N-HEPTANE	477		1.49		C18H23N1O1	ORPHENADRINE
5203	CYCLOHEXANE	141		3.44		C18H23N1O2S1	1,4-NAPHTHOQUINONE,2-BUTYLAMINO,3-BUTYLTHIO
5204	OLEYL ALCOHOL	142		2.57	3.14	C18H23N1O3	2-METHOXY-4-ALLYLPHENOXYACETAMIDE,N,N-DIALLYL
5205	DIETHYL ETHER	496		0.89	0.90 A	C18H24O3	ESTRIOL
5206	ETHYL ACETATE	496		1.38	1.43	C18H24O3	ESTRIOL
5207	DIETHYL ETHER	496		-0.92	-0.69 A	C18H24O4	6-A-HYDROXYESTRIOL
5208	ETHYL ACETATE	496		-0.05	-0.09	C18H24O4	6-A-HYDROXYESTRIOL
5209	CYCLOHEXANE	304		3.62		C18H24O5	DIETHYLMALONATE,3-BUTOXYBENZAL
5210	CHCL3	497		3.67	2.91 B	C18H25N1O1	OEXTROMETHORPHAN
5211	OLEYL ALCOHOL	489	27	2.56	3.10	C18H25N3O2	C1NCNONINAMIDE,N-(2-DIETHYLAMINOETHYL)-2-ETHOXY
5212	CHCL3	497	46	2.55		C18H26BR1N1O1	OEXTROMETHORPHAN HYDROBROMIDE
5213	CHCL3	497	46	1.77		C18H26CL1N1O1	OEXTROMETHORPHAN HYDROCHLORIDE
5214	CHCL3	497	46	3.11		C18H26I1N1O1	OEXTROMETHORPHAN HYDROIODOIDE
5215	N-HEPTANE	498		-0.07		C18H26O2	TESTOSTERONE,19-NOR/NANOROLONE/
5216	CYCLOHEXANE	446	26	3.17		C18H27N1O1	N-NONYLCINNAMAMIDE
5217	N-HEPTANE	477		2.33		C18H27N1O2	CARAMIPHEN
5218	OLEYL ALCOHOL	142		3.07	3.61	C18H27N1O3	2-METHOXY-4-ALLYLPHENOXYACETAMIDE,N,N-DIPICPLYL
5219	OLEYL ALCOHOL	142		1.42	1.97	C18H27N1O4	2-METHOXY-4-ALLYLPHENOXYETHOXYACETAMIDE,N,N-DIETHYL
5220	OLEYL ALCOHOL	142		1.26	1.81	C18H27N1O5	8-(2-MEO-4-ALLYLPHENOXY)-ETHANOL OXYACETAMIDE,N,N-DIETHYL
5221	CHCL3	490	17	0.75	0.41 B	C18H28N2O1.H8R	1-(M-MEBENZYL)-3-(N-O1ETCARBAMOYL)P1PERIDINE
5222	CHCL3	490	17	0.51	0.20 B	C18H28N2O1.H8R	1-(P-MEBENZYL)-3-(N-O1ETCARBAMOYL)P1PERIDINE
5223	CHCL3	490	17	0.33	0.05 B	C18H28N2O2.H8R	1-(M-MEOBENZYL)-3-(N-O1ETCARBAMOYL)P1PERIDINE
5224	CHCL3	490	17	0.30	0.03 B	C18H28N2O2.H8R	1-(P-MEOBENZYL)-3-(N-O1ETCARBAMOYL)P1PERIDINE
5225	1-OCTANOL	353		-0.35		C18H29K1O3S1	POTASSIUM OOOEYL BENZENESULFONATE
5226	1-OCTANOL	353		-0.45		C18H29NA1O3S1	SODIUM OOOEYL BENZENESULFONATE
5227	OCTANE	57		3.74		C18H3O03	P-T-OCTYLPHENOXYMONOETHOXYETHANOL/DPE-1/
5228	CHCL3	464	46	2.97		C18H31N1O6S1	N-ME-3-ETHOXYCARBONYLPYRIDINIUM NONYLSULFATE
5229	CHCL3	464	46	3.06		C18H31N1O6S1	N-ME-3-METHOXYCARBONYLPYRIDINIUM OECYLSULFATE
5230	N-HEPTANE	479	31	5.08		C18H32O2	LINOLEIC ACID
5231	N-HEPTANE	479	31	5.36		C18H34O2	OLEIC ACID
5232	BENZENE	478		-0.42	0.26 B	C18H36N2O1	P1PERIDINE,1-DECYL,3-(N-ETHYLCARBAMYL)
5233	BENZENE	478		-0.70	0.06 B	C18H36N2O1	P1PERIDINE,1-DECYL,3-(N,N-DIMETHYLCARBAMYL)
5234	N-HEPTANE	479	31	5.43		C18H36O2	OCTADECANOIC ACID/STEARIC ACID/
5235	CHCL3	96		0.00		C19H15N1S2	TRIPHENYLSULFONIUM THIOCYANATE
5236	PARAFFINS	499		1.98		C19H16N2	N-PHENYL-P-PHENYLBENZAMINE
5237	PARAFFINS	499		2.16		C19H16N2	N-PHENYL-P-PHENYLBENZAMINE
5238	DIETHYL ETHER	143	62	4.43	4.00 A	C19H16O3	2-HYDROXYNAPHTHOQUINONE,3-(W-PHENYLP1PRPYL)
5239	1-BUTANOL	130		1.06	0.98	C19H17CL2N3O5S1	O1CLOXACILLIN
5240	1-BUTANOL	130		0.75	0.55	C19H18CL1N3O5S1	CLOXACILLIN
5241	1-BUTANOL	130		0.59	0.32	C19H19N3O5S1	OXACILLIN
5242	OCTANOL	56		3.28	3.28 =	C19H20N2O3	OXYPHENBUAZONE
5243	DIETHYL ETHER	143	62	5.45	4.90 A	C19H20O3	2-HYDROXYNAPHTHOQUINONE,3-(W-CYCLOHEXEN-3YL-PROPYL)
5244	HEXANE	456		0.99		C19H21CL1O6	7-CL-4,6-D1MEO-6'-ME-2'-PROPOXYGR1S-2'-EN-3,4'-O1ONE
5245	HEXANE	456		1.38		C19H21CL1O6	7-CL-4,6-D1MEO-6'-ME-4'-PROPOXYGR1S-3'-EN-3,2'-O1ONE
5246	HEXANE	456		0.98		C19H21CL1O6	7-CL-6,2'-O1ETO-4-MEO-6'-MEGR1S-2'-EN-3,4'-O1ONE
5247	CHCL3	482	68	1.51	2.02 N	C19H21F3N2S1	RHODIUM7746/TR1FLUOTR1MEPRAZINE/
5248	CHCL3	482	69	2.02	2.49 N	C19H21F3N2S1	RHODIUM7746/TR1FLUOTR1MEPRAZINE/
5249	1-BUTANOL	4		2.02	2.34	C19H21N1O3	THEBAINE
5250	DIETHYL ETHER	3	17	1.21	1.91 B	C19H21N1O3	THEBAINE (PARAMORPHINE)
5251	OCTANOL	483	44	3.96	3.96 =	C19H21N1S1	OOSULEPINE
5252	CHCL3	482	68	0.64	1.21 N	C19H21N3S1	CYAMPROMAZINE
5253	CHCL3	482	69	1.11	1.64 N	C19H21N3S1	CYAMPROMAZINE
5254	OCTANOL	276		3.92	3.92 =	C19H22N2	TRIPROLODINE /PKA = 9.50/
5255	CHCL3	482	68	0.59	1.16 N	C19H22N2O1S1	ACEPROMAZINE
5256	CHCL3	482	69	2.29	2.74 N	C19H22N2O1S1	ACEPROMAZINE
5257	N-HEPTANE	485	14	0.88		C19H22N2O1S1	ACEPROMAZINE
5258	N-HEPTANE	416	14	1.95		C19H22N2O6	BIS(P-AMINOSALICYLIC ACID) AMYL ESTER
5259	CHCL3	482	68	0.85	1.40 N	C19H22N2S1	MEPAZINE
5260	CHCL3	482	69	1.60	2.10 N	C19H22N2S1	MEPAZINE
5261	CHCL3	500	14	1.57		C19H22N4O3S1	THIAMINE, S-BENZOYL
5262	CHCL3	500	14	0.45		C19H22N4O3S2	THIAMINE, O-BENZOYL
5263	DIETHYL ETHER	143	62	5.93	5.31 A	C19H22O3	2-HYDROXYNAPHTHOQUINONE,3-(W-CYCLOHEXYLPROPYL)
5264	DIETHYL ETHER	465	62	3.92	3.56 A	C19H22O4	2-HYDROXYNAPHTHOQUINONE,3-(2-METHYLOCTYL-7-ONE)
5265	DIETHYL ETHER	465	62	3.20	2.93 A	C19H22O5	2-HYDROXYNAPHTHOQUINONE,3-(8-CARBOMOXYOCTYL)
5266	DIETHYL ETHER	465	62	4.10	3.72 A	C19H22O5	2-HYDROXYNAPHTHOQUINONE,3-(2-ME-6-CARBOMETHOXYHEX)
5267	OCTANOL	483	44	3.88	3.88 =	C19H23CL1N2	CHLORIMIPRAMINE
5268	DIETHYL ETHER	501	17	-0.88	0.07 B	C19H23N3O2	ERGOMETRINE/ERGONIVINE/
5269	DIETHYL ETHER	501	17	0.41	1.21 B	C19H23N3O2	ERGOMETRINE
5270	CHCL3	500	14	-2.40		C19H23N4O6P1S1	THIAMINE MONOPHOSPHATE, S-BENZOYL
5271	SOETHER+50XOMF	125		0.23	1.37	C19H24CL1N1O1	2(A-ME-A-P-CLPHENYLBENZYL-OXY)-N,N-D1MOPROPYLAMINE
5272	OCTANOL	483	44	4.62	4.62 =	C19H24N2	IMIPRAMINE
5273	DIETHYL ETHER	466		2.75	2.54 A	C19H24N2	IMIPRAMINE
5274	CHCL3	466		3.30	2.60 B	C19H24N2	IMIPRAMINE
5275	HEXANE	466		2.82		C19H24N2	IMIPRAMINE
5276	CHCL3	466		1.69	1.22 B	C19H24N2O1	10-HYDROXYIMIPRAMINE
5277	DIETHYL ETHER	466		1.33	1.30 A	C19H24N2O1	2-HYDROXYIMIPRAMINE
5278	CHCL3	466		2.17	1.63 B	C19H24N2O1	2-HYDROXYIMIPRAMINE
5279	HEXANE	466		0.13		C19H24N2O1	2-HYDROXYIMIPRAMINE
5280	DIETHYL ETHER	466		-1.12	-0.86 A	C19H24N2O1	IMIPRAMINE-N-OXIOE
5281	CHCL3	466		1.54	1.10 B	C19H24N2O1	IMIPRAMINE-N-OXIOE
5282	HEXANE	466		-0.95		C19H24N2O1	IMIPRAMINE-N-OXIOE
5283	CHCL3	482	68	1.02	1.57 N	C19H24N2O1S1	METHOTRIMEPRAZINE
5284	CHCL3	482	69	1.93	2.41 N	C19H24N2O1S1	METHOTRIMEPRAZINE
5285	DIETHYL ETHER	378	44	0.99	1.80 B	C19H24N2O2	N,N-DI-PHENYLCARBAMIC ACID,DIETAMINOETHYL ESTER
5286	DIETHYL ETHER	457	62	3.08	2.82 A	C19H24N2O2	1,4-NAPHTHOQUINONE,2-W-CYCLOHEXYLPROPYLHYDRAZINO
5287	CHCL3	482	68	1.29	1.81 N	C19H24N2S2	METHIOMEPAZINE
5288	CHCL3	482	69	1.66	2.15 N	C19H24N2S2	METHIOMEPAZINE
5289	CYCLOHEXANE	474	14	0.63		C19H24N4O2S2	THIAMINE BENZYL OISULFIOE
5290	CHCL3	474	14	1.42	1.00 B	C19H24N4O2S2	THIAMINE BENZYL OISULFIOE
5291	BENZENE	474	14	-1.52		C19H24N4O2S2	THIAMINE BENZYL OISULFIOE
5292	ETHYL ACETATE	474	14	1.68	1.77	C19H24N4O2S2	THIAMINE BENZYL OISULFIOE
5293	N-HEPTANE	498		0.34		C19H24O2	1,4-ANORSTADIENE-3,17-DIONE
5294	N-HEPTANE	498		0.89		C19H24O2	4,6-ANORSTADIENE-3,17-DIONE
5295	DIETHYL ETHER	143	62	6.70	5.98 A	C19H24O3	2-HYDROXYNAPHTHOQUINONE,3-NONYL
5296	DIETHYL ETHER	465	62	3.38	3.09 A	C19H24O4	2-HYDROXYNAPHTHOQUINONE,3-(7-OH-7-METHYLOCTYL)
5297	CHCL3	486	46	1.04	1.54 N	C19H25CL1N2O1S1	METHOTRIMEPRAZINE HYDROCHLORIDE
5298	CYCLOHEXANE	446		3.50		C19H25N1O1	N,N-DICYCLOPENTYLCINNAMAMIDE
5299	OCTANOL	235		3.83	3.83 =	C19H25N1O1	PROPXYPHENE CARBINOL
5300	N-HEPTANE	421	44	3.64		C19H25N1O1	PROPXYPHENE CARBINOL

NO.	SOLVENT	REF	FOOT NOTF	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5301	CHCL3	482	68	-1.15	-0.47 N	C19H25N3S1	AMINOPPPDMAZINE
