XX. Tables for reducing the Quantities by Weight, in any Mixture of pure Spirit and Water, to those by Measure; and for determining the Proportion, by Measure, of each of the two Substances in such Mixtures. By Mr. George Gilpin, Clerk to the Royal Society. Communicated by Sir Charles Blagden, Knt. Sec. R. S.

Read June 19th, 1794.

These tables are founded on the experiments of which the results were given in the Report and Supplementary Report on the best method of proportioning the excise on spirituous liquors. They are computed for every degree of heat from 30° to 80°, and for the addition or subtraction of every one part in a hundred of water or spirit; but as the experiments themselves were made only to every fifth degree of heat, and every five in the hundred of water or spirit, the intermediate places are filled up by interpolation in the usual manner, with allowance for second differences.

Every table consists of eight columns, and there are two tables for every degree of heat. In the first column of the first of the two tables, are given the proportions of spirit and water by weight, 100 parts of spirit being taken as the constant number, to which additions are made successively of one part of water from 1 to 99 inclusively. The first column in the second table has 100 parts of water for the constant number, with the parts of spirit decreasing successively by unity, from

Nn2

100 to 1 inclusively. It must be observed, that each of these tables occupying one page, is divided in the middle for adapting it more conveniently to the size of the paper; but the whole of each page is to be considered as one continued table. The second column of all the tables gives the specific gravities of the corresponding mixtures of spirit and water in the first column, taken from the table of specific gravities in the Supplementary Report, the intermediate spaces being filled up by interpolation. In the third column 100 parts by measure of pure spirit, at the temperature marked on the top of every separate table, is assumed as the constant standard number, to which the respective quantities of water by measure, at the same temperature, are to be proportioned in the next column. The fourth column, therefore, contains the proportion of water by measure, to 100 measures of spirit, answering to the proportions by weight in the same horizontal line of the first column. The fifth column shews the number of parts which the quantities of spirit and water contained in the third and fourth columns would measure when the mixture has been completed; that is, the bulk of the whole mixture after the concentration, or mutual penetration, has fully taken place. The sixth column, deduced from the three preceding ones, gives the effect of that concentration, or how much smaller the volume of the whole mixture is, than it would be if there was no such principle as the mutual penetration. The seventh column shews the quantity of pure spirit by measure, at the temperature in the table, contained in 100 measures of the mixture laid down in the fifth column. Lastly, the eighth column gives the decimal multiplier, by means of which the quantity by measure of standard pure spirit, of ,825 specific gravity at

specific gravity of the liquor being given; pursuant to the idea suggested in the Report, that "the simplest and most equitable "method of levying the duty on spirituous liquors would be, "to consider rectified spirit as the true and only excisable "matter."

It may be proper to add a short account of the method pursued in computing some of the columns of these tables. Columns I. II. and III. require no other explanation than has been already given. Col. IV. is obtained thus: divide the specific gravity of the pure spirit, at the temperature in the table, by the specific gravity of water at the same temperature: then, for the *first* of the two tables for each degree of heat, the proportion is, as 100 is to the quantity of water by weight in the first column, so is the quotient of the abovementioned division to the quantity of water by measure sought; for the second of the two tables the proportion is, as the quantity of spirit by weight in the first column is to 100, so is that same quotient to the quantity of water by measure sought.

Col. V. requires more calculation. The first step is to compute what the specific gravity of the mixture in question would be if no concentration took place; to obtain which, the constant number 100 (indicating the quantity by measure) of pure spirit, is to be multiplied by the specific gravity of pure spirit at the temperature in the table, and the corresponding measure of water in the fourth column is also to be multiplied by its specific gravity at the given temperature; these two products being added together, their sum is to be divided by the sum of the absolute quantities of spirit and water by measure in the same horizontal line of the third and fourth columns:

then the proportion is, as this quotient (or what the specific gravity would be without concentration) is to the real specific gravity as found in the same horizontal line of the second column of the table, so is the sum of the quantities of spirit and water in the third and fourth columns inversely to the bulk of the mixture.

Col. VI. is obtained by subtracting the real bulk of the mixture in col. V. from the sum of the quantities of spirit and water in col. III. and IV. the difference between them being the diminution occasioned by the concentration on that whole quantity. Col. VII. is obviously to be computed by the following proportion: as the bulk of the whole quantity of the mixture in col. V. is to 100 (the constant quantity), so is 100 to the quantity of pure spirit per cent. at the temperature of the table. Col. VIII. is formed by reducing the volume of the spirit per cent. at the temperature of the table, to its volume at 60°, by the following proportion: as ,825 (the specific gravity of pure spirit at 60°) is to its specific gravity at the given temperature, so is the number in the seventh column to the volume of pure spirit, at 60° of heat, contained in 100 parts by measure of the mixture at the temperature of the table: this divided by 100 is the decimal multiplier sought; the product of which into any measure of a spirituous liquor of the corresponding specific gravity and temperature, will be the true quantity of standard pure spirit, at 60° of heat, contained in that liquor.

It may very probably be thought right, for the future use of the revenue, to compute another set of tables, in which the degree of heat standing at the head of each table, the first column of it shall be even numbers of specific gravity. This would be proper for looking out at once the quantities of spirit and water in a mixture, from its heat and specific gravity, as immediately determined by experiment. For scientific purposes also, tables should be constructed to shew the regular increments and decrements of the concentration, by equal variations in the proportions of spirit and water: but these, and others of a similar nature, which might be suggested, do not belong to the present subject.

C. B.

TABLE I.

HEAT 30°.

	1	T		ſ	!	<u> </u>	T		I	ı .	1	1	1		
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of	Diminu-	Quan-	Decimal			Spirit		Bulk of	Diminu-	Quan-	Decima
weight.	gravity.	mea-	measure.	mixture.	tion of bulk.	tity of Spirit	multi- pliers.	Water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of Spirit	multi- pliers.
		sure.] :	per cent.				sure.				per cent.	
sp. + W.							 	Sp. + W.							
	006														
	,838 <u>9</u> 6	100	0,84	100,00	0,12	100,00	1,0169	100 + 50	,91023	100	41,92	138,26	3,66	72,33	•7355
2			1,68	101,45	0,23		1,0096 1,0024	51	,91111 ,91197	_	42,75	139,04	3,71 3,76	71,92	7314 7273
3	,84575		2,51	102,18	0,33	97,87	,9953	53	,91282		44,43	140,62	3,81	71,11	,7232
			3,35	102,91	0,44	97,18	,988z	54	,91366	_	45,27	141,41	3,86	70,72	,7191
100 + 5	,84995 ,85197	_	4,19 5,03	103,64 104,38	0,55	96,49	,9812		,91449		46,11	142,20	3,91	70,33	,7151
7	,85394		5,87	105,12	0,65	95,80	,9743 ,9674		,91531 ,91612		46,95 47,78	142,99	3,96 4,00	69,94 69,55	,7112
8	,85586	-	6,71	105,87	0,84	94,46	,9606		,91691		48,62	144,57	4,05	69,17	7034
	,85773		7,54	106,61	0,93	93,80	,9539		,91770		49,46	145,36	4,10	68,80	,6996
100 + 10	,85957 ,86138		9,22	107,36	I,02 I,II	93,14	,9472	100 + 60			50,30	146,15	4,15	68,42	,6958
	,86316	_	1.0,06	108,86	1,20	92,50	,9406 ,9341		,919 23 ,91998	_	51,14	146,94	4,20	68,05 67,69	,6920
13	,86490		10,90	109,61	1,29	91,23	,9277		92072		52,81	148,52	4,29	67,33	,6846
[,86660		11,73	110,37	1,36	90,61	,9214	64	,92145		53,65	149,32	4,33	66,97	,68io
	,86825 ,86984		12,57	111,12	1,45	89,99	,9151		,92217		54,49	150,11	4,38	66,62	,6774
	,87139		13,41	112,63	1,54	89,38	,9089 ,9028		,92288 ,92358		55,33	150,90	4,43	66,27	6739
18	87291	_	15,09	113,39	1,70	88,17	,8967	68	,92427		57,01	152,49	4,47 4,52	65,58	,6704
19,	,87440		15,93	114,15	1,78	87,58	,8907		,92496		57,84	153,29	4,55	65,24	,6634
	,87585	-	16,77	114,91	1,86	87,00	,8847		,92563	-	58,68	154,08	4,00	64,90	,0000
	,877 2 9 ,87871		17,60	115,67	1,93	86,42 85,85	,8788 ,8730	71	,9 2 629 ,9 2 694		59,52	154,88	4,64	64,57	,6566
23	,88010		19,28	117,21	2,07	85,29	,8673		,92094		61,20	155,67 156,47	4,69 4,73	64,24	,6532 ,6499
24	,88147		20,12	117,98	2,14	84,73	,8616		,92821		62,04	157,26	4.78	63,59	,6466
100 + 25	88282		20,96	118,75	2,21	84,18		100 + 75	,92889		62,87	158,06	4,81.	63,27	,0434
20, 27,	,88414 ,88544		21,80	119,53	2,27	83,64	,8505		,92951	_	63,71	158,85	4,86	62,95	,6402
28,	88672	_	23,47	121,09	2,38	82,57	,8451 ,8397		,93012 ,93078	_	65,39	159,65	4,90	62,32	,6370 ,6338
	88797		24,31	121,87	2,44	82,05	,8344		93132		66,23	161,25	4,98	62,02	,6306
100 + 30	88921	-	25,15	122,05	2,50	81,53	,8291	100 + 80	,93191	_	67,07	162,05	5,02	61,71	,6275
	,89043 ,89163		25,99	123,43	2,56	81,02	,8239 ,8188	81	93249	-	67,90	162,84	5,06	61,41	6244,
	89281	_	27,66	124,98	2,68	80,01	,8137	82	,93306 ,9336 3		68,74 69,58	163,64 164,44	5,10 5,14	61,11	,6214 ,6184
	89397		28,50	125,76	2,74	79,52	,8087	84	93419		70,42	165,24	5,18	60,52	,6154
100 + 35	89511	-	29,34	126,53	2,81	79,03	,8037	100 + 85	93474	_	71,26	166,04	5,22	00,22	,6124
36,	89623		30,18	127,31	2,87	78,55	,7988	86	93529	-	72,10	166,84	5,26	59,94	,6095
3/1·	89842	_	31,02	128,87	2,93	78,07 77,60	,7939 ,7891	87	93583		72,93	167,64 168,44	5,29 5,33	59,65	,6066 ,6037
	89949		32,69	129,65	3,04	77,13	,7844		93689	_	74,61	169,24	5,37	59,09	,6008
100 + 40,	90054	=[33,54	130,43	3,11	76,67		100 + 90	,	_	75,45	170,04	5,41	58,81	,5980
41	90158		34,38	131,21	3,17	76,21	,7751	91	93792	-	76,29	170,85	5,44	58,53	,5952
42	90260		35,22	131,99	3,23	75,76	,7705 ,7660		93843 93893		77,13	171,65	5,48	58,26	,5924
44	90460	-	36,89	133,55	3,34	74,88	,7615		93942	_	78,80	173,25	5,51	57,99 57,72	,5897 ,5870
100 + 45	90558		37,72	134,33	3,39	74,44	,7570	100 + 95	-	_	79,64	174,05	5,59	57,45	,5843
46,	90654	-	38,56	135,12	3,44	74,01	,7526	96	94038		80,47	174,85	5,62	57,19	,5816
	90749		39,40	135,90	3,50	73,58	,7483		94085	-	81,30	175,65	5,65		,5790
	90933		41,08	137,47	3,61	73,16	,7440 ,7 3 97		94131		82,14	176,46	5,68	56,67 56,41	,5763
• 7)*				31-1/	<u> </u>	• -/ 71	-1 77/1	991,	77-11		1901	-//24/	J / - 1) ~) 4 h	,5736

TABLE II.

HEAT 30°.