5302	CHCL3	482	69	1.95	2.43 N	C19H25N3S1	AMINOPPPDMAZINE
5303	DIETHYL ETHER	457	62	3.93	3.57 A	C19H26N2O2	1,4-NAPHTHOQUINONE, 2-NONYLHYDRAZINO
5304	N-HEPTANE	498		0.37		C19H26O2	4-ANDROSTENE-3,17-DIONE
5305	CHCL3	491	46	-2.02		C19H27BRN1O3	ATROPINE-ETHYL BROMIDE
5306	DIETHYL ALCOHOL	489	27	3.24	3.77	C19H27N3O2	CINCHONINAMIDE, N-(2-OIETHYL-AMINOETHYL)-2-PROPOXY
5307	CHCL3	464	46	2.98		C19H28BRN1O4S1	N-METHYL-6-BROMOQUINOLINUM NONYL SULFATE
5308	CHCL3	464	46	2.86		C19H28CLN1O4S1	N-METHYL-6-CHLOROQUINOLINUM NONYL SULFATE
5309	CHCL3	464	46	3.29		C19H28IN1O4S1	N-METHYL-2-IODOQUINOLINUM NONYL SULFATE
5310	N-HEPTANE	498		0.49		C19H28O2	EPITESTOSTERONE
5311	OCTANOL	261		3.32	3.37 =	C19H28O2	TESTOSTERONE
5312	OCTANOL	65		3.31		C19H28O2	TESTOSTERONE
5313	DIETHYL ETHER	512		1.94	3.20 S	C19H28O2	TESTOSTERONE
5314	N-HEPTANE	498		0.32		C19H28O2	TESTOSTERONE
5315	N-HEPTANE	477		2.51		C19H29N1C1	CYCRIMINE
5316	N-HEPTANE	477		1.75		C19H29N1O1	PROCYCLIDINE
5317	N-HEPTANE	498		-0.05		C19H29N1O2	TESTOSTERONE OXIME
5318	CHCL3	503	46	2.77		C19H29N1O4S1	N-METHYL-1-QUINOLINUM NONYL SULFATE
5319	CHCL3	464	46	2.79		C19H29N1O4S1	N-METHYLQUINOLINUM NONYL SULFATE
5320	CHCL3	464	46	3.13		C19H29N1O5S1	N-ME-8-OH-QUINOLINUM NONYL SULFATE
5321	CHCL3	503	46	3.00		C19H30N2O4S1	1-METHYL-3-AMINOQUINOLINUM NONYL SULFATE
5322	DIETHYL ALCOHOL	473		4.28	4.85	C19H31N1O4	3-ET-0-4-BUTOXYBENZODIC ACID, OIETHYLAMINOETHYL ESTER
5323	DIETHYL ALCOHOL	473		3.78	4.35	C19H31N1O5	3,4,5-TRIETHOXYBENZODIC ACID, OIETHYLAMINOETHYL ESTER
5324	CHCL3	464	46	3.27		C19H33N1O6S1	N-ME-3-ETHOXYCARBONYLPYR10INUM DECYLSULFATE
5325	CHCL3	464	46	3.36		C19H33N1O6S1	N-ME-3-METHOXYCARBONYLPYR10INUM UNDECYLSULFATE
5326	OCTANOL	65	46	-0.08	-0.08 =	C19H34BRN1	BENZYL OIMETHYLOECYLAMMONIUM BROMIDE
5327	OCTANOL	65	46	1.32	1.32 =	C19H34BRN1	TETRADECYLPYR10INUM BROMIDE
5328	N-HEPTANE	443		3.30		C20H13N1S1	PHENOTHIAZINE, 3,4,6,7-DIBENZO
5329	N-HEPTANE	443		5.26		C20H13N1S1	PHENOTHIAZINE, 1,2,8,9-DIBENZO
5330	CHCL3	412		4.45		C20H16CUIN2O2	8-QUINOLINOL (2-METHYL) (B1S)-CUI(11)
5331	CHCL3	412		4.56		C20H16CUIN2O2	8-QUINOLINOL (4-METHYL) (B1S)-CUI(11)
5332	CCL4	412		3.29		C20H16CUIN2O2	8-QUINOLINOL, 4-METHYL (B1S)-CUI(11)
5333	CCL4	412		3.50		C20H16CUIN2O2	8-QUINOLINOL, 2-METHYL (B1S)-CUI(11)
5334	OCTANOL	227		1.74	1.74 =	C20H16N2O4	CAMPOTHECIN (NCS 9460C)
5335	DIETHYL ETHER	465	62	2.90	2.67 A	C20H16O4	2-HYDROXYNAPHTHOQUINONE, 3-(3-P-TOLYL PROPYL-3-ONE)
5336	CYCLOHEXANE	141		4.40		C20H19N1O2S1	1,4-NAPHTHOQUINONE, 2-ANILINO, 3-BUTYLTHIO
5337	OCTANOL	227		3.67	3.67 =	C20H19N1O3	ACRONYCINE (NCS 403169) (PKA IN 40% MEQH = 3.40)
5338	1-BUTANOL	4		-1.15	-7.12	C20H19N1O5	BERBERINE
5339	OCTANOL	504	40	1.16	1.16 =	C20H19N1O8	4-DEDIMETHYLAMINOTETRACYCLINE
5340	OCTANOL	227	61	-1.85	-1.85 =	C20H22N8O3	METHOTREXATE (PKA IN 30% MEQH = 4.70)
5341	CHCL3	482	68	2.17	2.63 N	C20H23CL1N2S1	SANOOZ#6524
5342	HEXANE	456		1.27		C20H23CL1O6	2'-BUTOXY-7-CL-4,6-D1MEO-6'-MEGR1S-2'-EN-3,4'-D1ONE
5343	HEXANE	456		1.72		C20H23CL1O6	4'-BUTOXY-7-CL-4,6-D1MEO-6'-MEGR1S-3'-EN-3,2'D1ONE
5344	OCTANOL	483	44	4.92	4.92 =	C20H23N1	AMITRIPTYLINE
5345	CYCLOHEXANE	141		4.22		C20H23N1O4	A-CARBETHOXY-8-ANILINO-8-PHENYLPROPIONIC ACID, ET. EST.
5346	DLIS	505	23	3.40		C20H24CL1N3O1	ACRIDINE, 2-CL-7-MEO-5-(2-DIETAMINO-2-ETAMINO)
5347	CHCL3	482	68	-0.70	-0.05 N	C20H24CL1N3S1	PROCHLORPERAZINE
5348	CHCL3	486		1.86	2.28 N	C20H24CL2N2S1	2-CL-10-(212-N-MEP1PERIDYL)ETHYL (PHENOTHIAZINE HCL
5349	CHCL3	482	68	1.44	1.95 N	C20H24N2O1S1	PROP1DMAZINE
5350	OCTANOL	186		1.73	1.73 =	C20H24N2O2	QUININE
5351	OCTANOL	218		1.83	1.83 =	C20H24N2O2	QUININE
5352	DIETHYL ETHER	3	17	1.64	1.65 A	C20H24N2O2	QUININE
5353	BENZENE	405	31	1.20	1.38 B	C20H24N2O2	QUININE
5354	OI-I-PR. ETHER	488		-1.60		C20H24N2O2	QUININE
5355	N-HEPTANE	416	14	1.98		C20H24N2O6	R1S(P-AMINUSALICYLIC ACID) HEXYL ESTER
5356	CHCL3	482	68	1.67	2.17 N	C20H24N2S1	SANOOZ#4457
5357	CYCLOHEXANE	495		1.86		C20H24N4O2	BENZIM1GAZOLF, 1-DIETHYLAMINOETHYL, 5-NITRO, 2-BENZYL
5358	CYCLOHEXANE	495		2.06		C20H24N4O2	BENZIM1GAZOLF, 1-DIETHYLAMINOETHYL, 6-NITRO, 2-BENZYL
5359	DIETHYL ETHER	143	62	4.97	4.49 A	C20H24O3	2-HYDROXYNAPHTHOQUINONE, 3-(W-CARBOMETHOXYOCTYL)
5360	DIETHYL ETHER	143	62	6.70	5.98 A	C20H24O3	2-HYDROXYNAPHTHOQUINONE, 3-(W-CYCLEHEXYLBUTYL)
5361	DIETHYL ETHER	465	62	4.27	3.87 A	C20H24O4	2-HYDROXYNAPHTHOQUINONE, 3-(DECYL-7-ONE)
5362	CHCL3	486	46	-0.40	0.23 N	C20H25CL2N3S1	PROCHLORPERAZINE HYDROCHLORIDE
5363	DLIS	505	23	2.61		C20H25N1	ACRIDINE, 5-(DIETHYLAMINOPROPYLAMINO)
5364	CHCL3	482	68	-1.22	-0.53 N	C20H25N3S1	PERAZINE
5365	DIETHYL ETHER	143	62	7.29	6.50 A	C20H26O3	2-HYDROXYNAPHTHOQUINONE, 3-DECYL
5366	DIETHYL ETHER	143	62	7.13	6.36 A	C20H26O3	2-HYDROXYNAPHTHOQUINONE, 3-1-DECYL
5367	DIETHYL ETHER	143	62	2.67	2.46 A	C20H26O5	2-HYDROXYNAPHTHOQUINONE, 3-(9,10-DIHYDROXYDECYL)
5368	N-HEPTANE	477		-3.49		C20H28N2O3	OXYPHENCYLAMINE
5369	CHCL3	491	46	-1.32		C20H28RRN1O3	ATROPINE-N-PROPYLBROMIDE
5370	DIETHYL ALCOHOL	142		1.45	2.00	C20H29N1O2	2-METHOXY-4-ALLYLPHENOXYACETAMIDE, N-ALLYL-N-MEBUTYL
5371	DIETHYL ALCOHOL	142		1.80	2.35	C20H29N1O2	2-METHOXY-4-ALLYLPHENOXYACETAMIDE, N,N-DIBUTYL
5372	OCTANOL	218		4.40	4.40 =	C20H29N3O2	DI1UCAINE/PERCAINE/
5373	OCTANOL	216	34	4.18	4.18 =	C20H29N3O2	DI1UCAINE/PERCAINE/
5374	DLIS	462		3.50	3.40 B	C20H29N3O2	DI1UCAINE/PERCAINE/
5375	DIETHYL ALCOHOL	489	27	3.70	4.23	C20H29N3O2	DI1UCAINE/PERCAINE/
5376	OCTANOL	216	79	2.18	2.18 =	C20H29N3O2, C2H4O2	DI1UCAINE ACETATE
5377	OCTANOL	216	56	1.97	1.97 =	C20H29N3O2, C8H6O4	DI1UCAINE PHTHALATE
5378	CHCL3	464	46	3.48		C20H30RRN1O4S1	N-METHYL-6-BROMOQUINOLINUM DECYLSULFATE
5379	CHCL3	464	46	3.30		C20H30CLN1O4S1	N-METHYL-6-CHLOROQUINOLINUM DECYLSULFATE
5380	CHCL3	464	46	3.79		C20H30IN1O4S1	N-METHYL-2-IODOQUINOLINUM DECYLSULFATE
5381	N-HEPTANE	498		0.72		C20H30O2	TESTOSTERONE, 17-A-METHYL
5382	N-HEPTANE	477		3.02		C20H31N1O1	TR1HEXYLPHENFDYL
5383	DIETHYL ALCOHOL	142		2.59	2.64	C20H31N1O3	2-METHOXY-4-ALLYLPHENOXYACETAMIDE, N,N-DI-T-BUTYL
5384	CHCL3	464	46	2.98		C20H31N1O4S1	1,2-DI-METHYLQUINOLINUM NONYL SULFATE
5385	CHCL3	464	46	3.05		C20H31N1O4S1	1,4-DI-METHYLQUINOLINUM NONYL SULFATE
5386	CHCL3	464	46	3.13		C20H31N1O4S1	1,6-DI-METHYLQUINOLINUM NONYL SULFATE
5387	CHCL3	503	46	3.39		C20H31N1O4S1	1,8-DI-METHYLQUINOLINUM NONYL SULFATE
5388	CHCL3	503	46	3.29		C20H31N1O4S1	N-METHYL-1-QUINOLINUM DECYLSULFATE
5389	CHCL3	464	46	3.25		C20H31N1O4S1	N-METHYLQUINOLINUM DECYLSULFATE
5390	OCTANOL	503	46	3.95	3.95 =	C20H31N1O4S1	1,2,6-TRI-METHYLQUINOLINUM DECYLSULFATE
5391	CHCL3	464	46	3.02		C20H31N1O5S1	N-ME-6-METHOXYQUINOLINUM NONYL SULFATE
5392	CHCL3	464	46	3.56		C20H31N1H5S1	N-ME-8-OH-QUINOLINUM DECYLSULFATE
5393	CHCL3	464	46	3.31		C20H31N1O5S1	N-ME-8-METHOXYQUINOLINUM NONYL SULFATE
5394	CHCL3	503	46	3.43		C20H32N2O4S1	1-METHYL-3-AMINOQUINOLINUM DECYLSULFATE
5395	SFC-BUTANOL	84	19	-1.51	-2.62	C20H32N6O12S2	GLUTATHIONE DISULPHIDE
5396	N-BUTANOL	159		0.32	-7.10	C20H32N8	4-ANDROSTENE-3,17-DIONE-19-DEMETHYL
5397	OCTANOL	438		2.73	2.73 =	C20H32O6	GLUCOPYRANOSIDE, 3,5-DI(1-T-BUTYL)PHENYL (BETA)
5398	OCTANE	57		3.14		C20H34O3	P-T-OCTYLPHENOXYDIETHOXYETHANOL (BETA)-2/
5399	CHCL3	464	46	3.19		C20H35N1O6S1	N-ME-3-BUTOXYCARBONYLPYR10INUM NONYL SULFATE
5400	CHCL3	464	46	3.50		C20H35N1O6S1	N-ME-3-ETHOXYCARBONYLPYR10INUM UNDECYLSULFATE

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5401	CHCL3	464	46	3.72		C20H35N1O6S1	N-ME-3-METHOXYCARBONYLPYRIDINIUM DODECYLSULFATE
5402	BENZENE	478		-0.31	0.33 B	C20H38N2O1	PIPERIDINE, 1-DECYL, 3-(N-PYROLIDINO-FORMYL)
5403	BENZENE	478		-0.72	0.05 B	C20H38N2O2	PIPERIDINE, 1-DECYL, 3-(N-MORPHOLINO-FORMYL)
5404	BENZENE	478		-0.77	0.01 B	C20H40N2O1	PIPERIDINE, 1-DECYL, 4-(N,N-DIETHYL CARBAMYL)
5405	BENZENE	478	8	0.20	0.69 B	C20H40N2O1	PIPERIDINE, 1-DECYL, 3-(N,N-DIETHYL CARBAMYL)
5406	CHCL3	455		8.60		C21H18N4S1	THIOCARBAZONE, DI-A-NAPHTHYL
5407	DIEHTYL ETHER	465	62	3.90	3.54 A	C21H18O4	2-HYDROXYNAPHTHOQUINONE, 3-(5-PHENYLPENTYL-5-ONE)
5408	PARAFFINS	499		2.76		C21H20N2O1	P-ETHOXY-N-(4-DIPHENYL)-BENZAMIDINE
5409	PARAFFINS	499		2.15		C21H20N2O1	P-PHENYL-N-(P-ETHOXYPHENYL)-BENZAMIDINE
5410	PARAFFINS	499		2.99		C21H20N2O2	3,4-DIMETHOXY-N-(4-OIPHENYL)-BENZAMIDINE
5411	OCTANOL	276		5.06	5.06 =	C21H20O3S1	1-(2-1-PROPYLPHENYLTHIOMETHYL)-3-CARBOXY-8-NAPHTHOL
5412	OCTANOL	504	40	-0.60	-0.60 =	C21H21CL1N2O8	DEMETHYLCHLORTETRACYCLINE
5413	I-BUTANOL	130	12	-0.66	-1.43	C21H21CL1N2O8	DEMETHYLCHLORTETRACYCLINE
5414	OCTANOL	218		1.93	1.93 =	C21H22N2O2	STRYCHNINE
5415	DIEHTYL ETHER	3	17	0.34	1.16 B	C21H22N2O2	STRYCHNINE
5416	CHCL3	506		1.78	1.28 B	C21H22N2O2	STRYCHNINE
5417	DI-1-PR. ETHFR	488		-0.21		C21H22N2O2	STRYCHNINE
5418	OCTANOL	504	40	-0.08	-0.08 =	C21H22N2O7	6-DEMETHYL-6-DEOXYTETRACYCLINE
5419	CHCL3	482	68	2.20	2.66 N	C21H23F3N2S1	SANDOZ#10-068
5420	CHCL3	482	69	3.18	3.58 N	C21H23F3N2S1	SANDOZ#10-068
5421	OCTANOL	218		1.03	1.03 =	C21H23N1O2	COLCHICINE
5422	ETHYL DLEATE	494		1.07		C21H23N1O5	HEROIN /DIACETYL MORPHINE/
5423	CHCL3	482	68	0.52	1.09 N	C21H23N3O1S1	PROPERICLAZINE
5424	CHCL3	482	69	3.49	3.86 N	C21H23N3O1S1	PROPERICLAZINE
5425	CHCL3	482	68	-0.43	0.20 N	C21H24F3N3S1	TRIFLUOPERAZINE
5426	ODECANE	475		4.11		C21H24F3N3S1	TRIFLUOPERAZINE
5427	OCTANOL	469		1.84	1.84 =	C21H24N2O4	QUINAZOLIN-2-ONE, 1-METHYL-4-PHENYL-6-TRIEHTHOXY
5428	OCTANOL	475	46	1.69	1.69 =	C21H25CL1F3N3S1	TRIFLUOPERAZINE HYDROCHLORIDE
5429	CHCL3	486	46	-0.15	0.45 N	C21H25CL1F3N3S1	TRIFLUOPERAZINE HYDROCHLORIDE
5430	N-HEPTANE	477		0.38		C21H25N1O1	BENZTROPINE
5431	OILS	505	23	2.37		C21H26CL1N3O1	ACR10INE, 2-CL-7-MEO-5-(2-DIETAMINO-3-PR-AMINO)
5432	CHCL3	482	68	-1.40	-0.70 N	C21H26CL1N3O1S1	PERPHENAZINE
5433	CHCL3	482	68	1.50	2.01 N	C21H26N2O1S1	SANDOZ#KS33
5434	CHCL3	482	68	0.50	1.07 N	C21H26N2O1S2	MESORIDAZINE
5435	CHCL3	482	69	2.57	3.00 N	C21H26N2O1S2	MESORIDAZINE
5436	N-HEPTANE	416	14	2.19		C21H26N2O6	RIS(P-AMINDSALICYLIC ACID) HEPTYL ESTER
5437	CHCL3	482	68	2.04	2.51 N	C21H26N2S2	THIORIDAZINE
5438	DIEHTYL ETHER	143	62	7.14	6.38 A	C21H26O3	2-HYDROXYNAPHTHOQUINONE, 3-(N-CYCLOHEXYLPENTYL)
5439	I-BUTANOL	130		2.00	2.30	C21H26O5	PREDNISONE
5440	OCTANOL	227		1.46	1.46 =	C21H26O5	PREDNISONE (NCS 10023E)
5441	CHCL3	486	46	2.30		C21H27CL1N2S2	THIORIDAZINE HYDROCHLORIDE
5442	DIEHTYL ETHER	502		0.29	1.62 S	C21H27F1O5	6-A-FLUORO-PREDNISOLONE
5443	DIEHTYL ETHER	502		-0.12	1.21 S	C21H27F1O6	TRIAMCINOLONE
5444	ETHYL DLEATE	494		1.53		C21H27N1O1	METHADDONE
5445	CYCLOHEXANE	495		1.30		C21H27N3O1	BENZIMIDAZOLE, 1(2-DIMETHYLAMINO, 2-ME)ET, 2-P-ETHO-BENZYL
5446	CHCL3	482	68	-0.25	0.37 N	C21H27N3S2	SANDOZ#7834
5447	CHCL3	482	69	2.43	2.87 N	C21H27N3S2	SANDOZ#7834
5448	CHCL3	327		-1.38	-0.69 N	C21H27N7O5	NOR-PURDOLONE (TYRODINE DERIVATIVE)
5449	N-HEPTANE	136	44	1.09		C21H28N2O3	HIRSUTINE/PSEUDO CONFIG./
5450	N-HEPTANE	136	44	0.78		C21H28N2O3	ISOCORYNANTHEDINE/EPIALLO CONFIG./
5451	PRIM. PENTANOL S	181	10	-0.71		C21H28N7O17P3	NADP
5452	HEXANOL	181	18	-0.70		C21H28N7O17P3	NADP
5453	DIEHTYL ETHER	143	62	7.69	6.86 A	C21H28O3	2-HYDROXYNAPHTHOQUINONE, 3-1-UNDECYL
5454	DIEHTYL ETHER	143	62	4.36	3.94 A	C21H28O4	2-HYDROXYNAPHTHOQUINONE, 3-(N-DMETHYL-W-OH-OCTYL)
5455	HEXANF	507		-1.52		C21H28O4	4-PREGNENE-21-OL, 3, 11, 20-TRIONE
5456	DIEHTYL ETHFR	502		0.05	1.37 S	C21H28O5	PREDNISOLONE
5457	DIEHTYL ETHER	508		0.00	0.84 B	C21H28O5	PREDNISOLONE
5458	OCTANOL	227		1.42	1.42 =	C21H28O5	PREDNISOLONE (NCS 9120E)
5459	OCTANOL	218		1.97	1.47 =	C21H28O5	4-PREGNENE, 17-A, 21-DIOL, 3, 11, 20-TRIONE/CORTISONE/
5460	DIEHTYL ETHER	502		0.15	1.47 S	C21H28O5	4-PREGNENE, 17-A, 21-DIOL, 3, 11, 20-TRIONE/CORTISONE/
5461	BENZENE	507		-0.04	1.33 A	C21H28O5	4-PREGNENE, 17-A, 21-DIOL, 3, 11, 20-TRIONE/CORTISONE/
5462	I-BUTANOL	130	12	1.80	2.02	C21H28O5	4-PREGNENE, 17-A, 21-DIOL, 3, 11, 20-TRIDNE/CORTISONE/
5463	DIEHTYL ETHER	502		0.37	1.68 S	C21H29F1O5	9-A-FLUORO-HYDROCORTISONE
5464	DIEHTYL ETHER	508		0.36	1.15 B	C21H29F1O5	9-A-FLUOROHYDROCORTISONE
5465	N-HEPTANE	477		2.79		C21H29N1O1	DIMETHYLAMINOETHYL-2-T-BUTYLBENZHYDRYL ETHER
5466	OCTANOL	261		3.37	3.87 =	C21H30O2	PROGESTERONE
5467	DIEHTYL ETHER	502		2.78	4.01 S	C21H30O2	PROGESTERONE
5468	I-BUTANOL	130	12	2.40	2.86	C21H30O2	PROGESTERONE
5469	DIEHTYL ETHER	502		1.72	2.99 S	C21H30O3	DESOXYCORTICOSTERONE
5470	OCTANOL	261		2.89	2.88 =	C21H30O3	4-PREGNENE-21-DL, 3, 20-DIOL/DEOXYCORTICOSTERONE/
5471	N-HEPTANE	498		0.56		C21H30O3	4-PREGNENE-21-OL, 3, 20-DIOL/DEOXYCORTICOSTERONE/
5472	HEXANE	507		0.39		C21H30O3	4-PREGNENE-21-OL, 3, 20-DIOL/DEOXYCORTICOSTERONE/
5473	N-HEPTANE	498		-1.18		C21H30O3	PROGESTERONE, 11-A-HYDROXY
5474	N-HEPTANE	498		0.18		C21H30O3	PROGESTERONE, 17-A-HYDROXY
5475	N-HEPTANE	498		-0.54		C21H30O3	PROGESTERONE, 11-B-HYDROXY
5476	OCTANOL	261		2.46	2.46 =	C21H30O4	11-DESOXY-17-HYDROXYCORTICOSTERONE
5477	DIEHTYL ETHER	502		0.66	1.97 S	C21H30O4	4-PREGNENE-11-B, 21-DIOL-3, 20-DIOL/CORTICOSTERONE/
5478	BENZENE	507		1.00	2.37 A	C21H30O4	4-PREGNENE, 11-B, 21-DIOL, 3, 20-DIOL/CORTICOSTERONE/
5479	DIEHTYL ETHER	502		0.21	1.53 S	C21H30O5	HYDROCORTISONE
5480	DIEHTYL ETHER	508		0.11	0.96 B	C21H30O5	HYDROCORTISONE
5481	BENZENE	507		-0.49	0.89 A	C21H30O5	HYDROCORTISONE
5482	I-BUTANOL	130		1.74	1.93	C21H30O5	HYDROCORTISONE
5483	CHCL3	471	46	-1.54		C21H31BR1N1O3	ATROPINE-N-BUTYROBROMIDE
5484	CYCLOHEXANE	446		4.14		C21H31N1O1	N-CYCLODODECYLCINNAMAMIDE
5485	OCTANOL	509	31	4.32	4.32 =	C21H31N1O3	3(1N,N-DIMETHYL-2-NORBORNANYL 14-BUOXYBENZOATE/END/
5486	OCTANOL	509	31	4.35	4.35 =	C21H31N1O3	3(1N,N-DIMETHYL-2-NORBORNANYL 14-BUOXYBENZOATE/EXO/
5487	OLEYL ALCOHOL	489	28	4.41	4.98	C21H31N3O2	CINCHONINAMIDE, N-(2-DIETHYLAMINOETHYL)-2-PENTOX
5488	CHCL3	464	46	3.99		C21H32BR1N1O4S1	N-METHYL-6-AR-QUNINOLINIUM UNDECYLSULFATE
5489	CHCL3	464	46	3.78		C21H32CL1N1O4S1	N-METHYL-6-CL-QUNINOLINIUM UNDECYLSULFATE
5490	CHCL3	464	46	4.21		C21H32I1N1O4S1	N-ME-2-1000QUINOLINIUM UNDECYLSULFATE
5491	CYCLOHEXANE	446		3.45		C21H33N1O1	N-DODECYLCINNAMAMIDE
5492	CHCL3	464	46	3.49		C21H33N1O4S1	1, 2-DIMETHYLQUINOLINIUM DECYLSULFATE
5493	CHCL3	464	46	3.49		C21H33N1O4S1	1, 4-DIMETHYLQUINOLINIUM DECYLSULFATE
5494	CHCL3	464	46	3.62		C21H33N1O4S1	1, 6-DIMETHYLQUINOLINIUM DECYLSULFATE
5495	CHCL3	503	46	3.84		C21H33N1O4S1	1, 8-DIMETHYLQUINOLINIUM DECYLSULFATE
5496	CHCL3	503	46	3.72		C21H33N1O4S1	N-METHYL-(1-QUNINOLINIUM UNDECYLSULFATE
5497	CHCL3	464	46	3.78		C21H33N1O4S1	N-METHYLQUINOLINIUM UNDECYLSULFATE
5498	OCTANOL	503	46	4.50	4.50 =	C21H33N1O4S1	1, 2, 6-TRIMETHYLQUINOLINIUM NONYLSULFATE
5499	CHCL3	464	46	3.79		C21H33N1O4S1	1, 2, 6-TRIMETHYLQUINOLINIUM NONYLSULFATE
5500	CHCL3	464	46	3.56		C21H33N1O5S1	N-ME-6-METHOXYQUINOLINIUM DECYLSULFATE

NO.	SOLVENT	REF	FOOT NOTE	LOGP	LOGP OCT	EMPIRICAL FORMULA	NAME
5501	CHCL3	464	46	3.82		C21H33N10S51	N-ME-8-METHOXQUINOLINIU DECYLSULFATE
5502	CHCL3	464	46	4.04		C21H33N10S51	N-ME-8-OH-QUINOLINIUM UNDECYL SULFATE
5503	CHCL3	503	46	3.89		C21H34N2O4S1	1-METHYL-3-AMINOQUINOLINIUM UNDECYL SULFATE
5504	N-BUTANOL	159		0.99	0.86	C21H34N8	4-ANDROSTENE-3,17-DIONE
5505	CHCL3	464	46	3.56		C21H37N10S51	N-ME-3-BUTOXYCARBONYLPYRIDINIUM DECYLSULFATE
5506	CHCL3	464	46	3.96		C21H37N10S51	N-ME-3-ETHOXYCARBONYLPYRIDINIUM DOODECYLSULFATE
5507	CTANOL	65	46	1.83	1.83 =	C21H38BR1N1	HEXADECYL PYRIDINIUM BROMIDE
5508	CTANOL	65	46	1.71	1.71 =	C21H38CL1N1	HEXADECYL PYRIDINIUM CHLORIDE
5509	NITROBENZENE	63		0.55	1.34	C21H38CL1N1D1	HEXADECYL PYRIDONIUM CHLORIDE
5510	CHCL3	464	46	3.23		C21H38N2O5S1	N-ME-3-FORMAMIDOPYRIDINIUM TETRADECYLSULFATE
5511	CHCL3	464	46	3.95		C21H39N1O4S1	1,2-DIMETHYLPYRIDINIUM TETRADECYLSULFATE
5512	N-BUTANOL	510		0.04	-0.45	C21H39N7O12	STREPTOMYCIN (AS TRI-P-TOLUENESULFONATE)
5513	BFNZNF	478		0.26	0.73 B	C21H40N2O1	PIPERIDINE,1-DECYL,3-(N-PIPERIDINO-FORMYL)
5514	CTANOL	141		3.38	3.38 =	C22H15N1O4S1	1,4-NAPHTHOQUINONE,2-ANILINO,3-PHENYLSULFONYL
5515	CYCLOHEXANE	141		2.45		C22H15N1O4S1	1,4-NAPHTHOQUINONE,2-ANILINO,3-PHENYLSULFONYL
5516	CYCLOHEXANE	374		2.39		C22H18N2O2	MALON-DIANILOE, BENZAL
5517	CTANOL	226	48	2.06	2.06 =	C22H21N1O2S1	3-TRITYLTHTIO-L-ALANINE/NSC-83265/
5518	CTANOL	504	40	-0.04	-0.04 =	C22H22N2O8	METHACYCLINE
5519	CTANOL	504	40	-0.39	-0.39 =	C22H23CL1N2O8	CHLORTETRACYCLINE
5520	(-)-BUTANOL	130	12	-0.43	-1.11	C22H23CL1N2O8	CHLORTETRACYCLINE
5521	CTANOL	504	40	-0.02	-0.02 =	C22H24N2O8	DDXYCYCLINE
5522	CTANOL	218	39	-1.47	-1.47 =	C22H24N2O8	TFRACYCLINE
5523	CTANOL	504	40	-1.25	-1.25 =	C22H24N2O8	TETRACYCLINE
5524	(-)-BUTANOL	130		-1.00	-1.91	C22H24N2O8	TETRACYCLINE
5525	CTANOL	504	40	-1.12	-1.12 =	C22H24N2O9	DXYTETRACYCLINE
5526	N-HEPTANE	477		-0.74		C22H25N1O3	TROPINE BENZILATE
5527	CHCL3	482	68	-1.30	-0.61 N	C22H26F3N3D1S1	FLUPHENAZINE
5528	CHCL3	482	69	2.30	2.75 N	C22H26F3N3D1S1	FLUPHENAZINE
5529	DIETHYL ETHER	143	62	7.42	6.63 A	C22H26O3	2-HYDROXYNAPHTHOQUINONE, 3-TR-4-CYCLOHEXYLCYCLOHEXYL
5530	CHCL3	486	46	-1.00	-0.32 N	C22H27CL1F3N3D1S1	FLUPHENAZINE HYDROCHLORIDE
5531	HEXANE	456		2.81		C22H27CL1O6	7-CL-4'-HEXOXY-4,6-DIMEO-6'-MEGRIS-3'-EN-3,2'DIONE
5532	TLIS	505	23	2.39		C22H28CL1N3D1	ACRIDONE, 2-CL-7-MEO-5(2-DIETAMINO-4-8U-AMINO)
5533	DIETHYL ETHER	502		0.87	2.16 S	C22H28F2O5	6-A-FLUORO-DEXAMETHASONE
5534	N-HEPTANE	136	44	1.54		C22H28N2O3	CORYNANTHEDINE/ALLO CONFIG./
5535	N-HEPTANE	136	44	1.20		C22H28N2O3	DIHYDROCORYNANTHEDINE/NORMAL CONFIG./
5536	N-HEPTANE	416	14	2.26		C22H28N2O6	RIS(P-AMINO)SALICYLIC ACID) OCTYL ESTER
5537	CHCL3	482	68	2.29	2.74 N	C22H28N2S2	SANDOZ TTT418
5538	CYCLOHEXANE	495		1.99		C22H28N4O3	BENZIMIDAZOLE, 1-OIET-AMINOET-2-(P-ETO-BENZYL)-5-NO2
5539	DIETHYL ETHER	502		1.51	2.78 S	C22H29F1O4	6-A-METHYL-9-A-FLUORO-21-DESOXYPREDNISOLONE
5540	DIETHYL ETHER	502		0.68	1.98 S	C22H29F1O5	BETAMETHASONE
5541	DIETHYL ETHER	502		0.59	1.90 S	C22H29F1O5	DEXAMETHASONE
5542	DIETHYL ETHER	508		0.82	1.59 B	C22H29F1O5	DEXAMETHASONE
5543	DIETHYL ETHER	502		0.62	1.93 S	C22H29F1O5	6-A-METHYL-9-A-FLUORO-PREDNISOLONE
5544	CTANOL	235	67	4.18	4.18 =	C22H29N1O2	PROPOXYPHENE
5545	N-HEPTANE	421	44	3.65		C22H29N1O2	PROPOXYPHENE
5546	BFNZNF	511		-0.36		C22H29N1O7	RHODMYCIN
5547	CHCL3	482	68	0.02	0.62 N	C22H29N3S2	THIETHYLPERAZINE
5548	CHCL3	482	69	2.07	2.54 N	C22H29N3S2	THIETHYLPERAZINE
5549	CHCL3	322		0.89	1.36 N	C22H29N7O5	PURCYCLINE
5550	DIETHYL ETHER	143	62	8.24	7.34 A	C22H30O5	2-HYDROXYNAPHTHOQUINONE, 3-DOODECYL
5551	DIETHYL ETHER	502		0.54	1.85 S	C22H30O5	6-A-METHYL-PREDNISOLONE
5552	DIETHYL ETHER	508		0.42	1.20 R	C22H30O5	METHYLPREDNISOLONE
5553	DIETHYL ETHER	502		2.44	3.68 S	C22H31F1O3	9-A-FL-11-8-OH-6-A-MF-4-PREGNENE-3,20-DIONE
5554	DIETHYL ETHER	502		1.71	2.98 S	C22H31F1O4	6-A-METHYL-9-A-FLUORO-DESOXYHYDROCORTISONE
5555	CHCL3	491	46	-1.45		C22H33BR1N1O3	ATROPINE-N-AMYL BROMIDE
5556	DIETHYL ALCOHOL	489	28	5.13	5.70	C22H33N3O7	CINCHONINAMIDE, N-(2-DIETHYL-AMINOETHYL)-2-HEXOXY
5557	CHCL3	464	46	4.40		C22H34BR1N1O4S1	N-METHYL-6-BR-QUINOLINIUM DOOECYL SULFATE
5558	CHCL3	464	46	4.26		C22H34CL1N1O4S1	N-METHYL-6-CL-QUINOLINIUM DOOECYL SULFATE
5559	CHCL3	464	46	4.65		C22H35CL1N1O4S1	N-ME-2-DOOQUINOLINIUM DOOECYL SULFATE
5560	CHCL3	464	46	3.93		C22H35N1O4S1	1,2-DIMETHYLQUINOLINIUM UNDECYL SULFATE
5561	CHCL3	464	46	3.95		C22H35N1O4S1	1,4-DIMETHYLQUINOLINIUM UNDECYL SULFATE
5562	CHCL3	464	46	4.06		C22H35N1O4S1	1,6-DIMETHYLQUINOLINIUM UNDECYL SULFATE
5563	CHCL3	503	46	4.29		C22H35N1O4S1	1,8-DIMETHYLQUINOLINIUM UNDECYL SULFATE
5564	CHCL3	503	46	4.15		C22H35N1O4S1	N-METHYL-1-QUINOLINIUM DOODECYLSULFATE
5565	CHCL3	464	46	4.20		C22H35N1O4S1	N-METHYLQUINOLINIUM DOODECYLSULFATE
5566	CTANOL	503	46	5.05	5.05 =	C22H35N1O4S1	1,2,6-TRIMETHYLQUINOLINIUM DECYL SULFATE