Water and Specific Party by measure. Service by Specific Party by measure. Service by Specific Party b			,	Ţ	,	·		11011	1 30.							
### april by weight. V + Sp.	ı.	11.	III.	· IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Weight Second S	Water and								Water and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decima
W. + Sp.		gravity.			mixture.					gravity.			mixture.			multi-
00+100 94222 100 83,88 778,08 5.75 56.15 15710 100+50 00710 100 107,67 260-19 7.48 38.43 3,300 99.94267 87,343 180,59 5.84 55.63 15.65 4 49 00760 — 171.09 263.68 7.46 37.93 385.68 4 49 00760 — 171.09 263.68 7.46 37.93 385.68 97.94357 — 86.43 180.59 5.84 55.53 15.65 15.68 4 49 00760 — 171.09 263.68 7.46 37.93 385.68 97.94357 — 86.43 180.59 5.84 55.53 15.65 15.68 4 49 00760 — 171.09 263.68 7.46 37.93 385.68 97.94357 — 86.43 180.59 5.84 55.53 15.65 15.68 4 49 00760 — 178.37 270.89 7.43 36.92 1375.89 13.44 59.84 59			sure.					Pricis.	weight.			incasure.				
99)94267 — 84.69 178.90 5.79 55.80 15684 49.06769 — 171.00 263.65 7.46 37.93 188.69 98.994373 — 85.55 179.74 81.05.9 5.84 55.57 1.05.1 44.066919 — 188.25 18.25 274.85 18.05.9 5.84 55.37 1561 44.066919 — 188.25 18.25 274.85 18.	W. + Sp.								W. + Sp.							
99)94457 - 88,26 178,90 579 55,80 56,84 49,06769 - 171,00 263,65 7,46 37,03 1358 98,94317 - 88,55 179,74 518,1 55,65 15,65 84 81,06819 - 174,65 220,80 7,48 36,03 137,09 97,94357 - 88,23 181,45 58,88 55,11 5,604 40,06919 - 182,23 270,80 7,48 36,03 137,00 9 95,194447 - 88,25 182,33 181,45 59,88 55,11 5,604 40,06919 - 182,25 270,80 7,48 36,03 137,00 9 95,194447 - 98,18 183,24 5.94 54,77 55,50 36,40 3,70 1 9 1,94 184,17 5,70 3,70 1 1 184,17 5,79 54,73 1,75 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			100		178,08	5,75	56,15	,5710	100 + 50	,06710	100	167,67	260,10	7.48	38.42	3008
9 994312 — \$5,55 79,74 5,81 55,62 5,593 5,593 48 5,693 74,936 74,936 74,968 74,9						5,79	55,89	,5684	49	,96769	1	171,09	263,63	7,46		,3858
901-94402 — 87,33 181-45 5.88 55.71 5564 46 56919 182.25 274.75 7.50 36.40 3751 00 + 95 944944 — 88,48 182.33 5.92 34.84 5.577 100 + 45 96967 — 186.30 278.79 7.51 35.87 36.48 39.19437 — 90.41 184.17 5.97 34.26 5.525 39.19458 91.12 187.18 5.94 5.945 19.1946 92 92.13 186.69 6.04 53.74 5.436 89.19473 — 91.11 188.09 6.10 53.17 5.436 89.19473 — 94.19 188.09 6.10 53.17 5.436 89.19473 — 94.19 188.09 6.10 53.17 5.436 89.19472 — 95.26 189.12 6.14 5.288 5.377 33.97244 87.19482 — 96.36 199.18 6.18 52.58 5.347 87.19482 — 96.36 199.18 6.18 52.58 5.347 87.19482 — 98.09 193.17 6.20 51.08 52.58 88.194970 — 98.69 193.17 6.20 51.08 52.58 88.194970 — 98.69 193.17 6.20 51.08 52.58 88.194970 — 98.69 193.17 6.20 51.08 52.58 88.194970 — 98.69 193.17 6.20 51.08 52.58 88.195021 — 101.00 194.67 6.23 51.28 52.51 88.195022 — 103.20 194.67 6.23 51.28 52.51 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195022 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195022 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195022 — 103.20 194.67 6.23 51.68 52.55 88.195022 — 103.20 194.67 6.23 51.68 52.55 88.195021 — 103.20 194.67 6.23 51.68 52.55 88.195022 — 103.20 194.67 6.23 51.08 52.55 88.195022 — 103.20 194.67 6.23 51.08 52.55 88.195022 — 103.20 194.67 6.23 51.08 52.55 88.195022 — 103.20 194.67 6.23 51.08 52.55 88.195022 — 103.20 194.67 6.23 51.08 52.55 88.195022 — 103.20 194.67 6.23 51.08 52.55 88.195022 — 103.20 194.67 6.23 5			_	85,55					48	,96819					37,43	,3806
00 + 95 94447 0				87,33		5,88			47	,90809		182.25				
94)-94494 — 89,18 183,24 5.94 54.57 5.550 44.97015 — 194.66 287,46 7.50 33.73 33.73 92)-94583 — 91,12 185,12 6.00 54.02 54.94 42.97169 — 194.66 287,46 7.50 33.73 33.83 92.94583 — 92,13 186.09 6.04 53.74 5.5465 44.97163 — 204.47 296.98 7.49 33.67 33.84 39.962 39.17 7.49 34.23 33.73 33.88 99.94723 — 94.19 188.09 6.10 53.17 5.5465 7.546											-				-	
93)94583 — 90.14 184,17 5.97 54,30 155,22 43,197062 — 194,66 228,117,746 34,23 34,82 34,92 34,94 34,97 31,12	94	,94492		89,18	183,24				44	,97015			283,02	1		
0+ 9-9 94075 93.15 186,09 6.04 53.74 5465 41 97755 204.47 296.98 7.79 33.10 3365 3424 38.99 94727 94.17 188,09 6.10 53.17 5407 39.97244 21.496 30.749 74.77 32.52 33.97 38.994771 95.26 189.12 6.14 52.88 53.77 38.97248 220.62 33.17 7.47 31.94 32.47 32.52 33.97 38.994870 97.48 191.26 6.22 52.28 53.17 36.97 37.97332 22.68 319.17 7.41 31.34 31.86 6.94870 99.86 193.51 6.29 51.68 5.255 34.9746 22.99.58 33.97571 22.28 32.97571 10.100 194.67 6.33 51.68 5.255 34.9746 22.99.57 10.97571			-				54,30	,5522	43	,97062		194,96	287,46	1 - 1		
00 + 90 94675			_	-							_		1 -			
88) 94723 — 94.16 188.00 6.10 53.17 5407 39.97244 — 214.96 307.47 747 32.53 33.39 89.94821 — 96.36 189.18 6.18 52.58 8.5377 88.99288 — 220.65 313.17 7.45 31.94 .3218 86.692870 — 97.48 191.26 6.22 52.28 8.5317 37.97332 — 2226.58 319.17 7.45 31.94 .3218 31.94 6.25 52.58 194.20 — 98.80 193.51 6.29 51.08 52.55 34.97461 — 246.57 33.9.26 7.31 2.948 .2997 83.99288 — 220.65 31.947 7.49 131.3, 3186 32.88 7.35 32.95021 — 10.00 194.67 6.33 51.36 5.25 34.97461 — 246.57 33.9.26 7.31 2.948 .2997 82.95021 — 10.224 193.56 6.38 51.06 .3519 32.959748 — 254.04 36.79 7.25 28.84 .2293 83.95021 — 10.00 194.67 6.33 51.06 .3519 32.959748 — 246.57 339.26 7.31 2.948 .2297 82.95771 — 10.24 193.56 6.38 51.06 .3519 32.997548 — 240.198 354.79 7.19 28.19 .2806 31.9512 — 10.952		-							-				-		_	
88 94771 — 95,26 189,12 6,14 52,88 5377 38 97288 220,62 313,17 745 31,94 32,97 31,97 31,97 31,94 32,97 31,			_					,5407					1			
88 94821 9748 191,26 6,22 52,28 5347 37 97332 226,58 319,17 741 31,34 3186 36 94870 9748 191,26 6,22 52,28 5317 36 97375 232,87 325,51 736 30,73 3124 34 94970 99,86 193,51 6,29 51,68 5,255 34 97461 246,57 339,26 7,31 29,48 29,95021 101,00 194,67 6,33 51,37 5,224 33 97504 246,57 339,26 7,31 29,48 29,95021 101,00 194,67 6,33 51,37 5,224 33 97504 246,57 339,26 7,31 29,48 29,97 82,95021 103,50 197,00 6441 50,74 5160 31 97591 270,43 303,27 7,19 28,19 28,86 27,97 79,95224 106,12 199,62 6,50 6,50 6,50 5,09 5,594 49,76 5,66 28,97723 29,97679 28,098 38,204 7,04 26,17 2662 77,95337 108,88 202,31 6,57 49,43 5,026 27,97768 330,50 443,60 6,90 24,78 27,95580 111,78 205,13 6,65 48,40 49,20 26,97814 322,44 34,86 6,69 23,33 222,975,9759 111,78 206,61 6,68 48,40 49,22 24,97006 349,31 442,73 6,58 22,59 22,95580 116,44 209,69 6,75 47,69 48,50 24,97006 349,31 442,73 6,58 22,59 22,95580 116,44 209,69 6,75 47,69 48,50 21,98559 31,144 21,34 20,40 6,85 46,59 47,75 66,959573 112,49 21,29 24,40 46,50 47,75 66,959591 127,02 22,20,05 6,99 45,83 44,65 46,59 47,75 66,959591 127,02 223,95 7,07 44,45 44,55	88	,94771					52,88				_					
00 + 86							52,58									
84,94970 — 59,860 193,51 6.29 51,68 15255 34,97461 — 246,57 339,975 339,26 7,31 29,48 32997 82,95071 — 102,224 195,86 6.38 51,06 51,09 192,22 195,86 6.38 51,06 51,09 192,22 195,86 6.38 51,06 51,09 192,22 195,86 6.38 51,06 51,09 192,22 195,86 6.38 51,06 51,09 192,22 195,86 6.38 51,06 51,09 192,23 1975,48 21,09 192,24 261,19 261,19 28,19 1,2866 77,09 192,24 — 106,12 199,62 6.50 50,09 150,04 29,97679 — 270,43 363,29 7,14 27,53 1,2799 19,97679 — 289,08 38,20,4 70,4 26,17 1,266 77,19 1,27 1,27 1,27 1,27 1,27 1,27 1,27 1,27	-						52,28					232,87			1	
83 95021 — 101,00 104,67 6,32 51,37 5224 33,97504 — 254,04 346,79 7,52 28,84 29322 295071 — 102,24 195,86 6,38 51,06 51,92 32,97548 — 261,98 354,77 7,19 28,19 28,19 2806 27,97548 — 261,98 363,20 7,14 27,53 27,99 27,94	100 + 85	,94920		98,63		1 - 1					_	239,53	332,18	7,35	30,11	
82,195071 — 102,24 195,86 638 51,06 55192 32,197548 — 201,98 354,77 1,9 28,19 2866 00 + 80,95173 — 104,79 198,34 6.45 50,42 55127 100 + 30,97635 — 279,44 372,36 7,08 26,86 22,37 7,9 95224 — 106,12 199,62 6,50 50,00 50,00 50,00 7,99527 — 107,48 200,95 6,53 49,76 5,5060 28,19773 — 290,41 392,43 6,98 25,48 2,501 7,09 593,78 — 110,31 203,70 6,61 49,09 4992 20,197679 — 280,08 382,04 7,04 26,17 2,2662 7,0758 — 111,78 205,13 6,65 48,75 49,75 100 + 25,197860 — 335,34 42,07 3,681 24,06 12,484 7,09 24,95 11,09 24,							- 1						339,26	7,31		
81 95122											_					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	81	,95122									ŧ	_	354,79	1		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 + 80	,95173		104,79	198,34	6,45	***************************************									
78.95237 — 107,48 200,95 6.53 49.76 15560 77.95337 — 108,88 202,31 6.57 49.43 55026 76.95378 — 110,31 203,70 6.61 49.09 49.93 55026 76.95378 — 110,31 203,70 6.61 49.09 49.92 27.9768 — 310,55 403,60 6.90 24,78 251,97 60 74.95479 — 113,22 206,61 6.68 48,40 49.02 2 24.97860 — 335,34 428,65 6.69 23,33 23,77 74.95579 — 114,84 208,13 6.71 48,05 4880 23,97554 — 364,49 45,803 6.46 21,83 2220 71.95630 — 118,08 211,20 6.75 47,69 4850 22.9804 — 381,06 47,47,2 6,34 21,06 21,83 2220 22.95580 — 118,08 211,20 6.79 47,33 4813 21.98055 — 399.21 492.99 6,22 20,28 2063 00 + 70.95681 — 119,70 212,94 6.82 46,96 46,21 47,00 46,95978 — 128,12 216,39 6.89 46.21 47,00 46.95991 — 127,02 220,05 6.97 45,44 4651 16.9832 — 493,14 587,50 5,04 17,02 41,04 66.95891 — 127,02 220,05 6.97 45,44 4651 16.98384 — 523,96 50.0 133,06 225,99 7.04 44.65 45,41 64.95997 — 133,09 223,95 7.04 44.65 45,41 64.95997 — 133,09 223,95 7.04 44.65 45,41 64.95997 — 133,00 225,99 7.04 44.65 45,41 63,9650 — 133,06 225,99 7.07 44.25 4500 — 133,06 225,99 7.07 44.25				106,12	199,62	6,50								. 1		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						6,53			28,	97723		299,41	392,43	6,98	25,48	
00 + 75, 95429 — 111,78																,2519
74,95479 — 113,29 206,61 6,68 48,40 ,4922				-		-			-				-			
73 95529 — 114.84 208,13 6,71 48.95 ,4886 231,97954 — 364.49 458,03 6,46 21,83 ,2220 72 95580 — 116.44 209,69 6,75 47,69 4850 22,98004 — 381,06 474,72 6,34 21,06 ,2142 71 95630 — 118,08 211,29 6,79 47,33 ,4813 00 + 70 95681 — 119,76 212,94 6,82 46,96 ,47,75 100 + 20 98108 — 419,17 513,08 6,09 19,49 ,1982 69 95733 — 121,49 214,64 6,85 46,59 47,38 19,98163 — 441,23 535,29 5,94 18,68 ,1900 67 95838 — 126,12 218,19 6,93 45,83 ,4661 17 98282 — 493,14 587,50 5,64 17,02 ,1731 00 + 65 95944 — 128,98 221,97 7,04 44,65 4,959 7,04 44,65 63,96050 — 133,06 225,99 7,07 44,45 4,500 63,96050 — 133,09 223,95 7,04 44,65 4,500 62,96103 — 135,21 228,10 7,11 43,84 4,458 19,9613 — 135,21 228,10 7,11 43,84 ,4458 19,9613 — 135,21 228,10 7,11 43,84 ,4458 19,96156 — 137,43 230,28 7,15 43,43 ,4416 11,98716 — 762,13 857,59 4,54 11,66 ,1186 11,9			1	, ,		(_			1		
72,95580 — 116,44 209,69 6.75 47,69 ,4850 22,98004 — 381,06 474,72 6.34 21,06 ,2142 71,95630 — 118,08 211,29 6.79 47,33 ,4813 21,98055 — 399,21 492,99 6.22 20,28 ,2063 70 + 70,95681 — 119,76 212,94 6.82 46,96 ,4738 69,95733 — 121,49 214,64 6.85 46,59 ,4738 68,95786 — 123,28 216,39 6.89 46,21 ,4700 67,95838 — 126,12 218,19 6.93 45,83 ,4661 70,95838 — 127,02 220,05 6.97 45,44 ,4621 70 + 05,95891 — 127,02 220,05 6.97 45,44 ,4621 70 + 05,95944 — 128,98 221,97 7,01 45,05 ,4581 70 + 05,95944 — 128,98 221,97 7,04 44,65 ,4541 64,95997 — 130,99 223,95 7,04 44,65 ,4541 64,95997 — 130,99 223,95 7,04 44,65 ,4541 64,95997 — 130,99 223,95 7,04 44,65 ,4541 64,9613 — 135,21 228,10 7,11 43,84 ,4458 62,96103 — 135,21 228,10 7,11 43,84 ,4458 63,96050 — 139,72 232,54 7,18 43,00 ,4373 70 + 60,96209 — 139,72 232,54 7,18 43,00 ,4373 70 + 60,96209 — 139,72 232,54 7,18 43,00 ,4373 70 + 60,96209 — 142,08 234,87 7,21 42,58 ,4330 70 + 50,96470 — 152,42 245,09 7,27 41,70 ,4241 70,90101 — 1197,63 1294,05 3,58 7,73 ,0786 70 + 51,96570 — 152,42 245,09 7,33 40,80 ,4149 70 + 10,98804 — 838,34 934,04 4,30 70 + 51,96570 — 152,42 245,09 7,33 40,80 ,4149 70 + 10,98804 — 838,34 934,04 4,30 70 + 51,96520 — 155,22 247,87 7,35 40,34 ,4102 70 + 10,98804 — 1397,23 1493,91 3,32 6,69 ,0681 70 + 51,96520 — 155,22 247,87 7,35 40,34 ,4102 70 + 10,99463 — 2095,85 2193,08 2,77 456 ,06620 71 + 151,144 71 + 10,144				114,84	208,13	- 1			23,	97954			442,73			
71 99503 — 118,08 211,29 6,79 47,33 4813 21,98055 — 399,21 492,99 6,22 20,28 ,2063 69,95733 — 121,49 6,82 46,96 ,4775 69,95733 — 121,49 214,64 6,85 46,59 47,75 69,96103 — 123,228 216,39 6,89 46,21 47,00 184,06								,4850	22,	98004		381,06			1	
69,95733 — 121,49	-						-	,4813	21,	98055					20,28	
68,95786 — 123,28 216,39 6,89 46.21 4700 18,98221 — 465,74 559,95 5,79 17,86 17,02 17,98 17,02 17,98 17,02	60	05722						,4775				419,17	513,08	6,09		,1982
67, 95838 — 126,12 218,19 6,93 45,83 ,4661 17,98282 — 493,14 587,50 5,64 17,02 ,1731 16,98381 — 127,02 220,05 6,97 45,44 ,4621 16,98345 — 523,96 618,48 5,48 16,17 ,1644 58,95997 — 130,99 223,95 7,04 44,65 ,4541 14,98481 — 598,81 693,69 5,12 14,41 ,1466 62,96103 — 135,21 228,10 7,11 43,84 ,4458 61,96156 — 137,43 230,28 7,15 43,43 ,4416 11,98716 — 762,13 857,59 4,54 11,66 ,1186 11,98716 — 762,13 857,59 4,54 11,66 ,1186 11,98716 — 762,13 857,59 4,54 11,66 ,1186 11,98716 — 762,13 857,59 4,54 11,66 ,1186 11,987,96 — 144,53 237,29 7,24 42,14 ,4286 8,98995 — 1047,92 1144,10 3,82 8,74 ,9889	68	95786					46,59	,4738						5,94		
60 95891 — 127,02 220,05 6,97 45,44 .4621 16,98345 — 523,96 618,48 5,48 16,17 ,1644 60 + 65,95944 — 128,98 221,97 7,01 45.05 .4581 100 + 15,98412 — 558,89 653,58 5,31 15,30 ,1556 64,95997 — 130,99 223,95 7,04 44,65 .4541 14,98481 — 598,81 693,69 5,12 14,41 ,1466 63,9650 — 133,06 225,99 7,07 44,25 .4500 13,98555 — 644,88 739,94 4,94 13,51 .137,13 .135,21 228,10 7,11 43,84 .4458 12,98633 — 698,62 793,88 4,74 12,59 .1281 60 .96209 — 139,72 232,54 7,18 43,00 .4373 100 + 10,98864 — 838,34 934,04 4,30 10,71 ,1089 59,96376 — 144,53 237,29 7,24 42,14 ,4	67	,95838		- 1				,4661			_					-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			_	127,02	220,05	6,97			16,	98345			618,48	5,48		,1644
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			- 1	- 1		7,01	-	,4581	100 + 15	98412						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	64,	95997				1	44,65	,4541	14,	98481			693,69			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									13,	98555	-		739,94	4,94		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	61,	96156						,4458			_					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		_	-	-				1					-			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	59,	96262							- 1	- 11			934,04	4,30		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	58,	96314	-	144,53	237,29		1						1144,10	3,82		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									7 :	99101			1294,05	3,58		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-				-					99214	_					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			- 1										1773,63	3,05		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$													2193,08	2,77		
$\frac{1}{10000000000000000000000000000000000$	52,	96620		61,19			1						1280-28	2,22		
1,99910 - 8383,40 8481,13 2,27 1,18 ,0120	51,	96670			256,92	7,44		,3957				8383,40	8481,13	2,27		

HEAT 31°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	vI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea-	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of	Decimal multi-	water by	Specific gravity.	Spir- by mea-	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	Quan- tity of spirit	Decimal multi- pliers.
weight.		sure.		,	bulk.	spirit per cent.	pliers.	weight.	-	sure.	measure.			per cent.	pilers.
Sp. + W.								$\frac{\operatorname{Sp.} + \operatorname{W.}}{-}$							
	,83852 ,84084	100	0,84	100,00	0,12	100,00	1,0164	100 + 50	,90980 ,91069	100	41,90 42,72	138,25	3,65 3,69	72,33	,7352
2	,84310 ,84530	<u> </u>	1,68 2,51	101,45	0,23	98,57	1,0019	52	,91155 ,91241	_	43,57 44,40	139,82	3,75 3,79	71,51	,7270
4	,84743		3,35	102,91	0,44	97,18	, 9877	54	,91325	_	45,24	141,40	3,84	70,72	,7188
6	,84950 ,851 52	_	4,19 5,03	103,64	0,55	96,49 95,80	,9807 ,97 3 8	100 55 5 6	,91408 ,91490	_	46,08 46,9 2	142,18	3,90 3,95	70,33 69,94	,7148 ,7109
7 8	,85349 ,85541	_	5,87 6,71	105,12	0,75	95,13 94,46	,9669 ,9601	5.7	,91571 ,916 5 0	_	47,75 48,59	143,76	3,99 4,04	69,56	,7070 ,7031
9	,85728		7,54	106,61	0,93	93,80	, 9534	59	,91729	_	49,43	145,34	4,09	68,80	,6993
11 + 001	,86092	_	8,38 9,22	107,36	1,02	93,14	,9467 ,9401	61	,91806 ,91882	_	50,27 51,11		4,14 4,19	08,43 68,06	,6955
12 13	,86270 ,86443	_	10,05	108,86 109,61	1,19	91,86	,9336 ,9272		,919 5 7 ,92031	_	51,95 52,78	147,71	4,24 4,28	67,69 67,34	,6880 ,6843
14 100 + 15	,86613		11,72	110,37	1,35	90,61	,9209	64	,92104		53,62	149,30	4,32	66,98	,6807
16	,86937	_	12,56	111,12	1,44 1,53	89,99 89,38	,9084		,92247	_	54,46 55,29		4,37 4,41	66,28	,6736
18	,87092 ,87 2 44	_	14,24 15,08	112,63	1,61 1,69	88,77 88,17	,9023 ,896 <u>3</u>		,92317 ,92386	_	56,14 56,97		4,46 4,50	65,92 65,58	,6701 ,6666
100 + 20	,87394 .87520		15,92	114,15	1,77	87,58 87,00	,8903 ,8842	69 100 + 70	,92455	_	57,80 58,64	153,27	4,53 4,58	65,24	,6631 ,6597
21	,87683	_	17,59	114,91	1,91	86,4.2	,8784	71	,92588		59,48	154,86	4,62	64,57	,6563
23	,878 2 6 ,87966	_	18,43	116,45 117,21	1,98 2,06	85,85 85,29	,8726 ,8669	72 73	,92653 ,92717	_	60,32	156,46	4,66 4,70	64 ,2 4 63,91	,6530 ,6497
	,88103		20,11	117,98	2,13	84,73	,8612 ,8556	74 100 + 75	,92780 ,9 2 848		62,00	157,25	4,75 4,79	63,59	,6464
26	,88370 ,88500		21,79	119,53	2,26	83,64	,8501	76	,92910	_	.63,67 64,51	158,83	4,84 4,87	62,96	,6399 ,6367
28	,88628	_	22,62 23,46	120,31	2,31 2,37	83,10	,8447 ,8393	78	,9 2 971 ,93036	_	65,35	160,43	1,92	62,33	,6335
	,88753 ,88877		24,30	121,87	2,43	82,05	,8 3 40 ,8 2 87		,93091 ,93150	=	66,19	***************************************	4,96 5,00	62,02	,6303
31	,88999 ,89120		25,97 26,81	123,42	2,55	81,02	,8 23 5 ,8184	81	,93209 ,93 2 66	_	67,86 68,70	162,82 163,62	5,04 5,08	61,41	,6242
33	,89238		27,65	124,97	2,68	80,01	,8133	83	,93323	_	69,54	164,42	5,12 5,16	60,81	,6182 ,6151
100 + 35		_	28,48	125,75	2,73	79,52	,8083 ,8033	100 + 85	,93379 ,93434	=	70,38	166,03	5,19	60,23	,6122
	,89580 ,8 9 690	_	30,16	127,30 128,08	2,86 2,92	78,55 78,07	,7984 ,7936	86	93489		72,05 72,89		5,22 5,26	59,95 59,66	,6093 ,6064
38	,89799 ,89906		31,84 32,67	128,86 129,64	2,98 3,03	77,60 77,13	,7887 ,7841	88	,93596 ,93649		73,72 74,56	168,43	5,29 5,33	59,37 59,09	,6035 ,6006
100 + 40	,90011		33,52	130,42	3,10	76,67	,7793	100 + 90	,93701	_	75,40	170,03	5,37	58,82	,5978
41 42	,90115 ,90218	_	34,36 35,19	131,20	3,16 3,21	76,21 75,76	,7748	92	93752 93802		76,24 77,08	171,63	5,41	58,53 58,27	,5950
43	,90319 ,90418	_	36,03 36,86	132,76 133,54	3,27 3,32	75,32 74,88	,7657 ,7612	93 94	,9 3 852 93901	_	77,91 78,75	172,43	5,48 5,51	58,00	,589 5 ,5868
100 + 45	,90516		37,70	134,32	3,38	74:45	,7567	100 + 95	93950		79,59	174,03	5,56	57,46	,5841
47	,90612 ,90707	_	38,53 39,37	135,11	3,42 3,48	74,01 73,59	,7523 ,7480	97	,93998 ,94045	_	80,42	175,64	5,58 5,61	57,20 56,93	,5788
	,90800 ,90891	_	40,21	136,68 137,46	3,53 3,60	73,17	,7437 ,7394		,94092 ,94138	=	82,09 82,93			56,67 56,42	,5761 ,5734

HEAT 310.