5567	CHCL3	464	46	4.20		C22H35N1O4S1	1,2,6-TRIMETHYLQUINOLINIUM DECYL SULFATE
5568	CHCL3	464	46	3.98		C22H35N1O5S1	N-ME-6-METHOXQUINOLINIUM UNDECYL SULFATE
5569	CHCL3	464	46	4.29		C22H35N1O5S1	N-ME-8-METHOXQUINOLINIUM UNDECYL SULFATE
5570	CHCL3	464	46	4.50		C22H35N1O5S1	N-ME-8-OH-QUINOLINIUM DOODECYLSULFATE
5571	CHCL3	503	46	4.33		C22H36N2O4S1	1-METHYL-3-AMINOQUINOLINIUM DOODECYL SULFATE
5572	CTANE	57		2.50		C22H38O5	P-T-OCTYLPHENOXYTRIETHOXYETHANOL/OPE-3/
5573	CHCL3	464	46	3.91		C22H39N1O6S1	N-ME-3-BUTOXYCARBONYLPYRIDINIUM UNDECYL SULFATE
5574	CHCL3	464	46	4.30		C22H39N1O6S1	N-ME-3-METHOXYCARBONYLPYRIDINIUM TETRADECYLSULF
5575	CHCL3	464	46	4.46		C22H41N1O4S1	1,2,5-TRIMETHYLPYRIDINIUM TETRADECYLSULFATE
5576	BFNZNF	478		0.26	0.73 B	C22H44N2O1	PIPERIDINE,1-DECYL,3-(N,N,-DIPROPYL CARBAMYL)
5577	CYCLOHEXANE	141		4.00		C23H18N2O2	1,4-NAPHTHOQUINONE,2-ANILINO,3-P-TOLUIDINO
5578	CTANOL	50		2.30	2.30 =	C23H20N2O3S1	SULFOPYRAZONE
5579	DIETHYL ETHER	143	62	5.77	5.19 A	C23H22O3	2-HYDROXYNAPHTHOQUINONE, 3-W-B-TETRALYL PROPYL
5580	CTANOL	268		0.62	0.62 =	C23H25CL1N2	MALACHITE GREEN
5581	DIETHYL ETHER	3	17	-0.74	0.19 B	C23H26N2O4	BRUCINE
5582	N-BUTANOL	253	36	0.11	-0.36	C23H26N2O4	BRUCINE
5583	(-)-BUTANOL	4		1.32	1.35	C23H26N2O4	BRUCINE
5584	DIETHYL ETHER	502		2.39	3.63 S	C23H27CL1F2O6	6,9-A-DIFLUORO-16-A-CL-PREDNISOLONE ACETATE
5585	DIETHYL ETHER	502		1.93	3.19 S	C23H27F3O6	6,9,16-A-TRIFLUORO-PREDNISOLONE ACETATE
5586	CTANOL	504	40	-0.04	-0.04 =	C23H27N3O7	9-DI-MEAMINO-6-DEMETHYL-6-DEOXYTETRACYCLINE
5587	CTANOL	504	40	0.05	0.05 =	C23H27N3O7	MINOCYCLINE
5588	DIETHYL ETHER	502		1.66	2.92 S	C23H28F2O6	6-A-16-A-DIFLUORO-PREDNISOLONE ACETATE
5589	DIETHYL ETHER	143	62	7.37	6.59 A	C23H28O3	2-HYDROXYNAPHTHOQUINONE, 3-W-TR-8-DECALYL PROPYL
5590	CHCL3	486	46	1.20	1.20 N	C23H29CL2N3O2S1	THIOPROPAZATE HYDROCHLORIDE
5591	DIETHYL ETHER	502		1.57	2.86 S	C23H29F1O6	6-A-FLUORO-PREDNISOLONE ACETATE
5592	CHCL3	482	68	-1.40	-0.70 N	C23H29N3O2S1	ACETOPHENAZINE
5593	CHCL3	482	69	-1.71	2.20 N	C23H29N3O2S1	ACETOPHENAZINE
5594	BENZENE	475	46	-0.64		C23H30BR1N1O3	PROPANTHETOLINE BROMIDE
5595	TLIS	505	23	2.41		C23H30CL1N3O1	ACRIDONE, 2-CL-7-MEO-5(2-DIETAMINO-5-AM-AMINO)
5596	DIETHYL ETHER	502		1.91	3.17 S	C23H30F2O5	6-A-9-A-DIFLUORO-21-DESOXY-HYDROCORTISONE ACETATE
5597	CHCL3	482	68	2.29	2.74 N	C23H30N2O51	SANDOZ KS 75
5598	N-HEPTANE	136	44	1.38		C23H30N2O4	MITRACILIAINE/PSUEDO CONF16
5599	N-HEPTANE	136	44	2.02		C23H30N2O4	MITRAGYLINE/ALLO CONF16./
5600	N-HEPTANE	136	44	0.95		C23H30N2O4	SPECIFICILIAINE/EPIALLO CONF16./

NO.	SOLVENT	REF	FOOT NOTE	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5601	N-HEPTANE	136	44	1.49		C23H33N204	SPECIOGYLINE/NORMAL CONFIG./
5602	N-HEPTANE	416	14	2.32		C23H33N206	BIS(P-AMINOSALICYLIC ACID) NONYL ESTER
5603	CHCL3	512	57	1.05		C23H33N3C7	XANTHOMYCIN
5604	DIETHYL ETHER	502		1.40	2.68 S	C23H3306	CORTISONE ACETATE
5605	DIETHYL ETHER	502		1.33	2.61 S	C23H3306	PREDNISOLONE ACETATE
5606	DIETHYL ETHER	508		1.11	1.85 B	C23H3306	PREDNISOLONE ACETATE
5607	DIETHYL ETHER	502		1.66	2.92 S	C23H331F106	9-A-FLUORO-HYDROCORTISONE ACETATE
5608	DIETHYL ETHER	508		1.23	1.95 B	C23H331F106	9-A-FLUORO-HYDROCORTISONE ACETATE
5609	OCTANOL	56		3.47	3.47 =	C23H331N102	A, A-DIPHENYLVALERIC ACID, DIETHYLEMINOETHYL ESTER
5610	OCTANOL	276		4.65	4.65 =	C23H331N1C2	SKF 525A /PKA = 8.87/
5611	CHCL3	464	46	4.65		C23H331N1C4S1	N-METHYLACRIDONINE NONYL SULFATE
5612	CYCLOHEXANE	495		1.48		C23H331N3O1	BENZIMICAZOLE, 11(2-DI(FT-AMINO), 2-METH), 2-P-ETO-BENZYL
5613	DIETHYL ETHER	502		1.42	2.70 S	C23H33206	HYDROCORTISONE ACETATE
5614	DIETHYL ETHER	513		1.29	2.37 S	C23H33206	HYDROCORTISONE ACETATE
5615	DIETHYL ETHER	508		1.11	1.85 B	C23H33206	HYDROCORTISONE ACETATE
5616	I-BUTANOL	130		0.95	0.83	C23H33206	G-STROPHANTHIN
5617	CHCL3	405	46	-0.70		C23H33311N2O1	ISUPROPAMIDE
5618	N-BUTANOL	159		0.70	0.46	C23H334N8O3	PREDNISONE DIGUANYL HYDRAZONE
5619	I-BUTANOL	130		1.95	2.20	C23H33404	DIGITOXIGENIN
5620	CHCL3	491	46	-0.74		C23H335BR1N1O3	ATROPINE-N-HEXYLBROMIDE
5621	N-BUTANOL	159		1.54	1.62	C23H336N8	0-1-PROGESTERONE DIGUANYL HYDRAZONE
5622	N-BUTANOL	159		1.47	1.52	C23H336N8	0-6-PROGESTERONE DIGUANYL HYDRAZONE
5623	N-BUTANOL	159		0.82	0.62	C23H336N8O1	D-6-PROGESTERONE-14-OH/DIGUANYL HYDRAZONE
5624	N-BUTANOL	159		1.92	0.90	C23H336N8O1	PROGESTERONE DIGUANYL HYDRAZONE, 11-ONE
5625	N-BUTANOL	159		1.58	1.68	C23H336N8O2	0-1, 6-PROGESTERONE DIGUANYL HYDRAZONE
5626	N-BUTANOL	159		0.38	0.61	C23H336N8O3	CORTISONE DIGUANYL HYDRAZONE
5627	N-BUTANOL	159		0.51	0.19	C23H336N8O3	CORTISONE DIGUANYL HYDRAZONE
5628	N-BUTANOL	159		0.59	0.30	C23H336N8O3	PREDISOLONE DIGUANYL HYDRAZONE
5629	N-BUTANOL	159		0.99	0.86	C23H336N1O02	PROGESTERONE DIGUANYL HYDRAZONE, 2,4-DI-NITROSO
5630	N-BUTANOL	159		1.65	1.71	C23H337CL1N8	4-CHLORO-PREGESTERONE/DIGUANYL HYDRAZONE
5631	CHCL3	464	46	4.35		C23H337N1C4S1	1, 2-DIMETHYLQUINOLINUM DODECYSULFATE
5632	CHCL3	464	46	4.58		C23H337N1C4S1	1, 6-DIMETHYLQUINOLINUM DODECYSULFATE
5633	CHCL3	503	46	4.73		C23H337N1C4S1	1, 8-DIMETHYLQUINOLINUM DODECYSULFATE
5634	CHCL3	464	46	4.42		C23H337N1C4S1	1, 4-DIMETHYLQUINOLINUM DODECYSULFATE
5635	OCTANOL	503	46	5.45		C23H337N1C4S1	1, 2, 6-TRIMETHYLQUINOLINUM UNDECYLSULFATE
5636	CHCL3	464	46	4.66		C23H337N1O4S1	1, 2, 6-TRIMETHYLQUINOLINUM UNDECYLSULFATE
5637	CHCL3	464	46	4.52		C23H337N1O5S1	N-ME-5-METHOXYQUINOLINUM DODECYSULFATE
5638	CHCL3	464	46	4.77		C23H337N1O5S1	N-ME-8-METHOXYQUINOLINUM DODECYSULFATE
5639	N-BUTANOL	159		1.52	1.59	C23H338N3	PROGESTERONE DIGUANYL HYDRAZONE
5640	N-BUTANOL	159		0.88	0.71	C23H338N8O1	PROGESTERONE DIGUANYL HYDRAZONE, 11-OH
5641	N-BUTANOL	159		0.93	0.78	C23H338N8O1	PROGESTERONE DIGUANYL HYDRAZONE, 17-OH
5642	N-BUTANOL	159		1.12	1.04	C23H338N8O1	PROGESTERONE DIGUANYL HYDRAZONE, 21-OH
5643	N-BUTANOL	159		0.34	-0.04	C23H338N8O2	PROGESTERONE DIGUANYL HYDRAZONE, 7,14-OI-OH
5644	N-BUTANOL	159		0.51	0.19	C23H338N8O2	PROGESTERONE DIGUANYL HYDRAZONE, 6,11-DI-OH
5645	N-BUTANOL	159		0.54	0.24	C23H338N8O2	PROGESTERONE DIGUANYL HYDRAZONE, 11,17-DI-OH
5646	N-BUTANOL	159		0.59	0.29	C23H338N8O2	PROGESTERONE DIGUANYL HYDRAZONE, 16,17-DI-OH
5647	N-BUTANOL	159		0.75	0.53	C23H338N8O2	PROGESTERONE DIGUANYL HYDRAZONE, 17,21-DI-OH
5648	N-BUTANOL	159		0.31	-0.08	C23H338N8O3	HYDROCORTISONE DIGUANYL HYDRAZONE
5649	N-BUTANOL	159		1.11	1.03	C23H40N8	3, 20-PREGNANEDIONE DIGUANYL HYDRAZONE, 5-H-C1S
5650	N-BUTANOL	159		1.06	0.96	C23H40N8	3, 20-PREGNANEDIONE DIGUANYL HYDRAZONE, 5-H-TRANS
5651	N-BUTANOL	159		0.76	0.52	C23H41N8O1	PREGNANE-3, 20-DIONE-12-OH/DIGUANYL HYDRAZONE
5652	CHCL3	464	46	4.27		C23H41N106S1	N-ME-3-BUTOXYCARBONYLPYRIDINUM DODECYSULFATE
5653	CHCL3	464	46	4.60		C23H41N1C6S1	N-ME-3-ETHOXYCARBONYLPYRIDINUM TETRADECYLSULFATE
5654	OCTANOL	65	46	2.72	2.72 =	C23H422R1N1	OCTADECYLPYRIDINUM BROMIDE
5655	N-BUTANOL	514		0.61	0.35	C23H46H6O13	NEOMYCIN-B (AS 2-ETHYL BUTYRATE)
5656	CHCL3	95	46	0.68		C24H23AS1BR1	TETRAPHENYLARSONIUM BROMIDE
5657	CHCL3	95	46	-0.74		C24H23AS1CL1	TETRAPHENYLARSONIUM CHLORIDE
5658	CHCL3	95	46	-0.74		C24H23AS1N1O2	TETRAPHENYLARSONIUM NITRATE
5659	CHCL3	95	46	1.88		C24H23AS1N1O3	TETRAPHENYLARSONIUM NITRATE
5660	CHCL3	97	46	0.50		C24H23BR1P1	TETRAPHENYLPHOSPHONIUM BROMIDE
5661	CHCL3	97	46	-0.33		C24H23BR134P1	TETRAPHENYLPHOSPHONIUM BROMATE
5662	CHCL3	97	46	-0.74		C24H23CL1P1	TETRAPHENYLPHOSPHONIUM CHLORIDE
5663	CHCL3	97	46	1.85		C24H23I11P1	TETRAPHENYLPHOSPHONIUM IODIDE
5664	CHCL3	97	46	-0.96		C24H23N1C2P1	TETRAPHENYLPHOSPHONIUM NITRITE
5665	CHCL3	97	46	0.67		C24H23N1O3P1	TETRAPHENYLPHOSPHONIUM NITRATE
5666	CHCL3	95	46	-1.30		C24H21AS1O3S1	TETRAPHENYLARSONIUM SULFATE
5667	CHCL3	95	46	-1.79		C24H21AS1O3S2	TETRAPHENYLARSONIUM THIOSULFATE
5668	CHCL3	95	46	-0.23		C24H22AS1CR1O4	TETRAPHENYLARSONIUM CHROMATE
5669	CHCL3	95	46	1.09		C24H22AS1CR1O4	TETRAPHENYLARSONIUM CHROMATE
5670	CHCL3	95	46	-2.00		C24H22AS1O4P1	TETRAPHENYLARSONIUM PHOSPHATE
5671	CHCL3	97	46	-0.29		C24H22CR1O4P1	TETRAPHENYLPHOSPHONIUM CHROMATE
5672	CHCL3	97	46	0.73		C24H22CR1O4P1	TETRAPHENYLPHOSPHONIUM CHROMATE
5673	CHCL3	97	46	-1.60		C24H22O4P2	TETRAPHENYLPHOSPHONIUM PHOSPHATE
5674	PARAFFINS	499		2.10		C24H25N3	P-PHENYL-N-(P-PIPERIDINOPHENYL)-BENZAMIDINE
5675	CHCL3	497	46	6.70		C24H28N4O8	DEXTROMETHORPHAN PICRATE
5676	CCL4	497	46	4.20		C24H28N4O8	DEXTROMETHORPHAN PICRATE
5677	DIETHYL ETHER	508		1.23	1.95 B	C24H30F2C6	FLUCINDOLONE ACETONIDE
5678	DIETHYL ETHER	502		2.16	3.40 S	C24H30F2C6	6-A-FLUORO-DEKAMETHASONE ACETATE
5679	DIETHYL ETHER	502		1.41	2.69 S	C24H30F2C6	6-A-FLUORO-TRIAMCINOLONE ACETONIDE
5680	DIETHYL ETHER	502		1.97	3.23 S	C24H31F1O5	6-A-METHYL-9-A-FLUORO-21-DEOXY-PREDNISOLONE ACETATE
5681	DIETHYL ETHER	502		1.92	3.18 S	C24H31F1C6	6-A-METHYL-9-A-FLUORO-PREDNISOLONE ACETATE
5682	DIETHYL ETHER	502		1.16	2.44 S	C24H31F1O6	TRIAMCINOLONE ACETONIDE
5683	DIETHYL ETHER	513		1.11	2.39 S	C24H31F1O6	TRIAMCINOLONE ACETONIDE
5684	DIETHYL ETHER	508		1.10	1.84 B	C24H31F1O6	TRIAMCINOLONE ACETONIDE
5685	CHCL3	482	68	-0.11	0.50 N	C24H31N3O1S1	8UTAPERAZINE
5686	CHCL3	482	69	1.32	1.84 N	C24H31N3O1S1	8UTAPERAZINE
5687	CHCL3	482	68	-0.89	-0.22 N	C24H31N3O2S1	CARPENAZINE
5688	CHCL3	482	69	1.99	2.37 N	C24H31N3O2S1	CARPENAZINE
5689	D1LS	505	23	2.29		C24H32CL1N3O1	ACRIDINE, 2-CL-7-MEO-5(2-O(ETAMINO)-6-HEX-AMINO)
5690	N-HEPTANE	416	14	2.36		C24H32N2C6	BIS(P-AMINOSALICYLIC ACID) DECYL ESTER
5691	DIETHYL ETHER	502		1.83	3.09 S	C24H32O6	6-A-METHYL-PREDNISOLONE ACETATE
5692	DIETHYL ETHER	513		0.82	2.11 S	C24H32O6	PREDNACINOLONE
5693	DIETHYL ETHER	508		1.39	1.81 B	C24H33F1C6	FLUANDELONE ACETONIDE
5694	CYCLOHEXANE	474	14	-2.30		C24H34N8O4S2	THIAMINE DISULFIDE
5695	CHCL3	474	14	-1.49	-1.50 B	C24H34N8O4S2	THIAMINE DISULFIDE
5696	ETHYL ACETATE	474	14	-1.03	-1.16	C24H34N8O4S2	THIAMINE DISULFIDE
5697	CHCL3	491	46	-0.30		C24H37BR1N1O3	ATROPINE-N-HEPTYLBROMIDE
5698	N-BUTANOL	159		1.00	0.87	C24H37N8O2	PROGESTERONE DIGUANYL HYDRAZONE, 16-CARBOXY
5699	N-BUTANOL	159		0.33	-0.05	C24H37N9	PROGESTERONE DIGUANYL HYDRAZONE, 5-CYANO
5700	N-BUTANOL	159		0.61	0.33	C24H37N9	PROGESTERONE DIGUANYL HYDRAZONE, 12-CYANO

NO.	SOLVENT	REF	FOOT NOTF	LOGP SOLV	LOGP OCT	EMPIRICAL FORMULA	NAME
5701	OCTANOL	503	46	5.90	5.90	C24H39N104S1	1,2,6-TRIMETHYLQUINOLINUM DOOECYLSULFATE
5702	CHCL3	464	46	5.13		C24H39N104S1	1,2,6-TRIMETHYLQUINOLINUM DOOECYLSULFATE
5703	OCTANE	57		2.03		C24H42D6	P-T-OCTYLPHENOXYTETRAETHOXYETHANOL/OPE-4/
5704	CHCL3	95		1.53		C25H29AS1N1S1	TETRAPHENYLARSONIUM THIOCYANATE
5705	OCTANOL	268	59	0.96	0.96	C25H33CL1N3	GENTIAN VIOLET/CRYSTAL VIOLET/
5706	D1ETHYL ETHER	502		1.54	2.81	C25H33F1O6	6-A-METHYL-TRIAMCINOLONE ACETONIDE
5707	OCTANOL	283	7	-1.37	-1.37	C25H33N1C4.HCL	ETORPHINE HYDROCHLORIDE
5708	OILS	505	23	2.18		C25H34CL1N3O1	ACRIDINE,2-CL-7-MEO-5(2-O1ETAMINO-7-HEP-AMINO)
5709	D1ETHYL ETHER	502		2.40	3.64	C25H34O5	6-A-METHYL-21-DESOXY-PREDNISOLONE PROPIONATE
5710	D1ETHYL ETHER	502		1.73	3.00	C25H35F1C6	6-A-METHYL-9-A-FLUORO-16-A-HYDROXYCORTISONE ACETONIDE
5711	CHCL3	464	46	5.45		C25H35N1O4S1	N-METHYLACRIDINIUM UNOFCYLSULFATE
5712	D1ETHYL ETHER	502		2.39	3.63	C25H36O6	HYDROCORTISONE-21-BUTYRATE
5713	D1ETHYL ETHER	502		2.35	3.59	C25H36O6	HYDROCORTISONE-21-1-BUTYRATE
5714	CHCL3	491	46	0.22		C25H39BR1N1U3	ATROPINE-N-OCTYL BROMIDE
5715	CHCL3	515	41	3.42		C25H41N1O7S1	HDMATROPINE-NONYLSULFATE
5716	CHCL3	464	46	5.12		C25H45N1O6S1	N-ME-3-BUTOXYCARBONYLPYRIDINIUM TETRADECYLSULF.
5717	OCTANOL	65	46	3.28	3.28	C25H46BR1N1	BENZYL DIMETHYLHEXADECYLAMMONIUM BROMIDE
5718	TOLUENE	148		0.34	0.68	C26H22C01N8O2	CADMIUM-CARBAZONE COMPLEX
5719	TOLUENE	148		2.95	2.82	C26H22CU1N8O2	CUPRIC-CARBAZONE COMPLEX
5720	TOLUENE	148		3.08	2.86	C26H22FE1N8O2	FERROUS-CARBAZONE COMPLEX
5721	TOLUENE	148		-0.30	0.44	C26H22MN1N8O2	MANGANOUS-CARBAZONE COMPLEX
5722	TOLUENE	148		1.18	1.49	C26H22NB02P81	PLUMBOUS-CARBAZONE COMPLEX
5723	TOLUENE	148		2.30	2.33	C26H22NB02S1	STANNOUS-CARBAZONE COMPLEX
5724	TOLUENE	148		0.11	0.73	C26H22NB02Z1	ZINC-CARBAZONE COMPLEX
5725	TOLUENE	148		-0.10	0.58	C26H22N11N8O2	NICKEL-CARBAZONE COMPLEX
5726	D1ETHYL ETHER	502		3.18	4.39	C26H34F2O6	6-A-FLUORO-DEXAMETHASONE-21-BUTYRATE
5727	D1ETHYL ETHER	502		3.24	4.45	C26H34F2O6	6-A-FLUORO-DEXAMETHASONE-21-1-BUTYRATE
5728	CHCL3	491	46	0.87		C26H41BR1N1O3	ATROPINE-N-NONYLBROMIDE
5729	OCTANOL	57		1.61		C26H46O7	P-T-OCTYLPHENOXYPENTATHOXYETHANOL/OPE-5/
5730	CHCL3	516	64	1.98		C27H28BR2O5S1	BROMTHYMOL BLUE
5731	BENZENE	516	64	0.45		C27H28BR2O5S1	BROMTHYMOL BLUE
5732	TOLUENE	516	64	0.30		C27H28BR2O5S1	BROMTHYMOL BLUE
5733	CHCL3	516	64	0.10		C27H28BR2O5S1	BROMTHYMOL BLUE
5734	CLCH2CH2CL	516	64	0.91		C27H28BR2O5S1	BROMTHYMOL BLUE
5735	D1ETHYL ETHER	502		2.93	4.15	C27H35F1O7	6-A-ME-9-A-FL-PREDNISOLONE-16,17-ACETONIDE-21-ACETATE
5736	D1ETHYL ETHER	502		2.71	3.94	C27H37F1O6	RFAMETHASONE-17-VALERATE
5737	D1ETHYL ETHER	513	12	0.11	1.43	C27H37F1O6	BETAMETHASONE-17-VALERATE
5738	D1ETHYL ETHER	502		2.98	4.20	C27H37F1O7	6-A-ME-9-A-FL-HYDROXYCORTISONE-ACETONIDE-21-ACETATE
5739	D1ETHYL ETHER	502		3.56	4.75	C27H47O6	HYDROCORTISONE-21-CAPRATE
5740	CHCL3	491	46	1.15		C27H47BR1N1O3	ATROPINE-N-DECYLBROMIDE
5741	D1ETHYL ETHER	502		3.23	4.44	C28H37F1O7	6-A-METHYL-TRIAMCINOLONE ACETONIDE-21-PROPIONATE
5742	D1ETHYL ETHER	502		3.14	4.35	C28H39F1O7	6-A-ME-7-A-FL-HYDROXYCORTISONE-ACETONIDE-PROPIONATE
5743	MIXED SOLV#1	433		2.78		C28H48N2O3	BARBITURIC ACID, 1-N-OC TAOECYL-5,5-DIALLYL
5744	OCTANOL	57		1.23		C28H57O8	P-T-OCTYLPHENOXYHEXAETHOXYETHANOL/OPE-6/
5745	D1ETHYL ETHER	517	19	0.86		C28H39N4O4	DEUTERO-PORPHYRIN
5746	HEXANE	436		-1.17		C30H33CL1O15	GRISEOFULVIN, TETRA-ACETYL-2'-GLUCOSYLOXY
5747	CHCL3	515	41	4.07		C30H45N1O7S1	METHANTHELIN-NONYLSULFATE
5748	CHCL3	515	41	4.66		C30H53N1O7S1	OXYPHENONIUM-NONYLSULFATE
5749	OCTANE	57		0.74		C30H54O9	P-T-OCTYLPHENOXYHEPTATHOXYETHANOL/OPE-7/
5750	CHCL3	515	41	4.90		C30H55N1O5S1	TRIDHEXYL-NONYLSULFATE
5751	OCTANOL	65	46	-1.47	-1.47	C31H32BR2N6O11	NCS-113089
5752	CYCLOHEXANE	141		3.27		C31H46O2	1,4-NAPHTHOQUINONE, 2-METHYL, 3-PHYTYL (VITAMIN K)
5753	CHCL3	515	41	3.95		C31H52N2O6S1	BENZOMETHAZINE-NONYLSULFATE
5754	CHCL3	515	41	5.60		C32H49N1O7S1	PROPANTHELIN-NONYLSULFATE
5755	D1ETHYL ETHER	3	17	2.45	2.26	C32H49N1O9	CEVAIINE
5756	I-BUTANOL	4		2.17	2.54	C32H49N1O9	CEVAIINE
5757	CHCL3	515	41	4.49		C32H52N2O5S1	15-OPROPAMIDE-NONYLSULFATE
5758	OCTANE	57		0.30		C32H53O10	P-T-OCTYLPHENOXYOCTATHOXYETHANOL/OPE-8/
5759	D1ETHYL ETHER	517	19	1.23		C34H34N4O6	PROTO-PORPHYRIN
5760	D1ETHYL ETHER	517	19	-0.32		C34H38N4O6	HEMATO-PORPHYRIN
5761	D1ETHYL ETHER	517	19	0.52		C34H38N4O6	MESO-PORPHYRIN
5762	D1ETHYL ETHER	359		0.85	1.62	C34H47N1O11	ACCNTINE
5763	CHCL3	359		1.77	1.28	C34H47N1O11	ACCNTINE
5764	OCTANE	57		-0.15		C34H62O11	P-T-OCTYLPHENOXYNONATHOXYETHANOL/OPE-9/
5765	D1ETHYL ETHER	518		1.09	1.08	C35H36N2O6	MONOFORMETHYL-L-CURINE
5766	OCTANOL	519		1.79	1.79	C35H61N3O14	3-AZIDO-3'-DE(01MEAMINO)-4'-HYDROXYERYTHROMYCIN
5767	D1ETHYL ETHER	518		0.15	0.25	C36H38N2O6	O-CHONDROCURINE
5768	D1ETHYL ETHER	517	19	-0.48		C36H38N4O8	COPRO-PORPHYRIN
5769	OCTANOL	519		2.21	2.21	C36H65N1O13	N-OFSMETHYLERYTHROMYCIN
5770	OCTANOL	519		1.26	1.26	C36H65N1O13	ERYTHROMYCIN C
5771	OCTANE	57		-0.59		C36H66O12	P-T-OCTYLPHENOXYDECAETHOXYETHANOL/OPE-10/
5772	OCTANOL	519		3.12	3.12	C37H67N1O12	DEOXYERYTHROMYCIN
5773	D1ETHYL ETHER	519	50	1.59	1.52	C37H67N1O12	DEOXYERYTHROMYCIN
5774	CYCLOHEXANE	519		0.39		C37H67N1O12	DEOXYERYTHROMYCIN
5775	CHCL3	519		2.64	3.08	C37H67N1O12	DEOXYERYTHROMYCIN
5776	BENZENE	519		2.18	3.50	C37H67N1O12	DEOXYERYTHROMYCIN
5777	TOLUENE	519		1.86	3.21	C37H67N1O12	DEOXYERYTHROMYCIN
5778	ETHYL ACETATE	519	50	1.62	1.78	C37H67N1O12	DEOXYERYTHROMYCIN
5779	1-PENT. ACETATE	519	50	1.90	1.79	C37H67N1O12	DEOXYERYTHROMYCIN
5780	CHCL3	519		1.36	2.63	C37H67N1O12	DEOXYERYTHROMYCIN
5781	DI-1-PR. ETHER	519	50	1.07	1.78	C37H67N1O12	DEOXYERYTHROMYCIN
5782	MF-(BUT.KETONE)	519	50	1.30	1.25	C37H67N1O12	DEOXYERYTHROMYCIN
5783	OCTANOL	519		2.48	2.48	C37H67N1O13	ERYTHROMYCIN
5784	D1ETHYL ETHER	519	50	1.30	1.26	C37H67N1O13	ERYTHROMYCIN
5785	CYCLOHEXANE	519		-0.22		C37H67N1O13	ERYTHROMYCIN
5786	CHCL3	519		2.46	2.90	C37H67N1O13	ERYTHROMYCIN
5787	BENZENE	519		1.62	2.94	C37H67N1O13	ERYTHROMYCIN
5788	TOLUENE	519		1.45	2.85	C37H67N1O13	ERYTHROMYCIN
5789	ETHYL ACETATE	519	50	1.28	1.43	C37H67N1O13	ERYTHROMYCIN
5790	CHCL3	519		1.25	2.93	C37H67N1O13	ERYTHROMYCIN
5791	DI-1-PR. ETHER	519	50	0.63	1.28	C37H67N1O13	ERYTHROMYCIN
5792	ME-1-BUT.KETONE	519	50	1.16	1.16	C37H67N1O13	ERYTHROMYCIN
5793	OCTANOL	519		1.44	1.44	C37H67N1O14	4'-HYDROXYERYTHROMYCIN
5794	OCTANOL	65	56	-2.18	-2.18	C38H42N2O6	O-TETRANDRINE/NCS-77037/
5795	OCTANOL	519	55	3.11	3.11	C38H65N1O14	ERYTHROMYCIN-9,11-CARBONATE-6,9-HEMICAL
5796	TOLUENE	148		2.44	2.44	C39H33FE1N12D3	FERRIC-CARBAZONE COMPLEX
5797	OCTANOL	519		3.32	3.32	C39H69N1O13	11-O-ACETYLOXYERYTHROMYCIN
5798	OCTANOL	226	54	-1.27	-1.27	C41H48N2O8	THALICARPINE (68075)
5799	I-BUTANOL	130		1.59	1.73	C41H64O13	DIGITOXIN
5800	OCTANOL	65	46	-1.60	-1.60	C43H43N7O7S2	NCS-114347



NO.	SOLVENT	REF	FOOT	LOGP	LOGP	EMPIRICAL	NAME
			NOTE	SOLV	OCT	FORMULA	
5801	OCTANOL	227		2.82	2.82 =	C <sub>46</sub> H <sub>56</sub> N <sub>4</sub> O <sub>10</sub> .H <sub>2</sub> S <sub>10</sub> 4	VINCRIStINE SULFATE (PKA= 5.5)(NCS 67574)
5802	OCTANOL	227		3.72	3.72 =	C <sub>46</sub> H <sub>58</sub> N <sub>4</sub> O <sub>9</sub> .H <sub>2</sub> S <sub>10</sub> 4	VINCALeUKOBLaStINE SULFATE (PKA= 5.4)(49842)
58C3	SEC-BUTANOL	84	19	1.21	1.19	C <sub>6</sub> O <sub>9</sub> H <sub>2</sub> N <sub>1</sub> O <sub>10</sub>	GRAMICIDIN S-A
5804	SEC-BUTANOL	84	19	-0.07	-0.63	C <sub>66</sub> H <sub>103</sub> N <sub>17</sub> O <sub>16</sub> S <sub>1</sub>	BACITRACIN A
58C5	SEC-BUTANOL	84	19	-1.08	-2.28	C999	INSULIN
58C6	SEC-BUTANOL	84	19	0.51	0.21	C999	POLYPETIN A

<sup>1</sup> pH 1.1, 37°. <sup>2</sup> At pH = pI net charge = zero. <sup>3</sup> In *n*-pentyl acetate. <sup>4</sup> Calculated log  $P_{\text{enol}} = 1.48$ ; log  $P_{\text{keto}} = 0.04$ ; intramolecular H bonds indicated. <sup>5</sup>  $P$  reported constant between pH 2 and 6. <sup>6</sup> No log  $P_{\text{oct}}$  values were calculated because the H-bonding capabilities of boronic acids were greatly influenced by the  $\sigma$  constant of substituents. <sup>7</sup> pH 2.0. <sup>8</sup> The large difference between the 3 and 4 isomers is explained in ref 478. <sup>9</sup> Compounds with active hydrogens show unusually high log  $P_{\text{benzene}}$  values. <sup>10</sup> At pH 7.4 plus hexadecylamine; the addition compound is also partitioning. <sup>11</sup> Some lactone also present. <sup>12</sup> This value appears "out of line"; it was not used in the regression equation. <sup>13</sup>  $P_{\text{un-ionized}} = P^*/(1 - \alpha)$ , where  $\alpha$  = degree of dissociation calculated from  $pK_a$ . <sup>14</sup> pH 7.4 + phosphate buffer; not ion-corrected. <sup>15</sup> pH 3.5. <sup>16</sup> pH  $\sim 1.0$ . <sup>17</sup> Apparent  $P$  reported; not buffered or ion-corrected. <sup>18</sup> pH 7.05 + octadecylamine; addition compound is also partitioning. <sup>19</sup> pH 1.0 using HCl. <sup>20</sup> pH  $-0.22$  using HCl. <sup>21</sup> pH 7.1 + octadecylamine; addition compound also partitioning. <sup>22</sup> Value is ratio of solubilities, not a true  $P$ , but the activity of an inert gas is nearly unity even at saturation. <sup>23</sup> pH 7.3; ion-corrected. <sup>24</sup> pH 7.3; estimated  $pK_a = 4.9$ ; absolute values not very reliable but comparison within series valid. <sup>25</sup> Corrected