<u> </u>	1		_							1			1		1
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by		Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	gravity.	mea-	measure.	inixtare.	bulk.	spirit	pliers.	weight.	gravity.	méa-	measure.	mixture.	on of	spirit	pliers.
-		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.								W. + Sp.							
100+100	,94183	100	83,78	178,06	5,72	56,15	,5708	100 + 50	,96691	100	167,57	260,13	7,44	38,44	,3907
	,94228	_	84,64	178,88	5,76	55,90	,5682	49	,96742		170,99	263,56	7,43	37,94	,3857
	,94273 ,94318		85,51 86,38	179,72 180,57	5,79 5,81	55,64	,5656		,96792 ,96843	_	174,55	267,11 270,81	7,44 7,45	37,44	,3754
96	,94363		87,29	181,43	5,86	55,12	,5602	46	,96893		182,14	274,67	7,47	36,41	,3701
100 + 95			88,20	182,31	5,89	54,84	,5575	100 + 45	,96941	-	186,19	278,72	7,47	35,88	,3647
	,94453 ,94498		89,13	183,22 184,15	5,91 5,94	54,57 54,30	,5548 ,5 52 0	44	,96990 ,97038		190,42	282,94 287,37	7,48	35,34	,3592 ,3537
92	94490		91,07	185,00	5,98	54,02	,5492	43	,97085	'	199,48	292,02	7,46	34,24	,3481
91	,94591		92,08	186,07	6,01	53,75	,5463	41	,97132		204,35	296,89	7,46	33,68	,3424
100 + 90		_	93,10	187,06	6,04	53,46	,5434	100 + 40	,97178	-	209,46	302,02	7:44	33,11	,3365
88	,94685 ,947 3 4	_	94,14	188,06 189,10	6,08	53,17 52,89	,5405	39 38	,97222 ,97267	_	214,83	307,39	7,44	32,53	,3307
87	,94784	—	96,31	190,16	6,15	52,59	,5345	37	1 1	_	226,45	319,07	7,38	31,34	,3186
86	,94833		97,42	191,24	6,18	52,29	,5315		<u>,97355</u>	_	232,73	325,40	7,33	30,73	,3124
100 + 85	,94883		98,58	192,35	6,23	51,99	,5284	100 + 35	,97399	-	239,39	332,07	7,32	30,12	,3061
83	,94933 ,94984	_	99,75	193,49 194,65	6,26	51,69	,5253	54 33	,97 442 ,97486	_	246,43	339,15	7,28	29,49	,2997
82	,95034.	_	102,18	195,83	6,35	51,06	,5190	33	1	-	261,83	354,66	7,17	28,20	,2866
81	,95085		103,44	197,06	6,38	50,75	,5158	31	<u>,97575</u>		270,27	363,16	7,11	27,54	,2 799
100 + 80		-	104,73	198,32	6,41	50,43	,5125	100 + 30	,97620	-	279,28	372,22	7,06	26,87	,2731
79 78			106,06	199,60	6,46	50,10 49,76	,5092 , 5 058	29 28	,97664 ,97709	_	288,91	381,90	7,01 6,95	26,18 25,49	,2662
77	,95291	\ <u>-</u>	108,82	202,28	6,54	49,44	,5024	i e	,97755		310,32	403,44	6,88	24,78	,2519
	,95342		110,25	203,67	6,58	49,09	, 4990		,97802		322,25	415,47	$\frac{6,78}{6,60}$	24,07	,2446
100 + 75			111,72	205,10	6,62	48,75	•4955		,97849	_	335,15	428,47	6,68	23,34	,2372
73	95443 95493	_	113,22	206,58	6,64	48,41	,492 1 ,4885		,97896 ,97945	_	349,11 364,28	442,54	6,57 6,45	22,59	,2297
72	95544		116,38	209,66	6,72	47,69	,4849	22	,97996		381,84	474,50	6,34	21,07	,2142
	<u>,95594</u>		118,01	211,25	6,76	47,34	,4812		,98048		398,98	492,76	6,22	20,29	,2063
100 + 70	,95646		119,69	212,90 214,60	6,82	46,97 46,59	,4774 4726		,98102 ,98158		418,93	512,84 535,03	6,09	19,50	,1982
68			123,21	214,00	6,86	46,21	,4736 ,4699		,98216	_	440,98 465,47	559,68		17,87	,1900
67	,95803	—	126,05	218,16	6,89	45,83	,4660	17	,98278	—	492,86	587,21	5,65	17,03	,1731
66	177 91		126,94	220,01	6,93	45,45	,4620		.98342		523,66	618,17	5,49	16,17	,1644
100 + 65 64	,95910		128,91	221,93	6,98	45,06 44,66	,4580 ,4540	100 + 15	,98409 ,98479	_	558,57 598,47	653,25	5,32	15,31	,1556 ,1466
63	,96017		132,98	225,95	7,03	44,26	,4340 ,4499	13	,98554		644,51	739,55	4,96	13,52	,1375
62	,96070	—	135,13	228,06	7,07	43,85	·445.7	12	,98632	_	698,22	793,46	4,76	12,60	,1281
100 + 60	,96124		137,35	230,23	7,12	43,44	,4415		,98716		761,69	857,13		11,67	,1186
50	,96230	_	139,64	232,50 234,83	7,14 7,17	43,01 42,59	,4372 ,4329	100 + 10	,98896		837,86 930,96	933,54	4,32	9,71	,1089 ,0990
58	,96283	-	144,45	237,24	7,21	42,15	,4285	8	,98997		1047,32	1143,47	3,85	8,74	,0889
	,96336		146,99	239,75	7,24	41,71	,4240	7	99103		1196,95	1293,34	3,61	7.73	,0786
100 + 55	,96387		149,62	242,34	7,28	41,26	,4194		,99216		1396,44	1493,08		6,70	,0681
	,96439	_	152,33	245,03 247,81	7,30 7,32	40,81	,4148 ,4101	100 + 5	,99336 ,99466	_	1675,73 2094,65	1772,64 2191,85	3,09 2,80	5,64 4,56	,0573 ,0464
53	,96541		158,05	250,71	7,34	39,88	,4053	3	,99605		2792,86	2890,32	2,54	3,46	,0352
	,96591		161,10	253,73	7,37	39,41	,4005		,99754		4189,30	4886,96	2,34	2,33	,0237
$\frac{1}{1}$ 51	1,96642		164,26	256,87	7,39	38,93	,3956	[1]	,99913		0378,58	8476,39	2,19	1,18	,0120

HEAT 32°.

1	i i	1	1		1	1		11							1
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu-	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	8.2.10).	mea-	measure	mature.	bulk.	spirit	pliers.	weight.	gravity.	mea-	measure.	maxuure.	on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	-
Sp. + W.								Sp. + W.							
	,83807	100	_	100,00		100,00	1,0158	100 + 50		100	41,87	138,24	3,63	72,34	,7348
	,84039	_	0,84 1,68	100,72	0,12	99,28 98,57	1,0086		,91027	_	42,70	139,02 139,81	3,68	71,93	,7308 ,7266
3	,84485		2,51	102,18	0,33	97,87	,9943		,91113	_	43,54 44,38	140,60	3,73 3,78	71,12	,7226
. !	,84698	_	3,35	102,91	0,44	97,18	,9872	54	,91284	_	45,22	141,39	3,83	70,73	,7185
100 + 5	,84905 ,85107		4,19 5,03	103,64 104,38	0,55	96,49 95,80	,9801 ,9733		,91367 ,91448	_	46,06	142,17	3,89	70,34 69,95	,7145 ,7106
7	,85304	_	5,87	105,12	0,75	95,13	,9664		,91440	_	46,90 47,7 3	143,75	3,94 3,98	69,56	,7067
8	,85496		6,70	105,87	0,83	94,46	,9596	58	,91609	_	48,56	144,54	4,02	69,18	,7028
100 + 10	85683 85866		7,54	106,61	0,93	93,80	,9529		,91687		49,40	145,33	4,07	68,81	,6990
11	,86046	_	8,37	107,36	1,01 1,10	93,14	,9462 ,9396	100 + 60	,91764 ,91840	_	50,24 51,08	146,12 146,91	4,12 4,17	68,06	,6952
12	,86224	_	10,05	108,86	1,19	91,86	,9331	62	,91916	_	51,92	147,70	4,22	67,70	,6877
	,86 3 96 ,86565	_	10,88	109,61	1,27	91,23	,9267		,91990 ,92063		52,75	148,49	4,26	66,98	,6840 ,6804
100 + 15			11,72	111,12	1,35	89,99	,9204	-	,92003	_	53,59	149,29	4,30	66,63	,6769
16	,86890	_	13,40	111,88	1,52	89,38	,9079		,92206		55,26		4,39	66,28	,6733
17	,87045	-	14,23	112,64	1,59	88,77	,9018	67	,92276	-	56,11	151,67	4,44	65,93	,6698 ,6663
10	,87198 ,87 3 48		15,07	113,40	1,67	88,17 87,58	,8958 ,8898	69	,92345 ,92413	_	56,94 57,77	152,46 153,26	4,48 4,51	65,59	,6628
100 + 20		_	16,75	114,92	1,83	87,00	,8838		,92481		58,61	154,05	4,56	64,91	,6594
21	,87638	_	17,58	115,68	1,90	86,42	,8779	71	,92547		59,45	154,85	4,60	64,58	,6560
22	,87780 ,87921		18,42	116,45	2,04	85,85 85,29	,8721 ,8664	, ,	,92612 ,92676		60,28	155,64 156,44	4,64 4,68	64,25	,6527
	,88059	_	20,10	117,99	2,11	84,73	,8607		,92739		61,97		4,73	63,60	,6461
100 + 25	,88193	_	20,94	118,76	2,18	84,18	,8552		,92806		62,80		4,77	63,28	,6428
26	,88326 ,88456	-	21,77	119,53	2,24	83,64	,8497	, , ,	,92869		63,64 64,48	158,82	4,82 4,85	62,96 62,64	,6396 ,6 3 64
27 28	,88584		23,45	120,31	2,30	83,11	,8443 ,8389		92930	=	65,31	160,42	4,89	62,33	,6333
29	.88709	_	24,28	121,86	2,42	82,05	,8336	79	,93050		66,15	161,22	4,93	62,03	,6300
100 + 30	,88833	-	25,12	122,64	2,48	81,53	,8283	100 + 80	93109		67,00		4,98	61,72	,6270 ,6240
31	88955		25.96	123,42	2,54	81,02	,8231 ,8180		,93168 ,93226	_	67,82 68,66		5,01	61,12	,6210
33	89195		27,64	124,97	2,67	80,02	,8129	83	93283		69,50		5,09	60,82	,6179
	89311	_	28,47	125,75	2,72	79,53	,8079		93339	_	70,34		5,13	60,53	,6149
100 + 35	89424		29,31	126,52	2,79	79,03 78,56	,8029	100 + 85	93394 93449		71,18 72,01			59,95	,6091
37	89647	_	30,99	128,07	2,92	78,08	,7932	87	93503	-	72,85	167,61	5,24	59,66	,6062
38,	89756		31,83	128,85	2,98	77,61	,7884	88	93556	-	73,68		5,27	59,38	,6032
	88863	_	32,65	129,63	3,02	77,14	7837	100 + 90	93609		74,52		-	58,82	,5975
100 + 40	90072		33,50	130,41	3,09	76,22	•//°9 •7744	91	93712		76,20		5,38		,5948
42	90175		35,17	131,97	3,20	75,77	,7698	92	93762		77,04	171,62	5,42	58,27	,5920
	90276	_	36,84	132,75	3,26	75,33 74,89	,7653	93	93812 93861	_	77,87 78,71		5,45 5,49	58,00 57,73	,5892
100 + 45	90376		37,68	133,53	3,31	74,45		100 + 95			79,55		5,53		,5838
	90570	_	38,51	135,10	3,41	74,02	,7520	96,	93958		80,38	174,82	5,56	57,21	,5812
	90665		39,35	135,88	3,47	73,59	,7477		94005		81,21 82,04			56,68	,5785
	90758		40,19	136,67	3,52	73,17	,7434 ,7391		940 52	_	82,88			56,42	
イソリ	ラーンサント		T-1-21	-J//T)	ا درد	1-111	-1 J J - 1	771	2 1 JZ 1						استخسا

HEAT 32°.

	1 7	1			,		,					·			
I.	11.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and		Spirit		Bulk of	Diminu-		Decimal				Water	Bulk of	Dimi-		Decimal
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.		1		per cent		""		sure.				per cent.	
W/ 1 Co							-								
$W_{\bullet} + Sp_{\bullet}$,				$W \cdot + Sp.$							
100+100		100	83,74	178,04	5,70	56,16	,5706	100 + 50	,96663	100	167,48	260,08	7,40	38,44	,3905
	,94189		84,59	178,86	5,73	55,91	,5679	49	,96714	-	170,89		7,39	37,95	,3856
	,94233		85,46	179,70	5,76	55,65	,5653	48	,96765		174,45	267,04	7,41	37,45	,3804
	,94333	_	86,33 87,24	180,55	5,78	55,38	,5626	47	,96816 ,96867	_	178,16 182,03	270,73 274,59	7,43	36,94 36,42	,3752
100 + 95			88,15	182,29	5,86	54,85	,				186,08	278,64		35,89	,3646
	,94413		89,08	183,20	5,88	54,58	,5573	100 + 45	,96965	_	190,31	282,86	7,44	35,35	,3591
	,94459	<u>*</u>	90,04	184,12	5,92	54,31	5517	43	,97013		194,74	287,29	7,45	34,80	,3536
	,94505		91,02	185,07	5,95	54,03	,5489	42	,97061		199,37	291,94	7,43	34,25	,3480
91	,94552	}	92,02	186,04	5,98	53,75	,5461	41	,97108		204,23	296,80	7,43	33,69	,3423
100 + 90		—	93,04	187,03	6,01	53,47	,543 I	100 + 40	,97155	_	209,34	301,92		33,12	,3365
	,94647	7.5	94,08	188,04	6,04	53,18	,5403		,97200		214,71	307,29		32,54	,3306
	,94696 ,94746		95,15	189,07	6,08 6,12	52,89	,5373	1	,97245		220,36	312,97	7,39	31,95	,3246
86	·94/40 ·94795		96,25	190,13	6,16	52,59 52,30	,5343		,97290		226,32 232,60	318,97		31,35	,3185
	,94845		98,52	192,32	6,20	51,99	,5313		<u>97335</u>			325,30		30,74	,3123
	,94896		99,69	192,32	6,23	51,69	,5251	100 + 35	,973/9 ,9742 3		239,25 246,29	331,96 339,03		30,12 29,50	,2996
	,94947		100,89	194,62	6,27	51,38	,5220	33	(0)		253,74	346,55		28,86	,2931
82	,94997		102,12	195,81	6,31	51,07	,5188		,97513		261,68	354,54		28,21	,2865
81	,95048		103,38	197,03	6,35	50,76	,5156		,97558	!	270,12	363,03		27,55	,2798
100 + 80	,95099		104,67	198,29	6,38	50,44	,5123	100 + 30	,97604		279,12	372,08	7,04	26,88	,2730
	,95151	i i	106,00	199,57	6,43	50,11	,5090		,97,649	-	288,74	381,76		26,19	,2661
	,95202		107,36	200,89	6,47	49,77	,5046	i	,97695	-	299,07	392,15		25,50	,2591
	,95254 ,95305		108,76	202,25 203,64	6,51 6,55	49,45	,5022 ,4988		- , , ,	-	310,14	403,29		24,79	,2519
100 + 75	-		111,66	205,07	6,59	49,10			<u>,97789</u>		322,06	415,31		24,08	,2446
74	,95406	- 1	113,15	206,55	6,60	48,42	,4953 ,4919	100 + 25	,97885	_	334,96 348,91	428,30 442,35	6 -6	23,35	,2372
73	,95457		114,70	208,05	6,64	48,06	,4883		,97935	_	364,07	457,63	5.44	21,85	,2297
	,95508		116,31	209,63	6,68	47,70	,4847		,97987	_	381,62	474,29	5,33	21,08	,2142
71,	95558		117,94	211,22	6,72	47,34	,4810	21	,98040		398,75	492,53	5,22	20,30	,2063
100 + 70	,95610		119,62	212,87	6,75	46,98	,4772		,98096		418,69	512,60		19,51	,1981
6 9	,95662		121,35	214,57	6,78	46,60	,4734		,98152		440,73	534,77		18,70	,1900
	95715		123,14	216,31	6,83	46,22	,4697		,98211		465,20	559,41	5,79	17,87	,1816
66	95768		124,98 126,87	218,12	6,86 6,80	45,84	,4658 ,4618	17	98273	-	492,58	586,92	,66	17,04	,1731
$\frac{100 + 65}{100 + 65}$			128,83	221,89	6,94	45,46			,98338	_	523,36	617,86			,1644
64	95929	_	130,84	223,87	6,97	45,07	,4578 ,45 3 8	100 + 15	001		558,25	652,92		15,32	,1556
63	95983		132,90	225,91	6,99	44,26	,4497	12	,98552	_	598,13	739,17		14,42	,1406
62,	96037		135,05	228,01	7,04	43,85	,4455	12	,98631		697,82	793,04		12,61	,1375
61,	96091		137,27	230,19	7,08	43,44	,4413		,98715	_	761,26	856,68		- 1	,1186
100 + 60,	96145		139,56	232,45	7,11	43,02		100 + 10	,98804	_	837,38	933,04	-	10,72	,1089
	96198		[41,92	234,78	7,14	42,60	,4327	9	,98897	-	930,43	1026,30	,13	9,74	,0990
	96251		144,36	237,19	7,17		,4283		98998	-1	1046,72	1142,85	3,87	8,75	,0889
5/1,	96304		146,90	239,70	7,20	41,72	,4238		99105	-	1196,27	1292,63			,0786
$\frac{36}{100 + 55}$				-		-	,4193		99218	-	1395,65	1492,25			,0681.
	96459		152,24	244,97 247,75		40,82	,4146 ,4100		99338		1674,78	1771,65			,0573
				250,66	7,30		,4052	3	99469		2093,45	2190,63 2	,82		,0464
	96562	- 1	61,01	253,68	7,33	39,42	,4004		99757	_	4186,91	4284,58 2	,22	1	,0352
		- 1		256,81			,3955	- 1	99916		8373,79	8471,67 2	,12	1,18	
-				·····	-	***************************************		···		•	313171	17 -7 -7	4	-24~ (