for ionization and dimerization by method of ref 29. <sup>26</sup> Approximate value. <sup>27</sup> pH 7.3 in ref 489; pH 7.0 in ref 206; both ion-corrected. <sup>28</sup> pH 6.3, ion-corrected. <sup>29</sup> pH 5.9. <sup>30</sup> pH 6.9. <sup>31</sup> pH 7.4; ion-corrected from  $pK_a$ . Absolute values not reliable, but comparison within series valid. <sup>32</sup> pH 5.4. <sup>33</sup> pH 7.8. <sup>34</sup> pH 6.0. <sup>35</sup> pH 7.1. <sup>36</sup> pH 6.5 using 1 *M* phosphate buffer; method = countercurrent extraction. <sup>37</sup> pH 7.1 using 0.1 *M* phosphate + 1 *M* NaCl. <sup>38</sup> pH 6.6 + 1 *M* phosphate. <sup>39</sup> pH 6.9 using phosphate buffer. <sup>40</sup> pH 5.6 using phosphate buffer; ref 504 also lists values at pH 2.1-8.5. <sup>41</sup> This reference also lists values for decyl, undecyl, and dodecyl ion pairs. <sup>42</sup> May be dimerized in organic phase. <sup>43</sup> pH 7.5 + 0.2 *M* phosphate. <sup>44</sup> pH 7.4 using phosphate buffer, ion-corrected. <sup>45</sup> Calculated from the mole fraction partition coefficient ( $P_{\text{MF}}$ ) by the expression  $P = (P_{\text{MF}}) \times 18(\text{do})/\text{MW}_o$ , where do = density of organic solvent and  $\text{MW}_o$  = its molecular weight. <sup>46</sup> Ion pair. <sup>47</sup> Calculated from ratio  $C_w/(C_o)^{1/2}$  and the  $K_{\text{dimer}}$  from ref 139. <sup>48</sup> At isoelectric point, pH 5.35. <sup>49</sup> pH 5.8; ion-corrected using  $pK_a = 4.8$ . <sup>50</sup> Classification by regression equation appears anomalous. <sup>51</sup> 0°. <sup>52</sup> Aqueous phase is 5% HCl. <sup>53</sup> In plastic containers. In alkylpyridinium series, adsorption to glass gives values lower by 0.15 (decyl), 0.3 (hexyl), and 0.8 (butyl). <sup>54</sup> Dissolved in HCl, adjusted to pH 6.5. <sup>55</sup> Subject of U. S. Patent 3,417,077 issued to Eli Lilly & Co. <sup>56</sup> pH 4.0. <sup>57</sup> pH 8.0 using 0.02 *M* phosphate-citrate buffer. <sup>58</sup> Assay procedure: *J. Agr. Food Chem.*, 8, 460 (1960). <sup>59</sup> Commercial material: 96% pure. <sup>60</sup> pH 11 using Sorenson's buffer. <sup>61</sup> pH 4.7; log  $P^* = -2.00$  at pH 2.2. <sup>62</sup> Calculated as log  $P = (pE + 2) - pK_a$ . <sup>63</sup> pH 6.4, ion-corrected. Log  $P$ 's calculated from  $\pi$  values listed and log  $P_{\text{CHCl}_3} = -1.40$  and log  $P_{\text{oct}} = -0.70$  for sulfanilamide. <sup>64</sup> pH 5.5; phosphate buffer; largely as anion; some polymer possible. <sup>65</sup> pH 7.4 using phosphate buffer; not ion-corrected. <sup>66</sup> pH 8.93 using carbonate buffer; ion-corrected. <sup>67</sup> pH 9.2 using carbonate-bicarbonate buffer; ion-corrected. <sup>68</sup> pH 1.0; approximately half of phenothiazine ring nitrogens protonated. <sup>69</sup> pH 7.6; where solute has two alkyl N atoms, some diprotonation probable. <sup>70</sup> Entered twice: once as enol, once as keto tautomer. <sup>71</sup> pH 12.8; not ion-corrected;  $\sim 0.0001\%$  in neutral form. <sup>72</sup> pH 7.32; not ion-corrected;  $\sim 0.1\%$  in neutral form. <sup>73</sup> pH 10.15 using carbonate-bicarbonate buffer. <sup>74</sup> pH 13.7; not ion-corrected;  $\sim 0.01\%$  in neutral form. <sup>75</sup>  $pK_a$  measured in acetonitrile which accentuates base strength. <sup>77</sup> Log  $P$  at infinite dilution calculated by regression analysis;  $s = 0.03$ ,  $r = 0.995$ . Note: mixed solvent #1 is 67% (by volume) ethyl ether and 33% petroleum ether.

(164) J. H. Lawrence, W. F. Loomis, C. A. Tobias, and F. H. Turpin, *J. Physiol. (London)*, **105**, 197 (1946).  
 (165) W. Herz and A. Kurzer, *Z. Elektrochem. Angew. Phys. Chem.*, **16**, 240, 869 (1910).  
 (166) A. A. Jakowkin, *Z. Phys. Chem.*, **18**, 585 (1895).  
 (167) A. A. Jakowkin, *ibid.*, **29**, 613 (1899).  
 (168) L. Velluz, *C. R. Acad. Sci.*, **182**, 1178 (1926).  
 (169) J. H. Faull, Jr., *J. Amer. Chem. Soc.*, **56**, 522 (1934).  
 (170) G. Herrero, *An. Soc. Espan. Fis. Quim.*, **29**, 616 (1931); **31**, 5, 416 (1933); **34**, 549 (1936).  
 (171) L. Tschugajeff and A. J. Lukaschuk, *Z. Anorg. Allg. Chem.*, **172**, 223 (1928).  
 (172) D. M. Yost and R. J. White, *J. Amer. Chem. Soc.*, **50**, 81 (1928).  
 (173) R. Macy, *J. Ind. Hyg. Toxicol.*, **30**, 140 (1948).  
 (174) K. B. Sandell, *Naturwissenschaften*, **51**, 336 (1964).  
 (175) L. F. Audrieth and C. F. Gibbs, *Inorg. Syn.*, **1**, 77 (1939).  
 (176) N. A. Kolossowsky, *Bull. Soc. Chim. Fr.*, **37**, 372 (1925).  
 (177) W. Perschke and Chufarov, *Z. Anorg. Allg. Chem.*, **151**, 121 (1926).  
 (178) J. H. Walton and H. A. Lewis, *J. Amer. Chem. Soc.*, **38**, 633 (1916).  
 (179) A. Brann, Ph.D. Thesis, University of Wisconsin, Madison, Wis., 1914; see *J. Amer. Chem. Soc.*, **38**, 633 (1916).  
 (180) H. T. Calvert, *Z. Phys. Chem.*, **38**, 513 (1901).  
 (181) G. W. E. Plaut, S. A. Kuby, and H. A. Lardy, *J. Biol. Chem.*, **184**, 243 (1950).  
 (182) W. Herz and H. Fischer, *Chem. Ber.*, **37**, 4746 (1904).  
 (183) G. Georgievics, *Monatsh. Chem.*, **36**, 391 (1915).  
 (184) K. Gordon, *Ind. Eng. Chem.*, **45**, 1813 (1953).  
 (185) D. M. Yost and W. E. Stone, *J. Amer. Chem. Soc.*, **55**, 1889 (1933).  
 (186) C. Hansch and S. Anderson, *J. Org. Chem.*, **32**, 2583 (1967).  
 (187) G. Deniges, *Bull. Trav. Soc. Pharm. Bordeaux*, **78**, 61 (1940).  
 (188) A. Hantzsch and A. Vagt, *Z. Phys. Chem.*, **38**, 705 (1901).  
 (189) A. J. Courtier, *Bull. Soc. Chim. Fr.*, **15**, 528 (1948).  
 (190) R. C. Archibald, *J. Amer. Chem. Soc.*, **54**, 3178 (1932).  
 (191) F. Auerbach and H. Zeglin, *Z. Phys. Chem.*, **103**, 200 (1922).  
 (192) O. C. Dermer, W. G. Markham, and H. M. Trimble, *J. Amer. Chem. Soc.*, **63**, 3524 (1941).

(193) N. E. Gordon and E. E. Reid, *J. Phys. Chem.*, **26**, 773 (1922).  
 (194) C. S. Marvel and J. C. Richards, *Anal. Chem.*, **21**, 1480 (1949).  
 (195) D. E. Pearson and M. Levine, *J. Org. Chem.*, **17**, 1351 (1952).  
 (196) H. J. Vogt and C. J. Geankoplis, *Ind. Eng. Chem.*, **45**, 2119 (1953).  
 (197) J. Grossfield and A. Miermeister, *Z. Anal. Chem.*, **87**, 241 (1932).  
 (198) E. J. Ross, *J. Physiol. (London)*, **112**, 229 (1951).  
 (199) E. R. Washburn and H. C. Spencer, *J. Amer. Chem. Soc.*, **56**, 361 (1934).  
 (200) S. Y. Gerlisma, *J. Biol. Chem.*, **243**, 957 (1968).  
 (201) B. A. Lindenberg, *J. Chim. Phys.*, **48**, 350 (1951).  
 (202) W. Wittenberger, *Angew. Chem.*, **61**, 412 (1949).  
 (203) N. Komar and L. Manzhelii, *Chem. Abstr.*, **61**, 3736 (1964).  
 (204) W. A. Felsing and S. E. Buckley, *J. Phys. Chem.*, **37**, 779 (1933).  
 (205) W. Herz and E. Stanner, *Z. Phys. Chem.*, **128**, 399 (1927).  
 (206) K. H. Büchel and W. Draber, *Progr. Photosyn. Res.*, **3**, 177 (1969).  
 (207) O. C. Dermer and V. Dermer, *J. Amer. Chem. Soc.*, **65**, 1653 (1943).  
 (208) K. Drucker, *Z. Phys. Chem.*, **49**, 563 (1904).  
 (209) M. Bodansky and V. Meigs, *J. Phys. Chem.*, **36**, 814 (1932).  
 (210) R. Kerley and C. Hansch, unpublished analysis.  
 (211) P. Bhattacharyya, *J. Indian Chem. Soc.*, **32**, 387 (1955).  
 (212) E. E. Chandler, *J. Amer. Chem. Soc.*, **30**, 696 (1908).  
 (213) J. Pinnow, *Z. Anal. Chem.*, **54**, 321 (1915).  
 (214) F. Baum, *Arch. Exp. Pathol. Pharmacol.*, **42**, 119 (1889).  
 (215) G. Georgievics, *Z. Phys. Chem.*, **90**, 47 (1915).  
 (216) W. J. Dunn III and C. Hansch, unpublished analysis.  
 (217) N. Kakeya, N. Yata, A. Kamada, and M. Aoki, *Chem. Pharm. Bull.*, **17**, 2558 (1969).  
 (218) S. Anderson and C. Hansch, unpublished analysis.  
 (219) V. Rothmund and N. T. M. Wilmore, *Z. Phys. Chem.*, **40**, 611 (1902).  
 (220) M. Bodansky, *J. Biol. Chem.*, **79**, 241 (1928).  
 (221) C. H. Werkman, *Ind. Eng. Chem., Anal. Ed.*, **2**, 302 (1930).  
 (222) V. P. Sumarokov and Z. M. Volodutskaia, *Chem. Abstr.*, **54**, 8225 (1960).

- (223) G. Weissenberger, F. Schuster, and L. Piatti, *Z. Anorg. Allg. Chem.*, **151**, 77 (1926).
- (224) K. H. Meyer and H. Gottlieb-Billroth, *Z. Physiol. Chem.*, **112**, 55 (1921).
- (225) A. England, Jr., and E. J. Cohn, *J. Amer. Chem. Soc.*, **57**, 636 (1935).
- (226) National Cancer Institute, Drug Development Branch, private communication.
- (227) Midwest Research Institute (under contract with the National Cancer Institute, NIH No. 69-2113), private communication.
- (228) G. Aksnes, *Acta Chem. Scand.*, **14**, 1447 (1960).
- (229) R. D. Vold and E. R. Washburn, *J. Amer. Chem. Soc.*, **54**, 4217 (1932).
- (230) A. B. Lindenberg, *Soc. Biol. Strasbourg*, **116**, 1405 (1934).
- (231) E. Hutchinson, *J. Phys. Chem.*, **52**, 897 (1948).
- (232) J. L. Morgan and H. K. Benson, *Z. Anorg. Chem.*, **55**, 356 (1907).
- (233) S. Bugarszky, *Z. Phys. Chem.*, **71**, 753 (1910).
- (234) M. Nakano and N. K. Patel, *J. Pharm. Sci.*, **59**, 77 (1970).
- (235) D. Nikaitani and C. Hansch, unpublished results.
- (236) D. C. Stewart and H. W. Crandall, *J. Amer. Chem. Soc.*, **73**, 1377 (1951).
- (237) W. Walter and H. Weidemann, *Monatsh. Chem.*, **93**, 1235 (1962).
- (238) E. J. Lien and C. Hansch, unpublished results.
- (239) F. K. Bell, J. J. O'Neill, and R. M. Burgisan, *J. Pharm. Sci.*, **52**, 637 (1963).
- (240) P. Needleman and F. E. Hunter, Jr., *Mol. Pharmacol.*, **2**, 134 (1966).
- (241) R. G. Ross and R. A. Ludwig, *Can. J. Bot.*, **35**, 65 (1957).
- (242) W. Kemula, H. Buchowski, and R. Lewandowski, *Chem. Abstr.*, **61**, 8945 (1964).
- (243) W. Herz and W. Rathmann, *Z. Elektrochem.*, **19**, 552 (1913).
- (244) P. Gross and K. Schwarz, *Monatsh. Chem.*, **55**, 287 (1930).