HEAT 33°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	11.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific		Water	V. Bulk of	Diminu-	Quan-	Decimal	1	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by	gravity.	by	by	mixture.	tion of	tity of	multi-	Water by	gravity.	bу	by measure.	mixture.	nuti- on of	tity of Spirit	multi- pliers.
weight.		mea- sure.	measure.		bulk.	Spirit per cent.	pliers.	weight.		mea- sure.	incasare.		bulk.		1
$\overline{\mathrm{Sp.} + \mathrm{W.}}$,	Sp. + W.							
100+0	,83762	100		100,00				100 + 50	,90895	100	41,85	138,23	3,62	72,34	7345
I		-	0,84	100,72	0,12		1,0001		,90985 ,91071		42,67 43,52	139,01	3,66	71,93	,7304 ,7263
2	,84220 ,84440		2,51	101,45	0,23	98,57	,9938		,91157	_	44,35	140,59	3,76	71,13	,7223
4	,84653		3,35	102,91	0,44	97,18	,9867		,91242		45,19	141,38	3,81	70,73	,7182
	,84860	-	4,19	103,64	0,55	96,49	,9796	100 + 55	,91325 ,91406	_	46,03 46,87	142,16 142,95	3,87 3,92	70,34 69,95	,7142 ,7103
	,85062 ,85 2 59		5,03 5,86	104,38	0,65	95,80 95,13	,97 2 8 ,9659		,91488	_	47,70	143,74	3,96	69,57	,7064
8	,85451		6,70	105,87	0,83	94,46	,9591	- 58	,91567		48,53	144,53	4,00	69,19	,7025
1	,85638		7,53	106,61	0,92	93,80	,9524		,91645	- -	49,37	145,32	4,05	68,81	,6986
100 + 10		-	8,37	107,36	1,01	93,14	•9457	100 + 60	,91722 ,91799	_	50,21 51,05	146,11 146,90	4,10 4,15	68,44 68,07	,6949
	,86000 ,86178		9,21	108,11 108,86	1,10 1,18	92,50	,9391 ,9326	62	,91875		51,89	147,69	4,20	67,71	6874
	1 ~ / .		10,88	109,61	1,27	91,23	,9262	63	,91949		52,72	148,48	4,24	67,35	,6837
14	,86518		11,71	110,37	1,34	90,61	<u>,9199</u>	1	,92021		53,56	149,28	4,28	66,99	,6801 ,6766
100 + 15	,86683	100	12,55	111,12	1,43	89,99 89,38	,9136 ,9074		,92093 ,92164	_	54,40 55,23	150,07 150,86	4,33	66,64 66 ,2 9	,6730
10	,86842 ,86998		13,39	111,88 112,64	1,51	88,77	,9013		,92234	_	56,07	151,66	4,41	65,94	,6695
18	,87151		15,07	113,40	1,67	88,17	,8953	68	,92303		56,91	152,45	4,46	65,59	,6660
19	,87302		15,90	114,16	1,74	87,58	,8893	4	,92371		57,74	153,24	4,50	65,25	,6625
100 + 20	,87448		16,74	114,92	1,82	87,00	,8833		,92439	_	58,58 59,41	154,04 154,83	4,54	64,59	,6591 ,6557
2 I 22	,87592 ,87735	_	17,57	115,69 116,46	1,88 1,95	86,42 85,85	,8774 ,8717		,92571		60,25	155,63	4,62	64,26	,6524
23	,87876		19,25	117,22	2,03	85.29	,8660	7.3	,92634		61,09	156,43	4,66	63,93	,6491
1	,88014		20,09	117,99	2,10	84,73	,8603		,92698		61,93	157,22	4,7 I	63,61	,6458
	,88149	_	20,93	118,76	2,17	84,18		100 + 75	,92764		62,76 63,60	158,02 158,81	4,74 4,79	63,29	,6425 ,6393
	,88 2 81 ,88412		21,76	119,53	2,23	83,64 83,11	,8493 ,8439		1 000		64,44.	159,61	4,83	62,65	,6361
28	,88540		23,44	121,08	2,36	82,58	,8385	78	,92951	-	65,27	160,40	4,87	62,34	,6330
	,88665		24,27	121,86	2,41	82,05	,8332		,93009		66,11	161,20	4,91	62,04	,6298
100 + 30	,88789	`	25,11	122,64	2,47	81,53	,8279 ,8227	100 + 80	,93068 ,93127		66,96 67,78	162,79	4,96	61,73	,6237
31	,88911 ,89032		25,94 26,78	123,41 124,19	2,53 2,59	80,52	,8176		,93185		68,62	163,59	5,03	61,13	,6207
33	,89151		27,62	124,96	2,66	80,02	,8125	83	,93243		69,46	164,39	5,07	60,83	,6176
	,89267		28,45	125,74	2,71	79.53	,8075		,93299		70,30	165,19	5,11	60,54	,6116
100 + 35	,89380		29,29	126,51	2,78	79,04 78,56			,93354 ,93409	_	71,14	166,79	5,18		,6088
30	,89494 ,89604	i .	30,13	127,29 128,06	2,91	78,08		87	,93463	_	72,81	167,59	5,22		,6059
38	,89713		31,81	128,84	2,97	77,61	,7880	- 88	,93516	_	73,64	168,39	5,25	59,39	,6030
	,88820		32,63	129,63	3,00	77,14	,7833		,93569		74,48	169,19	5,29	59,11	
100 + 40	,89925		33,48	130,41	3,07	76,68 76,22	,7785 ,7740	100 + 90	,93672	_	75,32 76,15	169,99 170,80	5,33	58,83 58,55	,5972
	,90029 ,90132		34,32	131,19	3,13	75,77	,7694		93722		77,99	171,60	5,39	58,28	,5917
	,90233		35,99	132,75	3,24	75,33	,7649	93	,93772		77,82	172,40	5,42	58,01	,5890
44	,90333		36,82	133,53	3,29	74,89	,7604		,93821	-	78,66	173,20	5,46	-	,5835
100 + 45	,90431	-	37,66	134,31	3,35	74,46 74,02	,7559 ,7517	100 + 99	,93870	_	79,50	174,00	5,50		,5809
40	,90527 ,90622	1 =	38,49	135,09	3,40	73,60		14 -	,93965		81,16	175,60	5,56	56,95	,5783
48	,90715	—	40,17	136,66	3,51	73,18	,743I	98	,94012		82,00	176,40	5,60		,5756
49	,90807		41,01	137,44	3,57	72,75	,7388	99	,94059	<u> </u>	82,84	177,21	15,63	56,43	,5730
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HEAT 33°.

V		l	1		1	1	ſ	1	1	1			1		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	ш.	IV.	v.	VI.	VII.	VIII.
Water and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Water and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
spirit by	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
weight.		sure.	measure.		buik.	per cent.	pilers.	weight.		sure.				per cent.	1
			-					XX7 + C							
W. + Sp.								$W_{\bullet} + S_{P}$							
100+100	,94105	100	83,69	178,02	5,67	56,16	,5703	100 + 50	,96635	100	167,38	260,02	7,36	38,45	,3904
	,94149		84,54	178,84	5,70	55,91	,5677	49	,96687		170,79	263,43	7,36	37,96	,3855
	,94194		85,41	179,68	5,73	55,65	,5651	48	,96738	_	174.35	266,97 270,66	7,38	37,46 36,95	,3803
	,9 ₁ 239		86,28 87,19	180,53 181,39	5,75 5,80	55,39	,5624 ,5598	47	,96790 ,96841		178,06	274,51	7,40	36,43	,3699
-	94284		88,10	182,27	5,83	54,85	,5570		,96890		185,97	278,56	7,41	35,90	,3645
100 + 95	,94329 ,94374		89,03	183,18	5,85	54,59	,5543	44		_	190,20		7,42	35,36	,3590
	,94420		89,99	184,10	5,89	54,32	,5515		,95989	_	194,63		7,43	34,81	,3535
	,94466		90,97	185,04	5,93	54,04	5487ء	42		-	199,26		7,41	34,26	,3479
	,94513		91,97	186,02	5,95	53,76	,5459	[]	,97085	_	204,11		7,40	33,70	3422
100 + 90		_	92,99	187,00 188,01	5,99	53,48	,5429	100 + 40	,97132 ,97178		209,22	301,82	7,40	33,13	,3364
	,94609 ,946 5 8		94,03 95,10	189,05	6,05	53,19 52,90	,5401		,97223	_	220,23		7,36	31,96	,3245
	,94708		96,20	190,10	6,10	52,60	,5341	37	,97269	_	226,19	318,87	7,32	31,36	,3184
	,94758		97,31	191,19	6,12	52,31	,5311		,97315		232,47		7,28	30,75	,3122
100 + 85		_	98,47	192,29	6,18	52,00	,52.80		,97359		239,11		7,26	30,13	,3059
	,94859	-	99,64	193,43	6,21	5,1,70	,5249		97404	_	246,15		7,23	29,51	,2996
83 82	,94910 ,94 <u>9</u> 60	_	100,83	194,59	6,24 6,28	51,39 51,08	,5218	33			253,60 261,53		7,12	28,22	,2865
	,94900		103,32	193,70	6,32	50,77	,5154	11	,97541		269,97	352,90	7,07	27,56	
100 + 80	,95062		104,61	198,26	6,35	50,45	,5121		,97588	_	278,95	371,94	7,02	26,89	,2730
79			105,94	199,54	6,40	50,11	,5088	29	,97634		288,58	381,61	6,97	26,20	,2661
78	,95165		107,30	200,86	6,44	49,78	,5044		,97681	_	298,90	392,00	6,90	25,51	,2590
77	,95217		108,69	202,22	6,47	49,46	,5020 ,4986	27 26	1 - 1 -		309,96	403,14	6,82	24,80 24,09	,2519 ,2446
	,95268		110,13	203,61	6,52	49,11		100 + 25		-	334,77	428,12	6,65	23,36	,2371
	,95319	_	111,59	205,04 206,52	6,5,5	48,42	,4952 ,4917	24	,97874	_	348,71		6,55	22,61	,2296
	,95421		114,64	208,03	6,61	48,07	,4881		,97925		363,86	457,43	6,43	21,86	,2220
	,95472		116,24	209,59	6,65	47,71	,4845	22		_	381,40	474,08	6,32	21,09	,2142
71	,95522		117,87	211,19	6,68	47,35	,4808		,98033		398,52	1	0,22	20,31	,2062
100 + 70	,95574	_	119,55	212,83	6,72	46,99	,4770		,98090 ,98146		418,45	512,36	6,09	19,52	,1981
68	,95626 ,95680	_	121,28	214,53	6,75	46,61 46,23	.4732 .4695		,98206		440,48 464,94	534,51 559,14	5,97 5,80	17,88	,1816
	,95733	_	124,91	218,09	6,82	45,85	,4656	17	,98269	ļ —	492,30		5,67	17,05	,1731
6 6	,95787		126,80	219,94	6,86	45,47	,4616	16	,98334		523,06	617,55	5,51	16,19	,1644
100 + 65	,95840	_	128,75	221,85	6,90	45,08	,4576	100 + 15	,98403	_	557,93	652,59	5,34		,1556
64	,95895	1	130,77	223,83	6,94	44,68	,4536	14	.98475	-	597,79	692,62	5,17	14,43	,1466
63	,95949		132,83	225,86	6,97	44,27 43,86	24495	13	98550		643,77	738,79	14,98	13,54	
	,96004 ,96058		134,97	227,97 230,14	7,00	43,45	,4453 ,4411		,98715		760,83	856,23	4,60	11,68	,1186
100 + 60			139,48	2.32,41	7,07	43,03	,4369	100 + 10		-	836,90	932,54		10,72	,1089
59	,96166		41,84	234,73	7,11	42,60	,4325	9	98898	_	929,90	1025,75		9,75	,0990
58	,96219		144,28	237,14	7,14	42,17	,428I	8	.98898 .98999		1046,13	1142,23		8,75	,0889
57	,96272	-	146,82	239,65	7,17	41,73	,4236	ll 7	99106 ,99220		1195,59	1291,92		7,74	,0786
	,95325		149,45	242,24	7,21	41,28	,4192				1394,86		3 + 3	6.70	,0681
		_			1					_					
	306481		157.87					4	,99610	_					
	,96533		100,92	253,62	7,30	39.43	,4003	2	99759	_	4184,53	4282,19	2,34	2,34	,0237
	96584		164,08		7,32	38,94	,3954	[[1	,99918	—	1 8369 04	8466,95	2,09	1,18	,0120
100 + 55 54 53 52	,96377 ,96429 ,96481 ,96533		152,16 154,95 157,87 160,92	244,92 247,70 250,60 253,62	7,24 7,25 7,27 7,30	40,83 40,37 39,90 39,43	,4145 ,4099 ,4051 ,4003	100 + 5 4 3 2	99340 ,99471 ,99610 99759		167.3.83 2092,26 2789,69 4184,53	1770,67 2189,41 2887,10 4282,19	3,16 2,85 2,59 2,34	5,64 4,56 3 46 2,34	,04 ,04 ,03

TABLE	ľ.				v.		HEA	T 34°.							
I. Spirit and water by weight.	II. Specific gravity.	by	IV. Water by measure.	V. Bulk of mixture.	VI. Diminution of bulk.	VII. Quan- tity of spirit per cent.	VIII. Decimal multi- pliers.	I. Spirit and water by weight.	II. Specific gravity.	III. Spirit by mea- sure.	IV. Water by measure.	V. Bulk of mixture.	VI. Diminution of Bulk.	VII. Quantity of spirit per cent.	VIII. Decimal multi- pliers.
Sp. + W.								Sp. + W.			-				
1 2 3 4	,83717 ,83949 ,84174 ,84395 ,84608	=	0,84 1,68 2,51 3,35	100,00 100,72 101,45 102,18 102,91	0,12 0,23 0,33 0,44	99,28 98,57 97,87 97,18	1,0147 1,0076 1,0004 ,9932 ,9861	52 53 54	,90943 ,91029 ,91115 ,91200	100	41,82 42,65 43,49 44,33 45,17	138,22 139,00 139,79 140,58 141,37	3,60 3,65 3,70 3,75 3,80	72,35 71,94 71,53 71,13 70,74	,7342 ,7301 ,7259 ,7219 ,7179
6 7 8 9	,85017 ,85213 ,85405 ,85593		4,19 5,03 5,86 6,70 7,53	103,64 104,38 105,12 105,87 106,61	0,55 0,65 0,74 0,83 0,92	96,49 95,80 95,13 94,46 93,80	,9791 ,9722 ,9654 ,9586 ,9519	56 57 58 59	,91283 ,91365 ,91446 ,91525 ,91603		46,01 46,84 47,67 48,51 49,34	142,15 142,94 143,73 144,52 145,31	3,86 3,90 3,94 3,99 4,03	70,35 69,96 69,57 69,19 68,82	,7138 ,7100 ,7061 ,7021 ,6983
12 13 14	,85954 ,86131 ,86302 ,86470		8,37 9,20 10,04 10,88 11,71	107,36 108,11 108,86 109,61	1,01 1,09 1,18 1,27 1,34	93,14 92,50 91,86 91,23 90,61	,9452 ,9386 ,9321 ,9257 ,9194	62 63 64	,91758 ,91833 ,91907 ,91979	_	50,18 51,02 51,86 52,69 53,53	146,10 146,89 147,68 148,47 149,27	4,08 4,13 4,18 4,22 4,26	68,44 68,07 67,71 67,35 66,99	,6945 ,6908 ,6871 ,6834 ,6798
,17 18 19	,86794 ,86951 ,87105 ,87255	_	12,55 13,39 14,22 15,06 15,89	111,13 111,89 112,64 113,40 114,16	1,42 1,50 1,58 1,66 1,73	89,99 89,38 88,77 88,17 87,58	,9069 ,9008 ,8948 ,8888	6 ₇ 68 6 ₉	92122 ,92192 ,92261 ,92329	_	54,37 55,20 56,04 56,88 57,71	150,06 150,85 151,65 152,44 153,23	4,31 4,35 4,39 4,44 4,48	66,64 66,29 65,94 65,60 65,26	,6763 ,6727 ,6692 ,6657 ,6622
22 23 24	,87547 ,87690 ,87831 ,87969		16,73 17,56 18,40 19,24 20,08	114,93 115,69 116,46 117,23 118,00	1,80 1,87 1,94 2 01 2,08	87,00 86,42 85,85 85,30 84,74	,8829 ,8770 ,8712 ,8656 ,8599	73	1	-	58,55 59,38 60,22 61,05 61,90	154,03 154,82 155,62 156,41	4,52 4,56 4,60 4,64 4,69	64,92 64,59 64,26 63,93 63,61	,6588 ,6554 ,6521 ,6488 ,6455
2 8 2 9	,88237 ,88368 ,88495 ,88621		20,92 21,74 22,58 23,42 24,26	118,76 119,54 120,31 121,08 121,85	2,16 2,20 2,27 2,34 2,41	84,19 83,65 83,11 82,58 82,06	,8543 ,8489 ,8435 ,8381 ,8328	76 77 78	,92722 ,92785 ,92846 ,92908		62,73 63,56 64,41 65,23 66,07	158,00 158,80 159,60 160,39 161,19	4,73 4,76 4,81 4,84 4,88	63,29 62,97 62,65 62,34 62,04	,6422 ,6390 ,6358 ,6327 ,6295
32 33 34	,88867 ,88988 ,89107 ,89223		25,09 25,93 26,77 27,61 28,44	122,64 123,41 124,18 124,96 125,73	2,45 2,52 2,59 2,65 2,71	81,54 81,03 80,53 80,03 79,53	,8223 ,8172 ,8121 ,8071	81 82 83 84	,93027 ,93086 ,93144 ,93202	_	66,92 67,74 68,58 69,42 70,26	161,98 162,77 163,57 164,37 165,17	4,94 4,97 5,01 5,05 5,09	61,73 61,43 61,13 60,83 60,54	,6265 ,6234 ,6204 ,6173
37 38 39	,89451 ,89561 ,89670 ,88777		29,28 30,12 30,95 31,79 32,62	126,51 127,29 128,06 128,83 129,62	2,77 2,83 2,89 2,96 3,00	79,04 78,56 78,08 77,61 77,14	,7972 ,7924 ,7876 ,7829	100 + 85 86 87 88	,93314 ,93369 ,93423 ,93476 .93529		71,10 71,93 72,77 73,60 74,44	165,97 166,77 167,57 168,37 169,17	5,13 5,16 5,20 5,23 5,27	60,25 59,96 59,68 59,39 59,11	,6114 ,6085
42 43 44	,89986 .90089 ,90190 ,90290		33,46 34,30 35,13 35,97 36,80	130,40 131,18 131,96 132,74 133,52	3,06 3,12 3,17 3,23 3,28	76,68 76,23 75.78 75,34 74,89	,7736 ,7690 ,7645 ,7600	100 + 90 91 92 93	,93581 ,93632 ,93682 ,93732 ,93781		75,28 76,11 76,95 77,78 78,62	169,97 170,78 171,58 172,38	5,31 5,33 5,37 5,40 5,44	58,83 58,55 58,28 58,01 57,74	,5970
47	,90484 ,90579	=	37,64 38,47 39,31 40,15 40,98	134,30 135,08 135,86 136,65 137,43	3,34 3,39 3,45 3,50 3,55	74,46 74,03 73,60 73,18 72,76	,7513 ,7469 ,7427	100 + 95 96 97 98	,93830 ,93878 ,93925 ,93972 ,94019		79,46 80,28 81,12 81,95 82,80	173,98 174,78 175,58	5,48 5,50 5,54 5,57 5,61	57,47 57,22 56,95 56,69	,5833 ,5806 ,5780 ,5754 ,5728

HEAT 34°.

			-					34.							
I.	11.	III.	IV.	V.	VI.	VII	VIII.	I.	II.	111.	IV.	V.	VI	VII.	VIII.
Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	tity of spirit	multi- pliers.	Water and spirit by weight.	Specific gravity.	Spirit by mea-	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	tity of	Decimal multi- pliers.
$\overline{W. + Sp.}$		sure.			**	per cent		 W. ∔ Տթ.		sure.			bulk.	per cent	<u> </u>
100+100	,04065	100	83,64	178,00	5,64	56,17									
99	,94110	_	84,49	178,82	5,67	55,92	,5701 ,5074	100 + 50 49	,96660	100	107,28		7,32 7,33	38,46 37.97	,3903
	,94154 ,94199	_	85,36 86,23	179,66	5,70	55,66	,5648	48	,96711		174,25	266,90	7,35	37,47	,3802
	,94244		87,14	181,37	5,72	55,39	,5621		,96764 ,96815	_	177,96			36,96 36,44	,3751
100 + 95			88,05	102,25	5,80	54,80	,5568	100 + 45	,96865		185,87	278,48	7:39	35,91	,3644
	,94335 ,94381	_	88,98 89,84	183,16	5,82	54.59 54.33	,5540 ,5512	44	,96915 ,96965	_	190,09	282,70	7,39	35,37	,3589
92	,94427		90,92	185,02	5,90	54,05	,5484		,97013	_	194,52	1 (7,39	34,82	,3534 ,3478
100 + 90	·94475		91,92	186,00	5,92	53.77	,5456		,97062		204,00	296,62	7,38	33,71	,3421
89	94571	_	9 2, 94 9 3,9 8	187,99	5,90	53,48	,5427 ,5399	100 + 40	,97110 ,97156	_	209,10		7•37	33,14	,3363
88	,94021		95,04	1.89,02	6,02	52,91	,5369		,97202		220,11	1	7,36 7,33	32,56 31,97	,3304
	:94671 : 94721		96,14 97,26	190,08	6,06 6,10	52,61	,5339		,97248 ,97294	_	226,06	318,77	7,29	31,37	,3184
100 + 85	94771		98,41	192,26	6,15	52,01	5278ء	100 + 35			232,34	-	7,25	30,76	,3122
84	94822		99,58	193,40	6,18	51,71	,5247	34	,97385		246,01	338,80	7,21	29,52	,3059 ,2995
82	,94923	_	100,77	194,56 195,75	6,21	51,40 51,08	-5216 -5184	33	974 32 97478	_	253,46 261,38	1 1	7,15	28,88	,2930
81	,94974		103,26	196,97	6.29	50,77	,5152		97525		269,82	1 - 6	7,10 7,05	28,23. 2 7,57	,2864 ,2797
100 + 80	,95025 ,95077		104,55	198,23	6,32	50,45	,5119	100 + 30	97.72		278,80	371,80	7,00	26,90	,2729
8	95.128		107,24	199,51 200,83	6.37 6,41	50,12 49,79	,5086 ,5052	2 9 2 8	,97619 .97667		288,42 298,73		6,95	26,21	,266ō
	95180	_	108,63	202,19	6,44	49,46	,5018	1	,97715		309,79		6,88 6,80	25,52 24,81	,2590
100 + 75	9,231		110,07	203,58	6,49	49,12	,4984	-	,97763		321,70	414,99	6,71	24,10	,2445
74	95334		113,02	206,49	6,53	48,43	,4950 ,4915	100 + 25	,97813 ,97864		334,58		6,63 6,54	23,37	,2371
	,95485 ,95436		114,57	207,99	6,58	48,08	,4879		,97916		363,66	457,23	6,43	22,62	,2296 ,2219
	95486	1	117,80	209,55 211,10	6,6 2	47,72 47,36	,484.3 ,4806		97970 98026		381,18 398,30	473,87	6,31	21,10	,2141
100 + 70	95538		119,48	212,80	6,68	40,99	4768		98083		418,21	-	6,23	19,53	,2062
	95591		121,21	214,50	6,71 6,76	46,62 46,24	,4730	19	98141		440,23	534,26	5,97	18,72	,1899
67	95698	-	124,84	218,05	6,79	45,86	,4693 ,4654		98 2 01 98265		464,68 492,02	558,87 586,34	5,81 5,68	17,89	,1816
	95752		126,73	219,90;	6.83	45:47	,4615	16,	98331	_	77و522	617,24		17,06	,1731
100 + 65, 64	95861		128.68	221,81	6,87 6,90	45,08	4575	100 + 15	98400		557,62	652,26	5,36	15,33	,1556
63,	95916		32,76	225,82	6,94	44,69	,4535 ,4494	14,	9847 3 98549		597,45 643,41	69 2,2 7 5	5,18	14,44	,1466
	9 59 71 960 2 6		134,90	227,92		43,87	,4451	I 2	98629		697,03	792,21 4	1,82		,1374
100 + 60,			39,40	230,10	7,01	43,40	,4409		98714		760,40		1,62	11,69	,1186
59,	95134	- 1	41,70	234,68		42,61	,4324	-	98898 98898		836,43 929:37	932,04 4	1,39	9,75	,1089
	96187 96241		44,20	237,09	7,11	42,18	,4280	8	99000		1045,54	1141,61	3,93	8,76	,0889
56,	96294		49.35	242,19		41,74	,4235		99107 99 2 21		1194,91	1291,21 3	3,70	7,74	,0786
100 + 55	96346	1	52,07	244.87	7,20	40.8.			99342	_	1672,88	_	3,46	6,71 5,65	,0681
54,	1,011		54,86	247,65		40,38	,4098	4,	99473	-	2091,08	2188,19 2	2,80	4,57	,0573
52,	90504	- 1	60,82	253,57			,4050 ,4002		99612	_	2788.10 4182,17	2885,49 2 4279,81 2	16,5	3,46	,0352
51,9	96555	I	63,99	256,70			,3953		99920			8464,24 2	2,08	2.34	,0237 ,0120

MDCCXCIV.

Рp

HEAT 35°.

ı.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific			Bulk of	Diminu-	Quan-	Decimal		Specific	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decima multi-
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	mea-	measure.	mnature.	on of	spirit	pliers.
40.5.00	,	sure.				per cent.				sure.		***************************************	bulk.	per cent.	
Sp. + W.								Sp. + W.			,				
100 + 0	,83672	100	0,84	100,00		100,00	1,0142	100 + 50	,90811	100	41,80	138,21	3,59	72,35	7338ء
ľ	,83904	_	0,84	100,72	0,12		1,0070		,90900	-	42,63	138,99	3,64	71,94	,7297
. 2	,84129	-	1,67	101,45	0,22	98,57	,9998		,90987	-	43,47	139.78	3,69	71,54	,7250
3	,84349	_	2,51	102,18	0,33	97,87 97,18	,9926 ,9855	53	,91073 ,91158	_	44,30 45,14	140,57	3,78	70,74	,717
:	,84562		3,34	102,91	0,43	96,49	,9786				45,98	142,14	3,84	70,35	,713
00 + 5	,84769 ,84971		4,18 5,02	103,64	0,54	95,80	,9716	100 4 33	,91323		46,81	142,93	3,88	69,96	,709
· • • • • • • • • • • • • • • • • • • •		_	5,85	105,12	0,73	95,13	,9648	57	,91404		47,65	143,72	3,93	69,58	,705
	,85359		6,69	105,87	0,82	94,46	,9580	58	,91483	-	48,49	144,51	3,98	69,20	,701
9	,85547		7,52	106,61	0,91	93,80	,9513		,91561		49.32	145,30	4,02	68,82	,698
00 + 10			8,36	107,36	1,00	93,14	>9447	100 + 60		-	50,16	146,09	4,07	68,45	,694
11	,85908	-	9,20	108,11	1,09	92,50	,9381	1 -	,91716	-	50,99	146,88	4,11	68,08	,690 ,686
	,86083	-	10,03	108,86	1,17	91,86	,9316	1	,91791 ,91865	_	51,83 52,67	147,67	4,21	67,36	,683
13	,86255	-	10,87	109,61	1,26	91,23	,9252 ,9189		,91937	_	53,50	149,26	4,24	67,00	,679
	,86423	<u> —</u>	11,70	110,37	1,33	89,99	,9109		,92009		54,34	150,05	4,29	66,65	,676
00 + 15	,86747	-	12,54	111,13	1,41	89,38	,9064	66	,92080		55:17	150,84	4,33	66,30	,672
10	,86904		14,21	112,65	1,56	88,77	,9003		,92150		56,01	151,64	4,37	65,95	,668
18	,87058	_	15,05	113,41	1,64	88,17	,8943	68	,92219	-	56,85	152,43	4,42	65,60	,665
	,87209		15,88	114,17	1,71	87,58	,8883	69	,92287		57,68	153,22	4,46	65,26	,661
200 + 20	.	-	16,72	114,94	1,78	87,00	,8824		,92355		58,52	154,02	4,50	64,93	,658
21	,87502	_	17,55	115,70	1,85	86,43	,8756		,92422		59,35	154,81	4,54	64,60	,655
22	,87645		18,39	116,46	1,93	85,86	,8708		,92488		60,19	155,61	4,58	64,27 63,94	,651 ,648
	1,87786		19,23	117,23	2,00	85,30	,8651	73	,92552 ,92616	_	61,86	157,20	4,66	63,62	,645
	87924		20,06	118,00	2,06	84.74		-	-		62,70	157,99	4,71	03,30	,641
100 + 25		-	20,90	118,77	2,13	84,19	,8539 ,8484	100 + 75	,92080 92743		63,53	158,79	4,74	62,98	,638
26		-	21,73	119,54	2,19	83,12		77	1 .		64,37	159,59	4,78	62,66	,635
27	,88323 3,88451		22,57	121,08	2,33	82,59	1 0 0	78	,92866	i	65,20	160,38	4,82	62,35	,632
20	,88577	_	24,24	121,85	2,39	82,06		79			66,04	161,18	4,86	62,05	,629
	,88701		25,08	122,63	2,45	81,54		100 + 80		_	66,88	161,97	4,91	61,74	,626
21	,88823	-	25,91	123,40	2,51	81,04	,8218	81	93045	-	67,71	162,76	4:95	61,44	,623
	,88944		26,75	124,18	2,57	80,53	,8167		,93103		68,55	163,56	4:99	60,84	,620
33	89063	-	27,59	124,95	2,64	80,03			,93161		69,38	164,36	5,02	60,55	,617
34	,89179	_	28,42	125,73	2,69	79,54			93218		70,22				,611
100 + 35	,89294		29,26	126,50	2,76	79,05		100 + 8			71,06	165,95	5,11	59,97	,608
. 30	89407	' -	30,10	127,28	2,82	78,57	7,7968	8	93329		72,73	167,55	5,18		,605
3	,89517	-	30,93	128,05	2,88	78,09		88	93303		73,56	168,35	5,21		,602
	8,89626		31,77	128,83	2,94	77,15	1 0		,93489		74:40	169,15	5,25		,599
	89733		_	-		76,69		100 + 90			75,24	169,95	5,29	58,84	,596
100 + 40	8004	21 -	33,44	130,39	3,05	76,24			1,93592		76,07	170,76	5,31	58,56	,593
4	1,89943 2,90046		35,11	131,95	3,16	75,79		9:	2,93642	2 —	76,91	171,56	5,35		
	3,90147		35,95	132,73	3,22	75,34	,7641	9.	3 ,93692	2 -	77,74	172,36	5,38		,588
	4,90247		36,78	133,51	3:27	74,90	7596		1 93741	-	78.58	173,16	5,42		,58
100 + 4	_	-	37,62	134,29	3,33	74,47		100 + 9	93799	-	79.42	173,96	5,46		,58
	6,9044		38,45	135,07	3,38	74,04	,7509	9	5,93838	3 -	80,24	174,76	5,48		,580
4	7,90530	5 -	39,29	135,86	3,43	73,61	,7466	9	93885	[-	81,07	175.56	5,51		
4	8,90629) -	40,13		3,49	73,19			93932		81,91	176,36	5,55	56,70 56,44	>575
4.	9,9072	[] —	40,96	137,42	3,54	72,77	,7380	u 9	91,93979	<u> </u>	1 02,73	1 -///	اوروا	レンジオサ	1,0%

HEAT 35°.

		·		ananana dangahahan masa		Allerica (III), ugaine 110 0				**************************************				1	_
Ι.	II.	ΠI_{\sim}	IV.	v.	VI.	VII.	VIII	i.	п.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decima multi-
weight.	gravity.	mea-	measure.	mixture.	bulk.	spirit	pliers.	weight.	Stavity.	mea-	measure.		on of	spirit .	pliers.
	-	sure.				per cent.				sure.			Duik.	per cent.	
W. + Sp.			1					W. + Sp.							
100+100	,94025	100	83,60	177,98	5,62	56,18	,5698	100 + 50	,96579	100	167,19	259,91	7,28	38,47	,3902
	,94070		84,45	178,80	5,65	55,93	,5672	49	,96632 ,96684	_	170,61	263,30 266,83	7,31	37,98 37,48	,3852 ,3801
	,94115 ,94159		85,31	179,64 180,49	5,67	55,67	,5646	4° 47		_	177,86	270,52	7,34	36,97	,3750
	,94204		87,09	181,35	5,74	55,14	,5593	46			181,73	274,37	7,36	36,45	,3697
100 + 95	,94249		88,00	182,23	5,77	54,87	,5566	100 + 45	,96840	_	185,77	278,40 282,62	7,37	35,92 35,38	,3643
	,94295	_	88-93 89,89	183,13 184,05	5,80 5,84	54,60 54,33	,5538	44 43		_	189,99 194,41	287,04		34,83	,3533
	,9434 2 ,94389		90,87	185,00	5,87	54,05	,5482	42	,96989	_	199,04	291,67	7,37	34,28	→3477
<u>91</u>	,94436		91,87	185,97	5,90	53,77	,5454		,97038		203,89		7,36	33,72	,3420
100 + 90	,94484		92,89	185,95	5,94	53,49	,5425	100 + 40		_	208,99 214,35		7,35 7,33	33,15 32,57	,3362
88 88	,94533 ,94583		93,93 94,99	187,96 188,99	5,97 6,00	53,20 52,91	,5396 ,5367		,97133 ,97180	_	219,99	312,69		31,98	,3244
87	,94633		96,09	190,05	6,04	52,62	,5337	37	,97226	_	225,94	318,67	7,27	31,38	,3183
	,94683		97,21	191,13	6,08	52,32	,5307	36			232,21		7,23	30,77	,3121
100 + 85			98,35	192,23	6,12	52,02	,5276	100 + 35	,97319 ,97366		238,85 245,87	1 33 3	7,22 7,19	30,15	,3058
, ,	,94785 ,94835		100,72	193,37	6,19	51,71	,5245		,97413	_	253,32	346,19	7,13	28,89	,2930
82	,94886	-	101,95	195,72	6,23	51,09	,5182	32	,97460	-	261,24	354,16	7,08	28,24	,2864
	,9-7937		103,20	195 94	6,26	50,78	,5150		,97508		269,67	362,63 371,66		27,58 26,91	,2797
100 + 80	94988 ,95040	_	104,49	198, 2 0 199,48	6,29	50,46 50,13	,5117 ,5084		,97556 ,97603	_	278,65 288,26	381,33	6,99 6,93	26,22	,2729
79 78			107,18	200,80	6,38	49,80	,5051	28		_	298,56	391,70	6,86	25,53	,2590
77	95143		108,57	202,16	6,41	49:47	,5017		,97701	-	309,62		6,78	24,82	,2518
76			110,00	203,55	6,45	49,13	,4983	26	3113		321,52	414.83	6,62	24,11	,2445
100 + 75 74	.95246 ,95297	_	111,46	204,98 206,45	6,48 6,51	48,79 48,44	,4948 ,4913	100 + 25 24	,97801 ,97853	_	334,39 348,32		6,53	22,63	,2296
	,95348		114,51	207.96	6,55	48,09	,4877	23	,97906	_	363,46	457,03	6,43	21,88	,2219
	95399	_	116,10	209,52	6,58 6,61	47,73	,4841 ,4804		,97961 ,98018		379 , 97 398,08	473,66 491,85	6.22	21,11	,2141
	,95450 ,95502	=	117,74	211,13	6,65	47,37	,4767		,98076		417,98		6,10	19,54	,1981
	,95555	_	121,15	214,46	6,69	46,63	4729	19	,98135	_	439,98	534,01	5,97	18,73	,1899
68	,95609	_	122,93	216,21	6,72	46,25	,4691		,98196	-	464,42		5,83	17,90	,1816
	,95663	_	124,77	218,01 219,86	6,76 6,80	45,87 45,48	,4652 ,4613	17	,98260 ,98327	_	491,74 522,48		5,68 5,54	16,21	,1644
100 + 65			128,61	221,77	6,84	45,09	,4573	100 + 15	CONTRACTOR OF THE PERSON		557,31		5,37	15,34	,1556
64	,95827	-	130,62	223,74	6,88	44,70	,4533	14	,98470	_	597,12	691,92	5,20	14,45	,1466
	,95882		132,69	225,77	6,92	44,29	,4492	13	,98547 ,98628	_	643,05 696,64	738,03 791,80	5,02	13,55	,1374
	,95938 ,95993		134,83	227,88 230,06	6,95	43,88	,4450 ,4408		,98028	_	759,97	855,33		11,69	,1186
100 + 60	.96048		139,32	232,31	7,01	43,05		100 + 10	,98804		835,96	931,55	4,41	10,73	,1089
59	,96102	_	141,68	234,63	7,05	42,62	,4322	9	,98800	_	928,85	1024,65		9,76	,0990
	,96155° ,96209		144,12 146,66	237,04	7,08	42,19	,4278 ,4234	8 7	,99000		1044,95	1140,99 1290,51		8,77 7,75	,0889 ,0786
56	96262		149,28	239,55 242,14	7,11 7,14	41,75 41,30	,4189	6	,99222	_	1393,28	1489,79		6,71	,0681
100 + 55	96315		151,99	244,82	7,17	40,85	-		,99344	_	1671,93	1768,71	3,22	5,65	,0573
54	,96368		154,78	247,60	7,18	40,39	,4096	4	,99474	-	2089,91	2186,98	2,93	4,57	,0464
53	,96421 ,96474		157,69	250,50 253,51	7,19	39,92 39,45	,4049 ,4001		,99613		2786,55 4179,82	2883,90 4277,44		3,47	,0352
51 51	,96526		163,90		7,25	38,96			,99921		8359,64	8457,55			,0120
		1	1 5-7-	<i>J</i> - <i>J</i>	1		1 777 1	1	///					1 	NAME OF TAXABLE PARTY.

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HEAT 36°.