- (245) J. Traube, "E. Pflüger," *Arch. Physiol.*, **105**, 541 (1904).
- (246) W. Herz and P. Schuftan, *Z. Phys. Chem.*, **101**, 269 (1922).
- (247) R. Deitzel and E. Rosenbaum, *Biochem. Z.*, **185**, 275 (1927).
- (248) K. B. Sandell, *Monatsh. Chem.*, **89**, 36 (1958).
- (249) E. Knauff-Lenz, *Arch. Exp. Pathol. Pharmacol.*, **84**, 66 (1919).
- (250) W. Kemula, H. Buchowski, and J. Teperek, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, **12**, 343 (1964).
- (251) K. B. Sandell, *Naturwissenschaften*, **49**, 12 (1962).
- (252) H. G. Mandel, E. L. Alpen, W. D. Winters, and P. K. Smith, *J. Biol. Chem.*, **193**, 63 (1951).
- (253) J. F. Tinker and G. B. Brown, *ibid.*, **173**, 585 (1948).
- (254) C. A. Hogben, D. J. Tocco, B. B. Brodie, and L. S. Schanker, *J. Pharmacol. Exp. Ther.*, **125**, 275 (1959).
- (255) J. Iwasa, T. Fujita, and C. Hansch, *J. Med. Chem.*, **8**, 150 (1965).
- (256) K. Butler, H. Howes, J. Lynch, and D. Pirie, *ibid.*, **10**, 891 (1967).
- (257) W. L. Ruigh and A. E. Erickson, *Anesthesiology*, **2**, 546 (1941).
- (258) C. D. Leake and M. Chen, *Soc. Exp. Biol. Med.*, **28**, 151 (1930).
- (259) J. C. Kranz, Jr., C. J. Carr, and W. E. Evans, Jr., *Anesthesiology*, **5**, 291 (1944).
- (260) E. J. Lien, *J. Med. Chem.*, **14**, 653 (1971).
- (261) E. Kutter, Karl Thomae, GmbH, Biberach, West Germany, unpublished analysis.
- (262) W. Dedek, *Monatsber. Deut. Akad. Wiss. (Berlin)*, **4**, 225 (1962).
- (263) R. Gaundier and W. Hoffman, *Chem. Abstr.*, **64**, 13729 (1966).
- (264) A. Eeckhout, *Arch. Exp. Pathol. Pharmacol.*, **57**, 338 (1907).
- (265) V. Sovostina, E. Astakhova, and V. Peshkova, *Chem. Abstr.*, **59**, 1062 (1963).
- (266) A. Babko and P. Mikhelson, *Ukr. Khim. Zh.*, **21**, 388 (1955).
- (267) N. M. Cone, S. E. Forman, and J. C. Kranz, Jr., *Proc. Soc. Exp. Biol. Med.*, **48**, 461 (1941).
- (268) W. R. Glave and C. Hansch, unpublished analysis.
- (269) R. Dietzel and P. Schmitt, *Z. Unters. Lebensm.*, **63**, 369 (1932).
- (270) D. Mackintosh and C. Hansch, unpublished analysis.
- (271) S. Öksne, *Acta Chem. Scand.*, **13**, 1814 (1959).
- (272) E. Meeussen and P. Huyskens, *J. Chim. Phys.*, **63**, 845 (1966).
- (273) V. S. Morello and R. B. Beckmann, *Ind. Eng. Chem.*, **42**, 1078 (1950).
- (274) D. Dyrssen, S. Ekberg, and D. H. Liem, *Acta Chem. Scand.*, **18**, 135 (1964).
- (275) P. J. Gehring, T. R. Torkelson, and F. Oyen, *Toxicol. Appl. Pharmacol.*, **11**, 361 (1967).
- (276) M. Tute, Pfizer Corp., Sandwich, Kent, England, unpublished analysis.
- (277) N. Kolassa, K. Pfleger, and W. Rummel, *Eur. J. Pharmacol.*, **9**, 265 (1970).
- (278) W. G. Scribner, W. J. Treat, J. D. Weis, and R. W. Moshier, *Anal. Chem.*, **37**, 1136 (1965).
- (279) T. Wakabayashi, S. Oki, T. Omori, and N. Suzuki, *J. Inorg. Nucl. Chem.*, **26**, 2255 (1964).
- (280) C. Golumbic and M. Orchin, *J. Amer. Chem. Soc.*, **72**, 4145 (1950).
- (281) R. M. Woodman and A. S. Corbet, *J. Chem. Soc.*, 2461 (1925).
- (282) A. Albert, *ibid.*, 1376 (1951).
- (283) J. Schaeffer and C. Hansch, Sandwich, Kent, England, unpublished analysis.
- (284) S. Rich and J. G. Horsfall, *Phytopathology*, **42**, 457 (1952).
- (285) D. Stevancevic and V. Antonijevic, *Chem. Abstr.*, **63**, 17215 (1965).
- (286) J. Rydberg, *Svensk. Kem. Tidskr.*, **62**, 179 (1950).
- (287) I. Starnik, N. Ampelogova, and B. Kuznetsov, *Radiokhimiya*, **6**, 519 (1964).
- (288) N. A. Kolosovskii and N. P. Ponomareva, *J. Gen. Chem. (USSR)*, **4**, 1077 (1934).
- (289) Southern Research Institute (under contract with National Cancer Institute NIH No. 71-2021), private communication.
- (290) I. Odaira, *Mem. Coll. Sci., Kyoto Imp. Univ.*, **1**, 324 (1916).
- (291) J. Grossfield and A. Miermeister, *Z. Anal. Chem.*, **85**, 321 (1931).
- (292) P. Harrass, *Arch. Int. Pharmacodynam. Ther.*, **11**, 431 (1903).
- (293) R. Bierick, "E. Pflüger," *Arch. Physiol.*, **174**, 202 (1919).
- (294) N. P. Komar and A. K. Khukhryanskii, *Chem. Abstr.*, **65**, 6523 (1966).
- (295) L. Craig, *Anal. Chem.*, **22**, 1346 (1950).
- (296) R. Siebeck, *Arch. Exp. Pathol. Pharmacol.*, **95**, 93 (1922).
- (297) M. E. Eldefrawi and R. D. O'Brien, *J. Exp. Biol.*, **46**, 1 (1967).
- (298) V. Lee, M. S. Thesis, San Jose State College, Aug 1967.
- (299) V. H. Parker, *Biochem. J.*, **97**, 658 (1965).
- (300) R. J. Pinney and V. Walters, *J. Pharm. Pharmacol.*, **21**, 415 (1969).
- (301) M. Tichy and K. Bocek, Institute of Industrial Hygiene and Occupational Diseases, Prague, Czechoslovakia, private communication.
- (302) T. Fujita and C. Hansch, unpublished analysis.
- (303) H. Freundlich and D. Kruger, *Z. Elektrochem.*, **36**, 305 (1930).
- (304) C. E. Lough, R. F. Silver, and F. K. McClusky, *Can. J. Chem.*, **46**, 1943 (1968).
- (305) A. Unmack, *Chem. Zentr.*, **2**, 1862 (1934).
- (306) A. S. Keston, S. Udenfriend, and M. Levy, *J. Amer. Chem. Soc.*, **72**, 748 (1950).
- (307) W. Kemula and H. Buchowski, *J. Phys. Chem.*, **63**, 155 (1959).
- (308) W. Kemula, H. Buchowski and J. Teperek, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, **12**, 347 (1964).
- (309) K. S. Rogers and A. Cammarata, *J. Med. Chem.*, **12**, 692 (1969).
- (310) C. L. DeLigny, J. H. Kreutzer, and G. F. Visserman, *Rec. Trav. Chim. Pays-Bas*, **85**, 5 (1966).
- (311) A. H. Soloway, B. Whitman, and J. Messer, *J. Pharmacol. Exp. Ther.*, **129**, 310 (1960).
- (312) Y. Ichikawa, T. Yamono, and H. Fujishima, *Biochim. Biophys. Acta*, **171**, 32 (1969).
- (313) B. Flürscheim, *J. Chem. Soc.*, **97**, 84 (1910).
- (314) W. Kemula, H. Buchowski, and W. Pawlowski, *Rocz. Chem.*, **42**, 1951 (1968).
- (315) G. Williams and F. G. Soper, *J. Chem. Soc.*, 2469 (1930).
- (316) J. Cymerman-Craig, S. D. Rubbo, and B. J. Pierson, *Brit. J. Exp. Pathol.*, **35**, 478 (1954).
- (317) S. Voerman, *Bull. Environ. Contam. Toxicol.*, **4**, 64 (1969).
- (318) K. Kakemi, H. Sezaki, K. Okamura, and S. Ashida, *Chem. Pharm. Bull.*, **17**, 1332 (1969).
- (319) W. Kemula, H. Buchowski, and W. Pawlowski, *Bull. Acad. Pol. Sci., Ser. Sci. Chim.*, **12**, 491 (1964).
- (320) T. Hagiwara, *Technol. Rep., Tohoku Univ.*, **18**, 16 (1953).
- (321) D. M. Kemp, *Anal. Chim. Acta*, **27**, 480 (1962).
- (322) P. Mazel and J. F. Henderson, *Biochem. Pharmacol.*, **14**, 92 (1965).
- (323) J. Lindberg, *Chem. Abstr.*, **54**, 14877 (1960).
- (324) A. B. Lindenberg and M. Massin, *J. Chim. Phys.*, **61**, 112 (1964).
- (325) N. C. Saha, A. Bhattacharjee, N. Basak, and A. Lahiri, *J. Chem. Eng. Data*, **8**, 405 (1963).
- (326) L. S. Schanker, J. M. Johnson, and J. J. Jeffrey, *Amer. J. Physiol.*, **207**, 503 (1964).
- (327) R. C. Doerr and W. Fiddler, *J. Agr. Food Chem.*, **18**, 937 (1970).
- (328) F. A. Philbrick, *J. Amer. Chem. Soc.*, **56**, 2581 (1934).
- (329) Vaubel, *J. Prakt. Chem.*, **67**, 473 (1903).
- (330) J. C. Philip and H. D. Clark, *J. Chem. Soc.*, **127**, 1274 (1925).
- (331) B. I. Ivanov and V. V. Makeikina, *Chem. Abstr.*, **62**, 15896 (1965).
- (332) J. Halmekoski and A. Nissema, *Suomen Kemistilehti B*, **35**, 188 (1962).
- (333) J. Pinnow, *Z. Anal. Chem.*, **50**, 162 (1911).
- (334) R. A. Robinson, *J. Chem. Soc.*, 253 (1952).
- (335) A. G. Foster and I. R. Siddiqi, *ibid.*, 4906 (1961).
- (336) B. I. Tokarev and V. I. Sharkov, *Chem. Abstr.*, **58**, 662 (1963).
- (337) C. Golumbic and G. Golbach, *J. Amer. Chem. Soc.*, **73**, 3966 (1951).
- (338) S. Mayer, R. P. Maickel and B. B. Brodie, *J. Pharm. Exp. Ther.*, **127**, 205 (1959).

- (339) R. Riedel, *Z. Phys. Chem.*, **56**, 243 (1906).
- (340) B. B. Brodie, H. Kurz, and L. S. Schanker, *J. Pharm. Exp. Ther.*, **130**, 20 (1960).
- (341) T. Fujita, Y. Soeda, I. Yamamoto, and M. Nakajima, Department of Agricultural Chemistry, Kyoto University, Kyoto, Japan, private communication.
- (342) H. Davson, *J. Physiol.*, **110**, 416 (1950).
- (343) T. Koizumi, T. Arita, and K. Kakemi, *Chem. Pharm. Bull.*, **12**, 413 (1964).
- (344) D. Rall, J. R. Stabenau, and C. G. Zubrod, *J. Pharmacol. Exp. Ther.*, **125**, 8123 (1959).
- (345) D. L. Tabern and E. F. Shelberg, *J. Amer. Chem. Soc.*, **55**, 328 (1933).
- (346) J. Iwasa and C. Hansch, unpublished analysis.
- (347) M. Lubieniecki, *Chem. Abstr.*, **63**, 13927 (1965).
- (348) K. A. Zirvi and C. H. Jarboe, *J. Med. Chem.*, **12**, 923 (1969).
- (349) E. Coats and C. Hansch, unpublished analysis.
- (350) D. Pressman, L. Brewer, and H. J. Lucas, *J. Amer. Chem. Soc.*, **64**, 1117 (1942).
- (351) T. E. Gier and J. O. Hougen, *Ind. Eng. Chem.*, **45**, 1362 (1953).
- (352) E. Fourneau and G. Florence, *Bull. Soc. Chim. Fr.*, **43**, 1027 (1928).
- (353) E. S. Hyman, *Biophys. J.*, **6**, 405 (1966).
- (354) Y. Turyan, P. Zaitsev, and Z. Zaitseva, *Chem. Abstr.*, **58**, 70 (1963).
- (355) N. A. Kolosovskii and S. V. Andryushchenko, *J. Gen. Chem. USSR*, **4**, 1070 (1934).
- (356) B. Szyszkowski, *Chem. Abstr.*, **9**, 2014 (1915).
- (357) D. R. Reese, G. M. Irwin, L. W. Dittert, C. W. Chong, and J. V. Swintosky, *J. Pharm. Sci.*, **53**, 591 (1964).
- (358) J. C. McGowan, P. N. Atkinson, and L. H. Ruddle, *J. Appl. Chem.*, **16**, 99 (1966).
- (359) J. W. Marden, *Ind. Eng. Chem.*, **6**, 315 (1914).
- (360) K. S. Rogers and A. Cammarata, *Biochim. Biophys. Acta*, **193**, 22 (1969).
- (361) T. C. Daniels and R. E. Lyons, *J. Phys. Chem.*, **35**, 2049 (1931).
- (362) L. H. Baldinger and J. A. Nieuwland, *J. Amer. Pharm. Assoc.*, **22**, 711 (1933).
- (363) F. T. Wall, *J. Amer. Chem. Soc.*, **64**, 472 (1942).
- (364) A. Klein, *Rocz. Chem.*, **5**, 101 (1925).
- (365) J. Tollenaere, Janssen Research, Beerse, Belgium, private communication.
- (366) K. B. Sandell, *Naturwissenschaften*, **49**, 348 (1962).
- (367) D. Dyrssen, *Acta Chem. Scand.*, **8**, 1394 (1954).
- (368) K. Kakemi, H. Sezaki, E. Suzuki, and M. Nakano, *Chem. Pharm. Bull.*, **17**, 242 (1969).
- (369) A. Seidell, ref 1, p 530.
- (370) K. Kakemi, T. Arita, S. Kitazawa, M. Kawamura, and H. Take-nada, *Chem. Pharm. Bull.*, **15**, 1819 (1967).
- (371) G. Aiello, *Biochem. Z.*, **124**, 192 (1921).
- (372) A. C. McCulloch and B. H. Stock, *Aust. J. Pharm.*, **48**, S14 (1966).
- (373) A. M. Reynard, *J. Pharmacol. Exp. Therap.*, **163**, 461 (1968).
- (374) H. Thies and E. Ermer, *Naturwissenschaften*, **49**, 37 (1962).
- (375) A. Taubman, *Z. Phys. Chem.*, **161A**, 141 (1932).
- (376) A. B. Hadaway, F. Barlow, J. E. Grose, C. R. Turner, and L. S. Flower, *Bull. WHO*, **42**, 369 (1970).
- (377) E. A. Hosein, P. Rambaut, J. G. Charbol, and A. Orzeck, *Arch. Biochem. Biophys.*, **111**, 540 (1965).
- (378) A. Sekera, A. Borovansky, and C. Vrba, *Ann. Pharm. Fr.*, **16**, 525 (1958).
- (379) O. T. G. Jones and W. A. Watson, *Biochem. J.*, **102**, 564 (1967).
- (380) E. King and W. Reas, *J. Amer. Chem. Soc.*, **73**, 1804 (1951).
- (381) R. J. Lukens, and J. G. Horsfall, *Phytopathol.*, **57**, 876 (1967).
- (382) J. H. Wilkinson, *Biochem. J.*, **54**, 485 (1953).
- (383) W. A. Bittenbender and E. F. Degering, *J. Amer. Pharm. Assoc.*, **28**, 514 (1939).
- (384) K. Kamoshita, Sumitomo Chemical Co., private communication.
- (385) G. C. Gross, E. F. Degering, and P. A. Tetrault, *Proc. Indiana Acad. Sci.*, **49**, 42 (1939).
- (386) P. P. Maloney and C. Hansch, unpublished analysis.