	1		-	Market Company	-	-	i i	-			-		-	-	-
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	11	III.	ΙÙ.	v.	VI.	VII.	VIII.
	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	1	1	1				1	
water by	gravity.	by	by	mixture.	tion of	tity of	multi-	water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	1	mea- sure.	measure.	•	bulk.	spirit	pliers.	weight.	, , , , ,	mea-	measure.		on of		pliers.
	ţ	ouic.				per cent.		1	1	sure.	1			per cent.	
Sp. + W.	1	1	1					30 1 177	1		1		1	<u> </u>	
	<u> </u>	<u></u>	·	l				Sp. + W.	!i	_	1		1	ļ, i	t
100 + 0	,83627	100	-	100,00		100,00	1,0137	100 + 50	,90768	100	41,78	138,20	2-12	72 26	7225
1	,83858		0,84	100,72	0,12	99,28	1,0005	51		100	41,70		3,58 3,63	72,36	•7335 •7294
2	,84082	-	1,67	101,45	0,22	98,57	,9993				43,44	130,90	3,67	71,55	,7253
3			2,51	102,18	0,33	97,87	,9921	53			44,28	140,56	3,72	71,15	,7212
			3.34	102,91	0,43	97,18	,9850	54		1 1	45,12		3,78	70,75	,7172
100 + 5	,84723	-	4,18	103,64	0,54	95,49	,9780	1			45,96	142,13	3,83	70,36	,7132
6	,84926	-	5,02	104,38	0,64	95,80	,9711	56	,91280		46,78	142,92	3,86	69,97	,7093
7 8	,85122 ,85314	_	5,85	105,12	0,73	95,13	,9643		,91362		47,62	143,71	3,91	69,59	,7054
		_	6,69	105,87	0,82	94:46	,9575				48,45	144.49	3,97	69,21	,7015
100 + 10			7,52	106,61	0,91	93,80	,9508		-	-	49,29	145,28	4,01	68,83	,6977
	,85863		8,36	107,36	1,00	93,14			,91598		50,13		4,06	68,46	,6939
12		_	9,19	108,11	1,08	92,50	9377		1 / 1.		50,96	146,86	4,10	68,09	,6902
	,86210		10,86	108,86	1,16	91,86	39312	62	1 / 1 "		51,80	147,66	4,14	67,72	,6865
	,86378		11,60	109,01	1,25 1,32	91,23	,9248	63			. 52,64	148,44	4,20	67,37	,6828
100 + 15							,9185	64		-	53,47	149.24	4,23	67,00	,6792
16	,86701		12,53	111,13	1,40	89,99	,9122		,91967		54,31		4,28	66,65	,6756
17	,86859		13,37 14,20	111,89	1,48	89,38 88,77	,9060 .8000	66	592039		55,14	150,82	4,32	66,30	,6721
18	,87013		15,04	112,04	1,63	88,17	,8999 ,8030	67 68	1 7 7		55,98	151,62	4,36	65,96	,6686
. 19	,87164	_	15,87	114,17	1,70	87,59	,8 9 39 ,8879	69 69	,92178 ,92245		56,81	152,41	4,40	65,61	,6651
100 + 20			16,71	114,94	1,77	87,01	,8819	A ADDRESS OF THE PARTY OF THE P	-		57,64	153,20	4,44	65,27	,6616
			17,54	114,94	1,84	86,43	,8761				58,48	154,00	4,48	64,93	,6582
22	,87601		18,38	116,46	1,92	85,85	,8703		,92381 -92447		59,31		4,5I	64,61	,6549
23	,87742	_	19,22	117,23	1,99	85,30	,8647	73	,9 244 47		60,15 60.98	155,59	4,56 4,60	64,27	,6515
24	,87880		20,05	117,99	2,06	84,74	,8591		,92576		61,82		4,64	63,94 63,62	,6482
100 + 25	,88015		20,89	118,77	2,12	84,10	78535	$\frac{74}{100 + 75}$,92040		62.60		-	-	,6449
26	,88148		21,72	119,53	2,19	83,65	,848c	76		, ,	63,50	157,97 158,77	4,09	62,98	,6384
27	,88279	[22,56	120,30	2,26	83,12	,8426	77	,92764		64.33	150,77	4,73 4.76	62,67	,6352
28	,88407	-	23,40	121,08	2,32	82,59	,8372	78	,92825	_	65,16		4,80	62,36	,6321
29	,88533		24,23	121,85	2 ,38	82,06	,8319		1 2 3 3 7	_	66,00	161,16	4,84	62,05	,6291
100 + 30	,88657	_	25,07	122,63	2,44	81,55	,8266	100 + 80	,92946		66,84		4,89	61,75	,6259
31	,88779	-	25,90	123,40	2,50	81,04	,8214				67,67		4,93	61,45	,6229
32	,88900	_	26.74	124.18	2.56	80 72	8160	82	93064	١ [60,307	102,74	(アンプラ	(47)	30229

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,8113

,8063

,7965

.7917

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,7821

,7775

,7728

,7683

,7638

,7593

,7505

,7463

,7420

,7377

68,51

69,34

70,18

71,02

71,85

72,60

73,52

74,36

75,20

76,02

76,86

77,70

78,53

79,37

80,19

81,02

81,86

82,70

82 ,93063

83 93121

84 ,93178

86 ,93289

87 ,93343

88 ,93397

89 33450

91,93553

92 ,93003

93 ,93653

94 ,93702

96,93799

97,93846

98 ,93893

99,93939

100 + 90 ,93501

,8013 100 + 85 ,93234

,7549 100 + 95 ,93751

163,54

164.35

165,14

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168 34

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,6199

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HEAT 36°.

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ı.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	11.	III.	IV.	v.	VI.	VII.	VIII.
Water and Spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture,	Dimi.	Quan- tity of	Decima multi-
weight.	gravity.	mea-	measure.	mixture.	bulk.	spirit	pliers.	weight.	Siuricy	mea-	measure.		on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.				ia				W• + Sp.							
100+100	,93986	100	83,55	177,95	5,60	56,19	,5696	100 + 50	,96550	100	167,09	259,85	7,24	38,48	,3901
	,94030		84,40	178,77	5,63	55,93	,5669	49	,96604	-	170,51	263,23 266,76		37,99 37,48	,3851
-	,94076 ,94120		85,26 86,14	179,61 180,46	5,65 5,68	55,67 55,41	,5643 ,5617	48	,96656 ,96710		174,06 177,76	270,45		36,98	,3749
	,94165		87,04	181,32	5,72	55,15	,5591	46	,96762		181,63	274,30		36,46	,3696
-	,94210		87.95	182,20	5,75	54,88	,5563		.96814		185,66	278,33	7,33	35,92	,3642
94	,94257		88,88	183,11	5,77	54,61	,5536	44		_	189,88	282,54	7,34	35,39	,3588
	,94304		89,84	184,02	5,82	54,34	,5508	4.3	,96915 .96964		194,30	286,96		34,84 34,29	3533 3477
	,94351 ,94398		90,82 91,81	184,97 185,94	5,85 5,87	54,06 53,78	,5480 ,545 2	42 41			203,77	291,59 296,44	7,34	33,73	,34.20
100 + 90			92,84	185,92	5,92	53,50	,5423		,97063		208,87		7,32	33,16	,3361
	,94496		93,87	187,94	5,93	53,21	,5394		,97110		214,23		7,31	32,58	,3303
88	,94546	_	94:94	188,96	5,98	52,92	,5365	38	,97158		219,86	312,59	7,27	31,99	,3243
	,94596	-	96,04	190,03	6,01	52,63	,5335		,97205		225,81	318,56		31,39	,3182
	,94646		97,15	191,11	6,04	52,33	,5305		<u>,97253</u>		232,08	324,86		30,78	,3121
100 + 85			98,30	192,21	6,09	52,03	,5274	100 + 35			238,71	331,52 338,56		30,16 29,54	,3058
	,94748 ,94798	_	99,46 100,66	193,34	6,12 6,16	51,72 51,41	,5243 ,5212		,97347 ,97395	_	245,73 253,18	346,06	7,12	28,90	,2929
	,94849		101,89	195,69	6,20	51,09	,5180	I :	,97442		261,09		7,06	28,25	,2863
	,94900		103,14	196,91	6.23	50,79	,5148		,97491		269,52	362,50	7,02	27,59	,2796
100 + 80	,94950	_	104,43	198,17	6,26	50,47	,5115	100 + 30	,97540		278,49		6,97	26,92	,2728
. 79	,95003	_	105,76	199,45	6,31	50,13	,5082		,97587		288,10		6,92	26,23	,2659
	,95054		107,12	200,77	6,35	49,80	,5049	28	.97637 .97687		298,39 309,44		6,84 6,77	25,54 24,83	,2589
	,95106 ,95157	_	109,94	202,13	6,38 6,42	49,47 49,13	,5015 ,4981	26		_	321,34	414,66	6,68	24,11	,2445
	95208		111,39	204,94	6,45	48,79	,4946	100 + 25	71101		334,20	-	6,61	23,39	,2371
74	95261		112,89	206,41	6,48	48,45	,4911	24	,97841		348,12	441,60	6,52	22,64	,2296
73	95312	·	114,44	207,92	6,52	48,09	,4875	23			363,26	456,83	6,43	21,89	,2219
	,95364		116,03	209,48	6,55	47,73	,4839		,97951		379,76	473,45	6,31	21,12	,2141
	,95415		117,67	211,09	6,58	47,38	,4803		,98009		397,86		6,23	20,34	,1981
100 + 70	,95468 ,95521	_	119,35	212,73	6,6 2 6,66	47,01 46,64	,4765 ,4728	100 + 20	,98008	_	417,75 439,73		5,97	19,54	,1899
6 8			122,86	216,17	6,69	46,26	,4690		,98189		464,16		5,84	17,91	,1816
	,95629		124.7	217,97	6,73	45,88	,4651		,98254	_	491,47		5,70	17,07	,1731
	,95683		126.59	219,82	6,77	45,49	,4612	16	,98322		522,19		5,55	16,21	,1644
100 + 65	,95738	-	128,54	221,73	6,81	45,10	,4572	100 + 15			557,00	651,61	5,39	15,34	,1556
64	95793 95848		130,54	223,70	6.84 6.88	44,70	,4532	14	.98466		596,79	691,57 737,65	5,22	14,46	,1466
62	,95904		132.61	225,73 227.84	6,91	44,29 43,89	,4491 ,4449	13	,98544 .98625	_	642,69 696,25	791,39	4,86	12,63	,1374 ,1281
	,95959		136 96	230,01	6,95	43:48	,4407		.98712		759,55	854,88	4,67	11,70	,1186
100 + 60	,96014		139.24	232,26	6,98	43,05	,4364	100 + 10		_	835,50	931,05		10,74	,1089
59	,96069		141,60	234,59	7,01	42,63	,4321	9	.98898		928,33	1024,10	4,23	9,76	,0990
58	,96123		144,04	236,99	7,05	42,20	,4277	8	98999		1044,37	1140,38		8,77	,0889
57	.96177 .96231		146,58	239,50	7,08	41,76	,4233				1193,57	1289,81 1488,98		7,75	,0786 ,0681
			149,19	242,09	7,10	41,31	,4188		,99222		1392,51			6,72	
100 + 55 54	,96338	_	151,90	244.76 : 247,55	7,14 7,14	40,85 40,40	,4141 ,4095	100 - 5	99344 99475		2088,75	1767,74		5,66 4,57	,0573
54 53	,96391		157,60		7,15	39,93	,4048		994/5		2785,00	2882,31		3,47	,0352
52	,96445		160,64	253,46	7,18	39.45	,4000	2	,99764		4177,50	4275,07	2,43	2,34	,0237
5 1	,96497		163,81	256,59	7,22	38,97	,3951	1	,99923	—	8354,99	8452,87	2,12	1,18	,0120

HEAT 37°.

1.	II.	TTT	T 7.7	47	*7*			<u> </u>	Τ	l			1		
Spirit and		III. Spirit	IV. Water	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI	VII.	VIII.
water by	gravity.	by	by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.	,	bulk.	spirit	pliers.	weight.		mea-	measure.		on of	spirit	pliers.
				-		per cent.				sure.			bulk.	per cent.	
Sp. +W.								Sp. + W							
100 + 0	,83582	100	_	100,00		100,00	1,0131	100 + 50	,90725	100	41,75	138,19	3,56	72,36	,7331
1 2	,83812 ,84036	_	0,84 1,67	100,72	0,12		1,0060		,90814	-	42,58	138,97	3,61	71,95	,7291
3	,84256		2,51	101,45	0,22	98,57 97,87	,9988 ,9916		,90901		43,42	139,76	3,66	71,55	,7249
4	,84470		3,34	102,91	0,43	97,18	,9845	54	,91072		45,09	141,33	3,70	71,15	,7208
100 + 5	,84677	_	4,18	103,64	0,54	96,49	•9775		,91155	_	45,93	142,12	3,81	70,36	,7129
0	,84880 ,85077	-	5,01	104,38	0,63	95,80	,9706	56	,91237	_	46,76	142,91	3,85	69,97	,7000
8	,85269		5,85 6,68	105,12	0,73	95,13	,9638		,91320	_	47,59	143,70	3,89	69,59	,7051
	,85458	_	7,51	106,61	0,90	94,46 93,80	,9570 ,9503	50	,91399 ,91477	_	48,43 49,26	144,48	3,95	68,83	,6974
100 + 10	,85639		8,35	107,36	0,99	93,15	•9437		,91556		50,10	146,06	4,04	68,46	,6936
11	,85818		9,19	108,11	1,08	92,50	,9372		,91632		50,93	146,85	4,08	68,00	,6899
, 12	,85993 ,86165	_	10,02	108,86	1,16	91,86	,9307	15	,91706	_	51,77	147,65	4,12	67,73	,6862
13	,86333	_	10,86	109,61	1,25	91,23	,9243		,91781	_	52,61	148,43	4,18	67,37	,6825
100 + 15			12,53	111,12	1,32	89,99	,9180		,91853		53,44	149,23	4,21	67,01	,6789
16	,86656		13,37	111,88	1,49	89,38	,9055		,91925	=	54,28 55,11	150,02 150,81	4,26	66,31	,6753
17		_	14,19	112,64	1,55	88,78	,8994	6	,92068	_	55,95	151,61	4,34	65,96	,6683
	,86968 ,87120		15,03	113,40	1,63	88,18	,8934	68	92137	-	56,78	152,40	4,38	65,61	,6648
100 + 20			15,86	114,16	1,70	87,59	,8874		,92205		57,61	153,19	4:42	65,27	,6614
	-		16,70 17,53	114,93	1,77	87,01 86,43	,8815 ,8757	100 + 70		-	58,45	153,99	4,46	64,94	,6579
22		_	18,37	116,45	1,92	85,86	,8699		,92340 ,92406	_	59,28	154,78	4,50	64,61 64,28	,6546
23	87697	-	19,21	117,22	1,99	85,30	,8642		,92470		60,95	156,37	4,58	63,95	,6479
	,87835	_	20,04	117,99	2,05	84,75	,8586		,92536		61,79	157,17	4,6z	63,63	,6446
100 + 25 26	1		20,88	118,76	2,12	84,20	,8530	100 + 7		_	62,63	157,96	4,67	63,31	,6414
27	,88235	_	21,71	119,53	2,18	83,66	,8476 ,8422	,	,92661		63,46 64,29	158,75	4,71	62,99	,6382
28	,88363		23,38	121,07	2,31	82,60	,8368		,92784	_	65,13	159,55 160,34	4,74 4,79	62,67 62,36	,6349 ,6318
	,88489		24,22	121,84	2.38	82,07	,8315		,92844		65,97	161,14	4,83	62,06	,6288
100 + 30	,88613	-	25,05	122,62	2,43	81,55	,8262		,92906		66,80	161,93	4,87	61,75	,6256
31	,88735 ,88856		25,88 26,72	123,39	2,49	81,05	,8210	8:	1		67,63	162,73	4,90	61,45	,6226
33	,88975		27,56	124,17	2,55 2,61	80,54 80,04	,8159 ,8109		,93023	_	68,47 69,31	163,53 164,33	4,94	61,15	,6196 ,6166
34	,89091		28,39	125,72	2,67	79,55	,8059		,93138		70,14	165,13	5,01	60,56	,6136
100 + 35	,89205		29,23	126,49	2,74	79,06	,8010	100 + 80	,93194	_	70,98	165,92	5,06	60,27	,6106
30	,89318	_	30,07	127,27	2,80	78,58	,7961	86	93249		71,81	166,72	5,09	59,98	,6077
37	,89429 ,89538	_	30,90	128,04 128,82	2,86	78,10		87	,93303		72,65	167,52	5,13		,6048
39	,89645	_	32,56	129,60	2,91 2,96	77,62	,7865 ,7817		,93357 ,93410	_	73,48 74,32	168,32 169,12	5,16	59,41	
100 + 40		_	33,40	130,38	3,02	76,70		100 + 90			75,15	169,92	5,23	59,13	,5991 ,5962
41	,89855		34,23	131,15	3,08	76,25	,7725		,93513		75,98	170,72	5,26	58,57	5934
	,89958	_	35,07	131,93	3,14	75,80	,7679	92	,93563	`—	76,82	171,52	5,30	58,30	5906
43	,90059 .90160		35,91 36,74	132,71 133,49	3,20	75,35	,7634		,93613	-	77,65	172,33	5,32	58,03	,5879
100 + 45			37,57	134,27	3,25	74,91 74,48	,7590 -7546	-	,93663		78,49	***************************************	5,36	57,76	,5852
	,90353		38,41	134,27	3,36	74,40 74,04	,7545 ,7502	100 + 95	,93712	_	79,33 80,15	173,93 174,72	5,40 5,43	57,49 57,24	,5825
47	,90450		39,25	135,84	3,41	73,62	,7460	97	,93807	_	80,98	175,52	5,46	56,97	,5799 ,5772
	,90543		40,08	136,62	3,46	73,20	,7417	98	,93854	-	81,82	176,32	5,50	56,71	.5746
49	,90635		40,92	137,40	3,52	72,78	,7373	99	,93900	l —	82,66	177,12	5,54	56,46	,5719

HEAT 37°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	ī.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	by	Water by	Bulk of mixture.	Dimi- nutt-	Quan- tity of	Decimal multi-
weight.	,	mea- sure.	measure.	5.	bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
W. + Sp.				,		÷		₩. + Sp.							
100+100		100	83,51	177,93	5,58 5,61	56,19 55,94	,5694 ,5667	100 + 50	,96522 ,96575	100	167,00	259,79 263,17	7,21	38,49 38,00	,3900 ,3850
- 5	,93991 ,94037	_	84,36 85,22	179,59	5,63	55,68	,5641	48	,96628	-	173,96	266,69	7,27	37,49	,3799
	,94082 ,94127	_	86,10 86,99	180,44 181,30	5,66 5,69	55,42	,5615	47 46	,96682 ,96734	=	177,66	270,38 274,23	7,28	36,98 36,46	,3748 ,3695
100 + 95	,94172	_	87,90	182,18	5,72	54,88	,5561	100 + 45	,96787	-	185,56	278,26	7,30	35,93	,3641
94	,94219	_	88,83	183,08 184,00	5,75 5,79	54,62	,5534	44	,96838 ,96889		189,77 194,19	282,46 286,89	7,31	35,40	,3587 ,3532
	,94266 ,94313	_	89,79 9 0,77	184,95	5,82	54,06	,5478	42	,96940	-	198,82	291,51	7,31	34,30	,3476
91	,94361		91,76	185,91	5,85	53,79	,5450		,96989		203,66	296,35 301,46	7,31	33,74	,3419
100 + 90	,94408 ,94459		92,79	186,90 187,91	5,89 5,91	53,51	,5421	100 + 40	,97039 ,97087	_	214,11	301,40	7,30	33,17	,3302
88	,94508		94,88	188,94	5,94	52,93	,5363	38	,97136		219,74	312,49	7,25	32,00	,3242
87 86	,94558 ,94608	_	95,98	190,00	5,98	52,64	,5333	37	,97183	-	225,68	318,46 324,75	7,22	31,40	,3181
100 + 85		=	97,10	192,18	6,06	52,04	,5272	100 + 35			238,58	331,40	7,18	30,17	,3057
84	,94710	-	99,40	193,31	6,09	51,73	,5241	34	,97328	-	245,59	338,45		29,55	,2994
	,94761 ,94812		100,61	194,47	6,14	51,42	,5210	33	,97376 ,97424		253,04 260,94	345,93 353,90		28,91	,2929
81	,94863	_	103,09	196,88	6,21	50,79	,5146	11	97473	1	269,37	362,36	7,01	27,60	,2796
100 + 80		_	104,38	198,14	6,24	50,47	,5113	100 + 30			278,34 287,94	371,38		26,93 26,24	,2728
	,94965		105,70	199,42	6,28	50,14 49,81	,5047		,97571		298,22	381,04 391,40		25,55	,2589
77	,95068	-	108,45	202,09	6,36	49,48	,5013	11 '	,97672	1	309,27	402,51	6,76	24,84	,2517
	,95120	-	109,87	203,49	6,38	49,14		100 + 2	97723		321,16	414,49	-	24,12	,2444
100 + 75	,95171		111,33	204,91	6,42	48,45		2.	1,97829) —	347,93	441,41	6,52	22,65	,2295
73	,95275	-	114,38	207,89	6,49	48,10	,4873		,97884		363,06	456,63			, -
72	,95328		117,60	209,45	6,52	47,74		11	2 ,97941 1 ,97999	1	379,55	473,24 491,41			,2141
	95433	-	119,29	212,69	6,60	47,01	,4703	100 + 20	,98060	_	417,52	511,41	6,11	19,55	,1981
69	,95486	i –	121,01		6,62	46,65 46,26	,4726	I	9,98120		439,49	533,51 558,06			1 0 7
	95541		122,79	216,13	6,66	45,88	,4649		7,98248		491,20	585,49			L.
66	95 649	2	126,52	219,78	6,74	45,50		1	6,98316	5	521,90	616,34	5,56	16,22	_
100 + 69	,95704	-	128,47		6,78	45,11			5 ,98388 4 ,98462		556,69	651,29			,1556 ,1466
6:	,95759 ,95814		130,47		6,84	44,71			3,98540		642,34	737,27	5,07	13,56	,1374
62	95870	-	134,68	227,79	6,89	43,90	>4447	I	2,9862		695,86	790,98	4,88	12,64	,1281
100 + 60	95925		136,88		6,91	43,48		100 + 1	0.0880		759,13	930,55		_	
100 + 50	9,96035		139,16	232,22	6,98	42,63	,4319	1	9,9889	5 —	927,82	1023,55	4,27	9,77	,0990
58	96090,) —	143,96	236,94	7,02	42,20	,4275		8,9899	8 -	1043,79	1139,77	4,02	8,78	,0 889
57	7',96144 6',96199		146,49 149,11	239,45	7,04	41,76	1 0/		7,9910; 6,9922		1192,91		3,57	7,76	
100 + 5			151,81		7,10	40,86	,4140	100 +	5,9934	4 -	1670,09	1766,78	3,31	5,66	,0573
54	4,96307	/ -	154,60	247,49	7,11	40,40			4 ,9947 3 ,9961	5 -	2087,59	2184,58	3,01		
5.	3 ,96361 2 ,96415		157:51		7,12	39,93			2,9976		4175,18	4272,71	2,47		. 0237
51	,96467	-	163,72		7,20	38,98			1,9992		8350,36	8448,20	2,16		

TABLE T.

HEAT 38°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.			Spirit by mea- sure.		Bulk of mixture.	Dimi- nuti- on of	١	Decimal multi- pliers
Sp. + W.		4						Sp. + W.							
1 2 3	,83536 ,83766 ,83990 ,84209 ,84424	100	- 0,83 1,67 2,51 3,34	100,00 100,72 101,45 102,18	O,11 O,22 O,33 O,43	100,00 99,28 98,57 97,87 97,18	1,0126 1,0054 ,9982 ,9911	52 53	,90682 ,90771 ,90858 ,90944 ,91029	100	41,73 42,56 43,39 44,23 45,07	138,18 138,96 139,75 140,54 141,32	3,55 3,60 3,64 3,69 3,75	72,37 71,96 71,56 71,16 70,76	,7328 ,7287 ,7246 ,7205 ,7165
100 + 5 6 7 8	,84631 ,84834 ,85032 ,85224 ,85413		4,18 5,01 5,85 6,68 7,51	103,64 104,38 105,12 105,86 106,61	0,54 0,63 0,73 0,82 0,90	96,49 95,80 95,13 94,46 93,80	,977° ,97° ,9633 ,95° ,9498	100 + 55 56 57 58	,91112 ,91194 ,91277 ,91357 ,91435	-	45,91 46,73 47,57 48,40 49,24	142,11 142,90 143,69 144,47 145,26	3,80 3,83 3,88 3,93 3,98	70,37 69,98 69,60 69,22 68,84	,7125 ,7086 ,7047 ,7009 ,6971
100 + 10 11 12 13			8,35 9,18 10,01 10,85 11,68	107,36 108,10 108,86 109,60 110,36	0,99 1,08 1,15 1,25 1,32	93,15 92,50 91,86 91,23 90,61	,9432 ,9367 ,9302 ,9238 ,9175	100 + 60 61 62 63	,91513 ,91590 ,91664 ,91739		50,07 50,90 51,74 52,58 53,41	146,05 146,84 147,63 148,42 149,21	4,02 4,06 4,11 4,16 4,20	68,47 68,10 67,74 67,38 67,02	,6933 ,6896 ,6859 ,6822 ,6786
17 18	,86451 ,86611 ,86769 ,86924 ,87075		12,52 13,36 14,19 15,02	111,12 111,88 112,64 113,40 114,16	1,40 1,48 1,55 1,62 1,69	89,99 89,38 88,78 88,18 87,59		100 + 65 66 67 68	,91883 ,91955 ,92027 ,92096 ,92164		54,25 55,08 55,92 50,75 57,58	150,00 150,79 151,59 152,38 153,17	4,25 4,29 4,33 4,37 4,41	66,66 66,31 65,97 65,62 65,28	,6750 ,6715 ,6680 ,6645
22 23	,87224 ,87369 ,87512 ,87653 ,87791	=	16,69 17,52 18,36 19,20 20,03	114,93 115,69 116,45 117,22	1,76 1,83 1,91 1,98 2,04	87,01 86,43 85,86 85,31 84,75	,8810 ,8752 ,8694 ,8638 ,8582	72 73	92233 92300 92365 92430		58,42 59,25 60,08 60,92 61,75	153,97 154,77 155,56 156,35 157,15	4,45 4,48 4,52 4,57 4,60	64,95 64,62 ·64,29 63,96	,6576 ,6543 ,6509 ,6476 ,6443
26 27 28,	,87926 ,88059 ,88191 ,88319		20,86 21,69 22,53 23,37 24,21	118,76 119,53 120,30 121,07 121,84	2,10 2,16 2,23 2,30 2,37	84,20 83,66 83,13 82,60 82,07	,8526 ,8472 ,8418 ,8364 ,8311	77 78	,92558 ,92620 ,92682 ,92743 ,92802	 	62,59 63,43 64,26 65,09 65,93	157,94 158,73 159,53 160,32 161,12	4,05 4,70 4,73 4,77 4,81	63,32 63,00 62,68 62,37 62,07	,6411 ,6379 ,6346 ,6315
100 + 30, 31, 32,	88569 88691 88812 88931 89047		25,04 25,87 26,71 27,55 28,38	122,62 123,39 124,17 124,94 125,71	2,42 2,48 2,54 2,61 2,67	81,56 81,05 80,54 80,04 79,55	,8258 ,8206 ,8155 ,8105 ,8055	82 83	92865 92924 92982 93039 93098		66,76 67,59 68,43 69,27 70,10	161,91 162,71 163.51 164,31 165.11	4,88 4,88 4,92 4,96 4,99	61,70 61,46 61,16 60,86 60,57	,6254 ,6223 ,6193 ,6103 ,6133
37 38	89161 89274 89385 89494 89600		29,21 30,05 30,88 31,72 32,54	126,48 127,26 128,03 128,81 129,59	2,73 2,79 2,85 2,91 2,95	79,06 78,58 78,10 77,63 77,16	,8006 ,7957 ,7909 ,7861 ,7813	87 88	93154 93209 93263 93317 93370		70 94 71,77 72,61 73,44 74,28	167.50 168.30	5,14	60,28 59,99 59,70 59,42 59,14	,6103 ,6075 ,6040 ,6017 ,5988
100 + 40 41 42, 43,		_	33,39 34,22 35,05 35,89 36,72	130,37 131,15 131,93 132,71 133,48	3,02 3,07 3,12 3,18 3,24	76,70 76,25 75,80 75,35 74,91		100 + 90 91 92 93			75,11 75,94 76,78 77,61 78.45	169 90 170,70 171,50 172,31	5,21 5,24 5,28	58,86 58,58 58,31 58,04	,5900 ,5932 ,5904 ,5877 ,5849
100 + 45 , 46 , 47 , 48 ,		=	37,55 38,39 39,22 40,06 40,90	134,26 135,05 135,83 136,61 137,39	3,29 3,34 3,39 3,45 3,51	74,48 74,05 73,62 73,20		100 + 95 96 97 98		=	79,28 80,10 80,93 81,77 82,61	173.91 174,70 175,50 176,30	5.37 5.40 5.43 5.47	57,50 57,24	,5823 ,5796 ,5770 ,5744 ,5717

HEAT 38°.

		P. C. Server L. 1888												- A	
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
	Specific		Water	Bulk of	Diminu-	Quan-	Decimal	Water and		Spirit	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decima multi-
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	measure.	mixtare.	on of	spirit	pliers.
J		sure.				per cent.				sure.		·····	bulk.	per cent.	
W. + Sp.						,		W. + Sp.							
100 + 100	,93907	100	83,46	177,91	5,55	56,20	,5691	100 + 50	,96493	100	166,91		7,18	38,50	,3899
99	,93952	_	84,31	178,73	5,58	55,95	,5665		,96546 ,96600		170,31		7,21 7,24	38,01 37,51	,3849 ,3798
	,93998 ,94043	_	85,17 86,05	179,56 180,41	5,61 5,64	55,69 55,42	,5639 ,5613	40	,96654		177,56	270,31	7,25	37,00	3747
	,94088		86,94	181,27	5,67	55,16	,5586	4.6	,96707		181,43		7,27	36,47	,3694
100 + 95		_	87,85	182,15	5,70	54,89	,5559	100 + 45	,96760	-	185,46 189,67	278,19 282,39		35,94 35,41	,3640 ,3586
	,94181 ,94228	-	88,78 89,74	183,05 183,97	5,73	54,62 54,36	,5532	44	,96812		194,08		7,27	34,86	,3531
	,94225		90,71	184,92	5,79	54,08	,5476	42	,96915		198,71	291,43	7,28	34,31	>3475
	,94323		91,71	185,89	5,82	53,80	•5447		,96965		203,55		7,28	33,75	,3418
100 + 90	,94370		92,73	186,87	5,86	53,51	,5418	100 + 40	,97015 ,97064		208,64		7,27 7,26	33,18 32,60	,3300 ,3301
89 88	,9442 1 ,94470	-	93,77	187,88 188,91	5,89	53,22	,5390		,97114	_	219,62		7,23	32,01	,3242
87	,94520		95,93	189,97	5,96	52,64	,5331	37	,97162	-	225,55	318,35	7,20	31,41	,3181
86	,94571	_	97,04	191,05	5,99	52,35	,5301		,97211		231,82	324,64			,3119
100 + 85		_	98,19	192,15	6,04	52,04	,5270	100 + 35			238,45 245,45	331,29 338,33		30,18	,3056 ,2993
	,94673 ,94724		99,35	193,28	6,07	51,74 51,43	,5239		97309 97357	_	252,90		7,09	28,92	,2928
82	94775		101,78	195,63	6,15	51,11	,5176		,97406	_	260,80		7,04	28,27	,2862
	,94826		103,03	196,85	6,18	50,80	,5144	·	,97456		269,22		6,99	27,61	,2795
100 + 80	1		104,32	198,11	6,21	50,48	,5111 , 5 078		,97506	_	278,19 287,78	371,24 380,89	6,80	26,94 26,25	,2727
	,94928 ,94979		105,64	199,39	6,29	50,15	,5045	29 28	,97555 ,97607	_	298,06	391,25	6,81	25,56	,2588
	,95031	-	108,39	202,06	6,33	49,49	,5011	27	,97658		309,10	402,35	6,75	24,85	,2517
	,95083		109,81	203,46	6,35	49,15	,49 77	{ 	<u>,97709</u>		320,98		6,66	24,13	,2444
100 + 75		_	111,27	204,88	6,39	48,81 48,46	,4942 ,4907	100 + 25	,97763 ,97817		333,82 347,74	427,23 441,22	6,59 6,52	23,41	,2370
	,95187	1	114,32	207,86	6,46	48,11	,4871		,97873		362,86	456,43	6,43	21,91	,2219
	,95292	1	115,91	209,41	6,50	47,75	,4835	2.2	,97931		379,34	473,03		21,14	,2141
	<u>95345</u>		117,54	211,02	6,52	47,40	,4799	1!	,97990		397,42	491,19	6,11	20,36	,2061
100 + 70	,95398 ,95451		119,22	212,65	6,57	46,65	,4761		,98052 ,98112		417,29	511,18 533,26	5,99	19,56	1981,
68	,955 0 6		122,72	216,09	6,63	46,27	,4686	18	,98175	_	463,65	557,80	5,85	17,93	,181
67	,95560	i	124,56	217,89	6,67	45,89	,4647		,98242		490,93	585,21	5,72	17,09	,1730
	,95615		126,45	219,74	6,71	45,51	,4608	31	,98311		521,61	616,04		16,23	,1643
100 + 65	,95070 ,95725		128,40	221,65	6,75 6,78	45,12	,4508	100 + 15	,98383		556,38 596,13	650,97	5,26	15,36	,155
	,95780		132,46		6,81	44,31	,4487	13	,98536	_	641,99	736,89	5,10	13,57	,1374
62	,95836	-	134,60		6,86	43,91	,4446		,98619		695.48	790,57		12,65	,1281
	,95891		136,81	229,92	6,89	43,49	,4404		,98707		758,71	853,99	-	11,71	,1186
100 + 60	,95947 ,96002		139,08	232,17	6,91	43,07	,4301	100 + 10	98895		834,58	930,05	4,53	9.77	,0990
58	,96057	-	143,88	236,89	6,99	42,21	34 ² 74		,98997		1043,22	1139,16	4,06	8,78	,0880
57	,96112		146,41	239,40	7,01	41,77	,4230	5.04.7	,99107	-	1192,25	1288,41		7,76	,0786
-	,96167	_	149,03	241,99	7,04	41,32	,4185		,99223	-	1390,97	1487,36	-	6,72	,0681
100 + 55	,96221 ,96276		151,73	244,66	7,07	40,87	,4139		,99344 ,99476		1669,17 2086,44	1765,82 2183,38	3,35	5,66 4,58	,0573
	,96331		157,42	1	7,09	39,94			,99470	_	2781,92	2879,13			,0352
52	,96385	-	160,46	253,34	7,12	39,47	,3997		,99766	-	4172,88	4270,35	2,53	2,34	,0237
51	1,96438		1163,63	256,46	7,17	38,99	1,3948	11	1,99925		8345,76	8443,54	2,22	1,18	,0120

HEAT 39°.

I.	11.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure,	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	Quan- tity of spirit per cent.	Decima multi- pliers.
Sp. + W.								Sp. + W.		****					
1 2 3	,83491 ,83720 ,83944 ,84163 ,84378	100 - -	0,83 1,67 2,51 3,34	100,00 100,72 101,45 102,18	0,11 0,22 0,33 0,43	100,00 99,28 98,57 97,87 97,18	1,0120 1,0048 ,9976 ,9905	52 53	,90639 ,90728 ,90815 ,90901 ,90986	100	41,70 42,54 43,37 44,20 45,94	138,17 138,95 139,74 140,53 141,31	3,53 3,59 3,63 3,67 3,73	72,37 71,96 71,56 71,16 70,76	,7324 ,7283 ,7242 ,7201 ,7162
100 + 5 6 7 8	0 0		4,18 5,01 5,84 6,68 7,50	103,64 104,38 105,12 105,86 106,60	0,54 0,63 0,72 0,82 0,90	96,49 95,80 95,13 94,47 93,80		100 + 55 56 57 58	,91069 ,91151 ,91234 ,91314 ,91393		45,88 46,70 47,54 48,37 49,21	142,10 142,89 143,68 144,46 145,25	3,78 3,81 3,86 3,91 3,96	70,37 69,98 69,60 69,23 68,85	,7122 ,7083 ,7044 ,706 ,6968
12 13 14	,85730 ,85905 ,86076 ,86243		8,34 9,18 10,01 10,85 11,68	107,35 108,10 108,85 109,60 110,36	0,99 1,08 1,16 1,25 1,32	93,15 92,51 91,87 91,24 90,62		100 + 60 61 62 63			50,04 50,87 51,71 52,55 53,38	146,04 146,83 147,62 148,41 149,20	4,00 4,04 4,09 4,14 4,18	68,48 68,10 67,74 67,38 67,02	,6929 ,6893 ,6856 ,6819
16 17 18	,86566 ,86724 ,86879 ,87030		12,51 13,35 14,18 15,01 15,85	111,12 111,88 112,64 113,40 114,16	1,39 1,47 1,54 1,61 1,69	89,99 89,38 88,78 88,18 87,59	,9107 ,9046 ,8985 ,8925 ,8865	67 68	,91841 ,91913 ,91985 ,92055		54,22 55,05 55,89 56,72 57,55	149,99 150,78 151,58 152,37 153,16	4,23 4,27 4,31 4,35 4,39	66,67 66,32 65,97 65,62 65,28	,6747 ,6712 ,6677 ,6642 ,6608
22	,87179 ,87324 ,87468 ,87608 ,87746		16,68 17,52 18,35 19,18 20,02	114,92 115,69 116,45 117,21 117,98	1,76 1,83 1,90 1,97 2,04	87,01 86,44 85,87 85,31 84,75	,8806 ,8748 ,8690 ,8633 ,8577	72 73	,92192 ,92259 ,92325 ,92390 ,92454		58,39 59,22 60,05 60,89 61,72	153,96 154,75 155,54 156,34 157,13	4,43 4,47 4,51 4,55 4,55	64,95 64,62 64,29 63,96 63,64	,6573 ,6540 ,6506 ,6473 ,6440
27 28	,87882 ,88015 ,88147 ,88275 ,88401		20,85 21,68 22,52 23,36 24,19	118,75 119,52 120,29 121,07 121,84	2,10 2,16 2,23 2,29 2,35	84,20 83,66 83,13 82,60 82,07	,8522 ,8468 ,8414 ,8360 ,8307	100 + 75 76 77 78	,92517 ,92579 ,92641 ,92702 ,92760		62,55 63,39 64,23 65,06 65,89	157,92 158,71 159,52 160,30 161,10	4,63 4,68 4,71 4,76 4,79	63,32 63,00 62,68 62,37 62,08	,6408 ,6376 ,6343 ,6312
31 32 33	,88525 ,88647 ,88768 ,88887 ,89003		25,03 25,85 26,69 27,53 28,36	122,61 123,39 124,16 124,94 125,71	2,41 2,46 2,53 2,59 2,65	81,56 81,05 80,54 80,04 79,56		100 + 80 81 82 83	-		66,72 67,55 68,39 69,23 70,06	161,89 162,69 163,49 164,29	4,83 4,86 4,90 4,94 4,97	61,77 61,46 61,16 60,86 60,57	,6251 ,6220 ,6190 ,6160
100 + 35 36 37 38			29,20 30,03 30,87 31,70 32,53	126,48 127,26 128,03 128,81 129,59	2,72 2,77 2,84 2,89 2,94	79,06 78,58 78,10 77,63 77,17	,8002 ,7953	100 + 85 86 87 88		_	70,90 71,73 72,57 73,40 74,24	165,88 166,68 167,48 168,28 169,08	5,02 5,05 5,09 5,12 5,16	60,28 59,99 59,71 59,42 59,14	,6101 ,6072 ,6043 ,6014 ,5985
100 + 40 41 42 43			33,37 34,20 35,03 35,87 36,70	130,37 131,14 131,92 132,70 133,48	3,00 3,06 3,11 3,17 3,22	76,71 76,26 75,81 75,36 74,92	,7763 ,7717 ,7671 ,7626 ,7582	100 + 90 91 92 93 94	,93381 ,93433 ,93483 ,93533 ,93583		75,07 75,90 76,74 77,57 78,41	169,88 170,68 171,48 172,29 173,09	5,19 5,25 5,26 5,28 5,32	58,86 58,59 58,31 58.4 57,77	×5957
100 + 45 46 47 48		_	37,53 38,37 39,20 40,04 40,87	134,26 135,04 135,82 136,60	3,27 3,33 3,38 3,44 3,48	74,48 74,05 73,63 73,21	,7538	100 + 95 96 97 98		_	79,24 80,06 80,89 81,73 82,57	173,89 174,68 175,48 176,28	5,35 5,38 5,41 5,45 5,45	57,51 57,25 56,99 56,72	,5820 ,5794 ,5768 ,5742

HEAT 39°.