- (387) A. P. Zozulya, N. N. Mezentsova, V. M. Peshkova, and Y. K. Yurev, *Zh. Anal. Chim.*, **14**, 15 (1959).
- (388) N. V. Melchakova, N. N. Mezentsova, A. Pen, V. M. Peshkova, and Y. Yurev, *Chem. Abstr.*, **57**, 2910 (1962).
- (389) Z. Ziolkowski, J. Respondek, and A. Olszowski, *ibid.*, **60**, 5743 (1964).
- (390) J. Büchi, X. Perlia, and A. Strässle, *Arzneim.-Forsch.*, **16**, 1657 (1966).
- (391) A. B. Hadaway and F. Barlow, *Bull. Entom. Res.*, **56**, 569 (1966).
- (392) P. S. Jaglan and F. A. Gunther, *Analyst (London)*, **95**, 763 (1970).
- (393) M. Yamazaki, N. Kakeya, T. Morishita, A. Kamada, and M. Aoki, *Chem. Pharm. Bull.*, **18**, 708 (1970).
- (394) W. O. Emery and C. D. Wright, *J. Amer. Chem. Soc.*, **43**, 2323 (1921).
- (395) H. J. Teschemacher, *Naunyn-Schmiedeberg's Arch. Pharmacol. Exp. Pathol.*, **255**, 85 (1966).
- (396) T. B. Vree, A. Muskens, and J. M. Van Rossum, *J. Pharm. Pharmacol.*, **21**, 744 (1969).
- (397) H. J. Schaeffer, R. N. Johnson, E. Odin, and C. Hansch, *J. Med. Chem.*, **13**, 452 (1970).
- (398) L. C. Mark, J. J. Burns, L. Brand, C. I. Campomanes, N. Trousof, E. M. Papper, and B. B. Brodie, *J. Pharmacol. Exp. Therap.*, **123**, 70 (1958).
- (399) K. Kakemi, T. Arita, R. Hori, and R. Konishi, *Chem. Pharm. Bull.*, **15**, 1705 (1967).
- (400) A. Herz, H. Holzhäuser, and H. Teschemacher, *Naunyn-Schmiedeberg's Arch. Pharmacol. Exp. Pathol.*, **253**, 280 (1966).
- (401) Y. Tsuzuki, *Bull. Chem. Soc. Jap.*, **13**, 337 (1938).
- (402) G. E. Crevar and R. W. Goettsch, *J. Pharm. Sci.*, **55**, 446 (1966).
- (403) D. Dyrssen, *Acta Chem. Scand.*, **11**, 1771 (1957).
- (404) B. F. Greenfield and C. J. Hardy, *J. Inorg. Nucl. Chem.*, **21**, 359 (1961).
- (405) K. Kakemi, H. Sezaki, S. Muranishi, and Y. Tsujimura, *Chem. Pharm. Bull.*, **17**, 1650 (1969).
- (406) D. V. Richmond, E. Somers, and C. Zaracovitis, *Nature*, **204**, 1329 (1964).
- (407) P. Ritter and M. Jermann, *Arzneim.-Forsch.*, **16**, 1647 (1966).
- (408) J. Bankovskis, D. Zaruma, A. Ievins, and I. Labrence, *Chem. Abstr.*, **64**, 2809 (1966).
- (409) M. W. Whitehouse and J. E. Leader, *Biochem. Pharmacol.*, **16**, 537 (1967).
- (410) H. A. Mottola and H. Freiser, *Talanta*, **13**, 55 (1966).
- (411) V. Bodnya and I. Alimarin, *Chem. Abstr.*, **67**, 15400 (1967).
- (412) J. Fresco and H. Freiser, *Anal. Chem.*, **36**, 631 (1964).
- (413) J. Bankovskis and A. Ievins, *Zh. Anal. Khim.*, **18**, 555 (1963).
- (414) W. Dieckmann and A. Hardt, *Chem. Ber.*, **52**, 1134 (1919).
- (415) E. Nelson, *J. Med. Chem.*, **5**, 211 (1962).
- (416) K. Kakemi, T. Arita, S. Kitazawa, and Y. Sagawa, *Chem. Pharm. Bull.*, **15**, 1828 (1967).
- (417) R. H. Goshorn and E. F. Degering, *J. Amer. Pharm. Assoc.*, **27**, 865 (1938).
- (418) R. Adams, E. Rideal, W. Brunett, R. Jenkins, and E. Dreger, *J. Amer. Chem. Soc.*, **48**, 1762 (1926).
- (419) A. M. Hjort, E. J. de Beer, J. S. Buck, and W. S. Ide, *J. Pharm. Exp. Ther.*, **55**, 152 (1935). Ureas in this reference are unsymmetrically substituted.
- (420) J. E. Bacher and F. W. Allen, *J. Biol. Chem.*, **188**, 59 (1951).
- (421) R. E. McMahon, *J. Med. Chem.*, **4**, 67 (1961).
- (422) K. W. Rosenmund and E. Karg, *Chem. Ber.*, **75B**, 1850 (1942).
- (423) B. Weibull, *Ark. Kemi*, **3**, 225 (1951).
- (424) H. L. Johnson, P. Tsakotellis, and J. I. DeGraw, *J. Pharm. Sci.*, **59**, 278 (1970).
- (425) J. Y. MacDonald, *J. Amer. Chem. Soc.*, **57**, 771 (1935).
- (426) D. Dyrssen and D. Petkovic, *J. Inorg. Nucl. Chem.*, **27**, 1381 (1965).
- (427) C. Hansch and T. Fujita, *J. Amer. Chem. Soc.*, **86**, 1616 (1964).
- (428) M. Gorin and C. Hansch, unpublished analysis.
- (429) I. Stary and N. Rudenko, *Chem. Abstr.*, **53**, 5828 (1959).
- (430) S. Kang and J. P. Green, *Nature*, **222**, 794 (1969).
- (431) D. F. Elliott, *Biochem. J.*, **45**, 429 (1949).
- (432) R. E. Hanschumacher and J. R. Vane, *J. Pharmacol. Chemother.*, **29**, 105 (1967).
- (433) F. Sandberg, *Acta Physiol. Scand.*, **24**, 7 (1951).
- (434) C. V. Bowen, *Ind. Eng. Chem.*, **41**, 1295 (1949).
- (435) C. O. Badgett, *ibid.*, **42**, 2530 (1950).
- (436) A. Seidell, ref 1, p 674.
- (437) W. B. Neely, W. E. Allison, W. B. Crummett, K. Kauer, and W. Reifschneider, *J. Agr. Food Chem.*, **18**, 45 (1970).
- (438) R. D. Poretz and I. J. Goldstein, *Arch. Biochem. Biophys.*, **125**, 1034 (1968).
- (439) J. Cymerman-Craig, S. D. Rubbo, J. W. Loder, and B. J. Pierson, *Brit. J. Exp. Pathol.*, **36**, 261 (1955).
- (440) A. Brunzell, *J. Pharm. Pharmacol.*, **8**, 329 (1956).
- (441) B. T. Ho, G. E. Fritchie, P. M. Kralik, L. W. Tansey, K. E. Walker, and W. M. McIsaac, *J. Pharm. Sci.*, **58**, 1423 (1969).
- (442) L. Brand, L. C. Mark, M. Snell, P. Vrindten, and P. G. Dayton, *Anesthesiology*, **24**, 331 (1963).
- (443) J. Cymerman-Craig and W. K. Warburton, *Aust. J. Chem.*, **9**, 294 (1956).
- (444) E. R. Garrett, J. B. Mielck, J. K. Seydel, and H. J. Kessler, *J. Med. Chem.*, **12**, 740 (1969).
- (445) C. Golumbic and S. Weller, *Anal. Chem.*, **22**, 1418 (1950).
- (446) D. J. Currie and H. L. Holmes, *Can. J. Chem.*, **48**, 1340 (1970).
- (447) M. Covello, *Rend. Accad. Sci. Napoli*, **2**, 73 (1932).

- (448) P. K. Gessner, D. D. Godse, A. H. Krull, and J. M. McMullan, *Life Sci.*, **7**, 267 (1968).
- (449) A. Brandstrom, *Acta Pharm. Suecica*, **1**, 159 (1964).
- (450) B. E. Leach and C. M. Teeters, *J. Amer. Chem. Soc.*, **73**, 2794 (1951).
- (451) I. Pyatnitskii and R. Kharchenko, *Chem. Abstr.*, **60**, 7433 (1964).
- (452) T. Ishimori and T. Fujino, *ibid.*, **58**, 3948 (1963).
- (453) A. Albert, R. Goldacre, and E. Heymann, *J. Chem. Soc.*, 651 (1943).
- (454) S. Balt and E. Van Dalen, *Anal. Chim. Acta*, **27**, 188 (1962).
- (455) B. E. McClellan and H. Freiser, *Anal. Chem.*, **36**, 2262 (1964).
- (456) S. H. Crowdy, J. F. Grove, and P. McCloskey, *Biochem. J.*, **72**, 241 (1959).
- (457) K. H. Dudley and H. W. Miller, *J. Med. Chem.*, **13**, 535 (1970).
- (458) E. Druckrey, Farbwerke Hoechst, Frankfurt (Main), W. Germany, private communication.
- (459) J. Büchi, G. Fischer, M. Mohs, and X. Perlia, *Arzneim.-Forsch.*, **19**, 1183 (1969).
- (460) J. Büchi, J. Doulikas, and X. Perlia, *ibid.*, **19**, 578 (1969).
- (461) J. Eisenbrand and H. Picher, *Arch. Pharm. (Weinheim)*, **276**, 1 (1938).
- (462) O. Schaumann, *Arch. Exp. Pathol. Pharm.*, **190**, 30 (1938).
- (463) K. Bowden and R. C. Young, *J. Med. Chem.*, **13**, 225 (1970).
- (464) F. Plakogiannis, E. J. Lien, C. Harris, and J. A. Biles, *J. Pharm. Sci.*, **59**, 197 (1970).
- (465) L. Fieser, *J. Amer. Chem. Soc.*, **70**, 3237 (1948).
- (466) M. H. Bickel and H. J. Weder, *J. Pharm. Pharmacol.*, **21**, 160 (1969).
- (467) P. Courtemanche and J. Merlin, *C. R. Acad. Sci.*, **260**, 3053 (1965).
- (468) E. J. Lien, M. Hussain, and M. P. Golden, *J. Med. Chem.*, **13**, 623 (1970).
- (469) E. Wulfert, P. Bolla, and J. Mathieu, *Bull. Chim. Therap.*, **4**, 257 (1969).
- (470) K. Verebely, H. Kutt, Y. Sohn, B. Levitt, and A. Raines, *Eur. J. Pharmacol.*, **10**, 106 (1970).
- (471) F. G. Zharovski and R. I. Sukhomlin, *Ukr. Khim. Zh.*, **33**, 509 (1967).
- (472) P. D. Hopkins and B. E. Douglas, *Inorg. Chem.*, **3**, 357 (1964).
- (473) C. Rohmann and T. Eckert, *Arch. Pharm. (Weinheim)*, **291**, 450 (1958).
- (474) H. Nogami, J. Hasegawa, S. Nakatsuka, and K. Noda, *Chem. Pharm. Bull.*, **17**, 228 (1969).
- (475) K. S. Murthy and G. Zografi, *J. Pharm. Sci.*, **59**, 1281 (1970).
- (476) S. Umezawa, T. Suami, K. Maeda, and S. Nakada, *J. Chem. Soc. Jap., Ind. Chem. Sect.*, **52**, 30 (1949).
- (477) A. Herz, H. Teschemacher, A. Hofstetter, and H. Kurz, *Int. J. Neuropharmacol.*, **4**, 207 (1965).
- (478) R. P. Quitana, *J. Pharm. Sci.*, **54**, 462 (1965).
- (479) P. Mukerjee, *J. Phys. Chem.*, **69**, 2821 (1965).
- (480) E. Szabo and J. Szabon, *Chem. Abstr.*, **65**, 11411 (1966).
- (481) Y. Zolotov and V. Lambrev, *ibid.*, **65**, 9808 (1966).
- (482) E. W. Baur, *J. Pharmacol. Exp. Ther.*, **177**, 219 (1971).
- (483) H. Glasser and J. Krieglstein, *Naunyn-Schmiedebergs Arch. Pharmacol. Exp. Pathol.*, **265**, 321 (1970).
- (484) E. Angadji and J. Colleter, *Bull. Soc. Pharm. Bordeaux*, **101**, 147 (1962).
- (485) J. Krieglstein and G. Kuschinsky, *Naunyn-Schmiedebergs Arch. Pharmacol. Exp. Pathol.*, **262**, 1 (1969).
- (486) T. S. Mao and J. J. Noval, *Biochem. Pharmacol.*, **15**, 501 (1966).
- (487) R. Greene and A. Black, *J. Amer. Chem. Soc.*, **59**, 1820 (1937).
- (488) M. L. Jacobs and G. L. Jenkins, *J. Amer. Pharm. Assoc.*, **26**, 599 (1937).
- (489) J. Büchi and X. Perlia, *Arzneim.-Forsch.*, **10**, 930 (1960).
- (490) R. P. Quintana and W. R. Smithfield, *J. Med. Chem.*, **10**, 1178 (1967).
- (491) A. Englehardt and H. Wick, *Arzneim.-Forsch.*, **7**, 217 (1957).
- (492) V. Bashilova and N. Figurovski, *Aptech. Delo*, **8**, 20 (1959).
- (493) H. Baggessaard-Rasmussen and I. Martins, *Arch. Pharm.*, **269**, 1 (1930).
- (494) G. Valette and J. Etcheverry, *C. R. Soc. Biol.*, **152**, 315 (1958).
- (495) A. F. Casy and J. Wright, *J. Pharm. Pharmacol.*, **18**, 677 (1966).
- (496) G. F. Marrian and A. Sneddon, *Biochem. J.*, **74**, 430 (1960).
- (497) A. Michaelis and T. Higuchi, *J. Pharm. Sci.*, **58**, 201 (1969).
- (498) A. Munck, J. F. Scott, and L. L. Engle, *Biochim. Biophys. Acta*, **26**, 397 (1957).
- (499) J. Cymerman-Craig, S. Rubbo, and B. J. Pierson, *Brit. J. Exp. Pathol.*, **36**, 254 (1955).
- (500) H. Shindo, K. Okamoto, and J. Totsu, *Chem. Pharm. Bull.*, **15**, 295 (1967).
- (501) L. F. Knudsen and D. C. Grove, *Ind. Eng. Chem., Anal. Ed.*, **14**, 556 (1942).
- (502) G. L. Flynn, *J. Pharm. Sci.*, **60**, 345 (1971).
- (503) F. M. Plakogiannis, *Pharm. Acta Helv.*, **46**, 236 (1971).
- (504) J. L. Colaizzi and P. R. Klink, *J. Pharm. Sci.*, **58**, 1184 (1969).
- (505) D. Hammick and S. Mason, *J. Chem. Soc.*, 345 (1950).
- (506) A. Seidell, ref 1, p 813.
- (507) H. Carstensen, *Acta Chem. Scand.*, **9**, 1026 (1955).
- (508) M. Katz and Z. I. Shaikh, *J. Pharm. Sci.*, **54**, 591 (1965).
- (509) M. R. Boots and S. G. Boots, *ibid.*, **58**, 553 (1969).
- (510) E. Titus and J. Fried, *J. Biol. Chem.*, **174**, 57 (1948).
- (511) H. Brockmann, K. Bauer, and I. Borchers, *Chem. Ber.*, **84**, 700 (1951).
- (512) C. B. Thorne and W. H. Peterson, *J. Biol. Chem.*, **176**, 413 (1948).
- (513) L. Mantica, R. Ciceri, J. Cassagne, and E. Mascitelli-Coriandoli, *Arzneim.-Forsch.*, **20**, 109 (1970).
- (514) B. E. Leach, W. H. Vries, H. A. Nelson, W. G. Jackson, and J. S. Evans, *J. Amer. Chem. Soc.*, **73**, 2797 (1951).
- (515) J. A. Biles, F. M. Plakogiannis, B. J. Wong, and P. M. Biles, *J. Pharm. Sci.*, **55**, 909 (1966).
- (516) V. Das Gupta and D. E. Cadwallader, *ibid.*, **57**, 2140 (1968).
- (517) A. Keys and J. Brugsch, *J. Amer. Chem. Soc.*, **60**, 2135 (1938).
- (518) E. Hultin, *Acta Chem. Scand.*, **15**, 879 (1961).
- (519) L. T. Sennello, Abbott Laboratories, North Chicago, Ill., private communication.