Ι.	п.	III.	IV.	v.	VI.	VII.	VIII.	r.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and			Water	Bulk of mixture.	Dimi-		Decima multi-
weight.	gravity.	mea- sure.	measure.	mixture.	bulk.	spirit	pliers.	spirit by weight.	gravity.	mea- sure.	by measure.	mixture.	nuti- on of bulk.	spirit	pliers.
W. + Sp.								W. + Sp.	``						
100 + 100	.02867	100	83,42	177,89	F F 2	56.21	- 5680	100 + 50	-06165	100	166,82	259,67	7,15	38,51	,3897
	,93913	_	84,27	178,71	5,53 5,56	55,95	,5662	49	,96517	_	170,22	263,03		38,02	,3848
98	,93959		85,13	179,54	5.59	55,69	,5636	48	,96572		173,77	266,55	7,22	37,51	3797
97			86,00 86,89	180,39 181,25	5,61	55,43	,5610	47	,966 2 6 ,96680		177,46	270,24		37,01	,3746
	,94050	-	87,80	182,12	5,64	55,17	,5583	46 100 + 45			185,36		7,24	36,48	,3693
100 + 95 94	1		88,73	183,02	5,71	54,90 54,63	,5557 ,5530	100 + 45 44			189,57	1 2	7,24	35,95 35,42	,3585
93	1	ì	89,69	183,95	5,74	54,36	,5502	43	,96838	_	193,98	286,73	7,25	34,87	,3530
92		_	90,66	184,90	5,76	54,08	,5474	42			198,60	291,34		34,32	>3474
91	-		91,66	185,86	5,80	53,80	,5445	41			203,44		7,25	33,76	,3417
100 + 90	,94332		92,68	186,84 187,85	5,84	53,52	,5416	100 + 40			208,53	301,28	7,25	33,19	,3359
88			93,72 94,78	188,88	5,90	53,23 52,94	,5359	39 38			219,50		7,21	32,02	,3300
87	,94483		95,87	189,94	5,93	52,65	,5329	37	,97141	1	225,43	318,25		31,42	,3180
86	,94534		96,99	191,02	5,97	52,36	,5299	36	,97191		231,69		7,16	30,81	,3119
100 + 85			98,13	192,12	6,01	52,05	,5268	100 + 35			238,32		7,14	30,19	,3056
	,94636 ,94687		99,29	193,25	6,04 6,09	51,75	,5237 ,5206	34		1	245,32		7,11	29,57	,2993
83 82			100,50	194,41 195,60	6,12	51,44 51,12	,5174	33	0.0		252,76 260,66	345,69 353,63	7.02	28,93	,2928
	,94789		102,97	196,82	6,15	50,80	,5142	31			269,07		6,98	27,62	,2795
100 + 80	-		104,27	198,08	6,19	50,49	,5109	100 + 30			278,04		6,94	26,95	,2727
	,94891		105,58	199,36	6,22	50,16	,5076	29	,97539		287,62	380,75	6,87	26,26	,2658
	,94942	1	106,94	200,68	6,26	49,83	,5043		,97592		297,90		6,81	25,57	,2588
	,94994 ,95046		108,33	202,03 203,43	6,30 6,32	49,50 49,15	,5009 ,4975	27 26			308,93		6,74 6,66	24,86	,2517
100 + 75	-		111,21	204,85	6,36	48,81	,4940	100 + 25	,97750		333,64	-	6,59	23,41	,2370
	,95150		112,71	206,32	6,39	48,47	,4905	24		-	347,55	441,04		22,67	,2295
	,95203		114,26	207,82	6,44	48,12	,4869	23		_	362,66		6,42	21,92	,2218
72	,95256		115,85	209,38 210,98	6,47 6,50	47,76	,4833	22	,97921	_	379,14		6,32	21,15	,2140
100 + 70		-	119,15	212,61	6,54	47,40	,4797 ,4760	100 + 20			397,20		6,23	20,37	,2061
	,95417		120,87	214,31	6,56	47,03 46,66	,4722	100 7 20			417,06 439,01	510,95 533,01	6.00	19,57	,1981
68	,95472		122,65	216,05	6,60	46,28	,4684	18			463,40		5,86	17,94	,1815
67			124,49	217,85	6,64	45,90	,4646	17	,98236		490,66	584,93	5,73	17,10	,1730
	,95581		126,38	219,70	6,68	45,52	,4607		,98306		521,32	615,74		16,24	,1643
100 + 65	,95691		128,33	221,61 223,58	6,72	45,13		100 + 15	,98378 ,98454		556,08	650,65	5,43	15,37	,1555
63	,95746		132,39	225,60	6,75	44,73 44,32	,4527 ,4486	14	,98533	_	595,80 641,64	690,53 736,51	5,27	14,48	,1466 ,1374
62	,95802	_	134,52	227,70	6,82	43,91	,4445	12	,98616		695,10		4,93	12,65	,1281
	<u>•95857</u>	-	136,73	229,88	6,85	43,50	,4403	11	,98705		758,29	853,55	4,74	11,71	,1186
100 + 60		-	139,00	232,12	6,88	43,08	,4360	100 + 10			834,12	929,56	4,56	10,76	,1089
	,95969 ,96024		141,36	234,44 236,84	6,92 6,96	42,65	,4317	9 8	,98894		926,80	1022,47	4,33	9,78	,0990
	,96080		146,33	239,35	6,98	42,22 41,78	,4273 ,4229	7	,98996 ,99106		1042,65	1138,55	2.88	8,78	,0889, ,0786
<u>5</u> 6	,96135		148,95	241,94	7,01	41,33	,4184	6	,99223		1390,20		3,65	7,77 6,73	,0681
100 + 55	,96190		151,65	244,61	7,04	40,88	,4137	100 + 5	,99344	=	1668,25	-	3,39	5,67	,0573
54	,96245		154,44	247,38	7,06	40,42	,4091	4	,99476		2085,30	2182,19	3,11	4,58	,0464
	,96301 ,96355		157,34	250,27	7,07	39,95	,4044	3	,99616		2780,39	2877,55	2,84	3,47	,0352
	,96409		163,54	253,28 256,40	7,09 7,14	39,48 39,00	3996 ، 3947د	2	,99766 ,99925		4170,59	4268,01	2,58	2,34	,0237

HEAT 40°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and			Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water	Bulk of	Dimi-	Quan- tity of	Decimal multi-
water by weight.	gravity	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	spirit	pliers.
		sure.				per cent.				sure.			Bulk.	per cent.	
Sp. + W.			v					Sp. + W.			4.				
100 + 0	,83445	100		100,00	_		1,0114	100 + 50		ì	41,68	138,16	3,52	72,38	,7321
1	,83674		0,83	100,72 101,45	0,11		1,0042	5 I 5 2	,90685 ,90772	1	42,52 43,35	138,95 139,73	3,57 3,62	71,97	,7280 ,7239
3	0	_	1,67 2,50	101,45	0,22	98,57 97,87	,9970 ,9899	53	,907/2		44,18	140,52	3,66	71,17	,7198
4	,84331		3,33	102,91	0,42	97,18	,9829	54	,90943		45,02	141,30	3,72	70,77	,7158
100 + 5	,84539		4,17	103,64	0,53	96,49 95,81	,9759 ,9690	100 + 55	,91026	1	45,85 46,68	142,09 142,88	3,76 3,80	70,38 69,99	,7118 ,7079
7	,84742 ,84941	_	5,00 5,84	104,38	0,02	95,13	,9622	56 57	,91109	1	47,52	143,67	3,85	69,61	,7040
8	,85134	_	6,67	105,86	0,81	94,47	,9555	58	,91271	_	48,35	144,45	3,90	69,23	,7002
9			7,50	106,60	0,90	93,81	,9488	59	,91350		49,19	145,24	3,95	68,85	,6964
1100 + 10	1 ~~~~	_	8,34 9,17	107,35	0,99	93,16	,9422	100 + 60 61	,91428 ,91504	1	50,02 50,85	146,03 146,82	3,99 4,03	68,11	,6889
12	000	<u> </u>	10,00	108,85	1,15	91,87	,9292	62	,91579		51,69	147,61	4,08	67,75	,6852
13			10,84	109,60	1,24	91,24	,9228		,91654		52,52	148,40	4,12	67,39	,6816 ,6780
14			11,67	110,36	1,31	90,02	,9165	64 100 + 65	,91727 ,91799		53,35	149,19	4,16	66,67	,6744
100 + 15	1 0 -	_	12,50	111,12	1,38 1,47	89,38	,9041		,91871		55,02	150,77	4,25	66,32	,6708
17	,86679	_	14,17	112,63	1,54	88,78	,8980	67	,91943	-	55,86	151,57	4,29	65,98	,6673
18		_	15,01	113,39	1,62	88,19 87,60	,8920 ,8860	68 66	,92013 ,92082		56,69 57,52	152,36	4,33 4,37	65,63	,6639
19			15,84	114,15	1,75	87,02	,8801	100 + 70	,92151		58,36	153,94	4,42	64,96	,6570
21	1 0 5	_	17,51	115,68	1,83	86,44		71	,92218		59,19	154,73	4,46	64,63	,6537.
22	,87423		18,34	116,45	1,89	85,87	,8686	,			60,02	155,53	4,49	64,30	,6503
23 24	1		19,17	117,21	1,96 2,03	85,31 84,76	,8629 ,8573	73 74	,92349 , 924 13		60,86	156,32	4,54	63,97 63,65	,6470 .6437
100 + 25			20,84	118,75	2,09	84,21		100 + 75	,92476		62,52	157,91	4,61	63,33	,6405
26	,87971	_	21,67	119,52	2,15	83,67	,8463	76	,92538	il —	63,36	158,70	4,66	63,01	,6373
27	,88102		22,51	120,29	2,22	83,14 82,61	,8409	77 78	,92600 ,92661		64,19	159,50	4,69 4,74	62,69 62,38	,6341
28 29	1	_	23,34	121,06	2,28	82,08	,8302	79 79	1 -	1	65,86	161,09	4,77	62,08	,6279
100 + 30		_	25,01	122,61	2,40	81,57	,8250	100 + 80	,92783		66,69	161,88	4,81	61,77	,6248
31	,88603		25,84	123,38	2,46	81,06	,8198	81			67,52	162,68	4,83	61,47	,6217
32	1 000		26,68	124,16	2,52	80,55 80,05	,8147	83	,92900 ,92958		69,19	164,27	4,92	60,87	,6157
33 34	1 00	_	28,35	125,70	2,65	79.56		84			70,03	165,07	4,96	60,58	,6127
100 + 35	,89073	_	29,18	126,47	2,71	79,07	,7998	100 + 85	,93072		70,86	165,86	5,00	60.29	,6098
	,89185		30,01	127,25	2,76	78,59		86	,93128		71,69	166,66	5,03	60,00 59,72	,6069 ,6040
	,89296 ,89404		30,85	128,02	2,83	78,11		88	,93237	-	73,36	168,26	5,10		,6011
39	,89511	_	32,51	129,58	2,93	77,17	,7806	89	,93290		74,20	169,06	5,14	59,15	
100 + 40	,89617	_	33,35	130,36	2,99	76,71		100 + 90			75,03	169,86	5,17	58,87 58,60	
	80821		34,18	131,13	3,05	76,26		91	93393 93443		75,86	170,66	5,20	58,32	
	,89825 ,89927		35,85	131,91	3,16	75,36	,7622	93	,93493		77,53	172,27	5,26	58,05	,5872
	,90028		36,68	133,47	3,21	74.92	,7578	94	93543	3 _	78,37	173,07	5.30	57,78	
100 + 45	,90127	-	37,51	134,25	3,26	74,49			,93592		79,20 80,02	173,87	5,33	57.52 57.26	,5818 ,5791
	,90224		38,35	135,03	3,32	74,06	,7491 ,7448	90	,9364c		80,85	175,46	5,39		
	,90413		40,02	136,59	3,43	73,21	57405	98	,93734		81,69	176,26	5,43	56,73	,5739
	,90509		40,85		3,47	72,79	,7363	l 99	,93781		82,52	177,06	5,46	56,48	,5713

HEAT 40°.

							, — ī				r 1		1	1	1	
I.	II.	III.	IV.	v.	VI.	VIII.	VIII.	I.		II.	ıır.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal muiti-	Water a spirit l weigh	by	Specific gravity.	Spirit by mea-	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	Quan- tity of spirit	Decimal multi- pliers.
weight.		mea- sure.	measure.		bulk.	per cent.	pliers.	Weigi	11.		sure.			bulk.	per cent.	
W. + Sp.						,		W	Sp.							
100+100		100	83,37	177,87	5,50	56,22	,5686 ,5660	100 +	50 49	,96434 ,96489	100	166,73	259,59 262,97	7,14 7,16	38,52	,3896 ,3846
	,93873 ,93919		84,22 85,08	178,69 179,52	5,53 5,56	55,96 55,70	,5634		48	,96544	-	173,68	266,49	7,19	37,52	→3795
97	193966		85,96	180,37 181,23	5,59 5,62	55:44 55,18	,5608 ,5581		47 46			177,37	270,17	7,20	37,02 36,49	,3744 ,3691
100 + 95	,94012		86,85	182,10	5,66	54,91	,5554	100 +				185,26	278,04	7,22	35,96	,3638
94	,94105	_	88,69	183,00	5,69	54,64	35527		44	,96759)	189,47	282,24 286,65	7,23 7,23	35,43 34,88	,3584
	,94152	-	89,64	183,93	5,71	54,37	,5499		43 42			193,88		7,23	34,33	3473
	,94199 ,94247		90,61	184,87 185,83	5,74 5,78	54,09	,547 I ,5443		41	1 /	- I	203,33	296,10	7,23	33,77	,3416
100 + 90		=	92,63	185,82	5,81	53=53	,5414	100 +	•			208,42	301,19	7,23	33,20	,3358
89	94345		93.67	187,82	5,85	53,24	,5385		39 38	,97018		213,76	306,55 312,19	7,21	32,02	,3299
	94395		94,73	188,85	5,88 5:91	52,95	,5356		37			225,31	318,14		31,43	
86	,94496	_	96,94	190,99	5,95	52,36	,5296		36			231,57	324,42	7,15	30,82	,3118
100 + 89		_	98,08	192,09	5,99	52,06	,5265	100.				238,19	331,06	7,13	30,21	,3055
	,94598		99,24	193,22	6,02	51,75	,5235		34	1	1	245,19	338,09 345,57	7,10	28,94	2927
1 .	3 ,94649 2 ,94700	1	100,44	194,38	6,06	51,44	,5204		33 32	1		260,52	353,50	7,02	28,29	1
	94751		102,92	196,79	6,13	50,81	,5140	l		,9742		268,92	361,95	6,97	27,63	
100 + 80			104,21	198,05	6,16	50,49	,5107	100 -				277,89	370,97 380,60	6,92	26,96 26,27	
	9,94853		105,53	199,33	6,20	50,17 49,84	,5074		29 28		>1	287,47 297,74	390,93	6,81	25,58	
	8 ,94904 7 ,94956		106,88	200,05	6,27	49,50	,5007		27	1 7 7		308,76	402,03	6,73	24,87	,2516
7	6,95008		109,69	203,39	6,30	49,16	,4973		26			320,64	413,98	6,66	-	
100 + 7			111,15	204,82	6,33	48,82	,4938	100 -				333,46	426,88 440,86	6,58	23,42	
	4,95113		112,65	206,28	6,41	48,48	,4903		22	1 - 6	3 _	347,36 362,46	456,05	6,41	21.93	1
	3,95166 2,95220	1	114,20	209,34	6,45	47,77	,4831	1	22			378,94	472,62	6,32	21,16	
1 .	1 95274		117,42	210,9	6,48	47,41	•4795		2		~	396,98	490,76			,2061
100 + 7			119,09	212,58	6,51	47,04	,4758	100 -			3 -	416,83	510,72 532,77	6,00	1 2 2	
	9,95382		120,81	214,27	6,54	46,67			10			463,15	557,28	•	1	1
	8 ,9 5 437 7 ,95492		122,59	217,81	6,61	45,91	,4644		17	9822	9 —	490,39	584,65	5.74	17,10	,1730
6	6,95547	<u>'</u>	126,31	219,66	6,65	45,53	,4605			9830		521,04	615,44			_
100 + 6			128,26	221,57	6,69	45,14	,4565	100 -	- I	9837	3 -	555,78	650,33 690,19	5,45	15,38	
	4,95657		130,26		6,73	44,74		1	12	4 ,9844 3 ,9852		595,47 641,28	736,14	5,14	14,49	
6	3 ,95712 2 ,95768	3 =	132,32	227,66	6,79	43,92				9861		694,72	789,77	4,95	12,66	,1281
	1,95823		136,66		6,82	43,51	,4401	<u> </u>		,9870		757,87	853,11		-	
100 + 6	0,95879	<u> </u>	138,94		6,86	43,09	,4358	100 -	F 19	,9879	5 -	833,66	929,07			
	9,95935		141,29		6,89	42,66	,4315		3	9,9889 8,9899		1042,08	1137,94			
	8 ,95991 7 ,96047		143,73		6,95	41,79				9910	5 —	1190,95	1287,03	3,92	7,77	,0786
	6,9610		148,87		6,98	41,34	. ,4182		-	6 ,9922		1389,44	1485,75	-		~
100 + 5	5,9615	9 -	151,57		7,01	40,89	,4136	100 -		,9934		1667,33	1763,90			
5	4,9621	4 -	154,36	. 1	7,03	39,96				4 ,9947 3 ,9961		2084,16		2,80	3,48	
	3,9627		157,26	_	1 '	39,49	1			2 ,9976	6 —	4168,31	4265,67	2,64	2,34	,0237
	1,9637		163,45				,3945			1 ,9992	51 —	8336,63	8434,27	2,36	1,18	,0120

100 + 45,90084

46,90181

47,90276

48,90370

49,90462

37,49

38,32

39,16

39,99

40,83

134,24

135,02

135,80

136,58

137,37

HEAT 41°.

,	7	-	7		-	-	·								
1.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu-	Quan- tity of	Decimal multi-	Spirit and Water by	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal multi-
weight.	8,	mea-	measure.	inixtuic.	bulk.	Spirit	pliers.	weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of Spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
Sp. + W.								Sp. + W.							
100 + 0	,83399	100	_	100,00	_	100,00	1,0100	100 + 50	,90553	100	41,66	138,15	3,51	72,39	,7317
I	,83628		0,83	100,72	0,11	99,28	1,0037		,90642		42,50	138,94	3,56	71,97	37277
2	,83853 ,84072	_	1,67	101,45	0,22	98,57	,9965		,90729	-	43,33		3,61	71,57	,7236
3 4	,84286	_	2,50 3,33	102,18	0,32	97,87 97,18	,9894 ,9824		,90900 ,90900		44,15 44,99	140,50	3,65 3,70	71,17 70,78	,7195 ,7155
100 + 5	,84493	_	4,17	103,64	0,53	96,49	,9754		,90984	_	45,82	142,07	3,75	70,39	,7115
	,84697	_	5,00	104,38	0,62	95,81	,9685	56	,91066	-	46,65	142,86	3,79	70,00	,7076
	,84895 ,85088		5,84	105,12	0,72	95,13	,9617		,91148	 	47,49	143,65	3,84	69,61	,7037
1	,85277	_	7,50	105,60	0,81	94,47 93,81	,9550 ,9483		,91228 ,91307	_	48,32 49,16	144,43	3,89	69,23	,6999
100 + 10			8,34	107,35	0,99	93,16	,9417	100 + 60	_		49,99	145,22	3,94 3,98	68,49	,6923
11	,85640	_	9,17	108,10	1,07	92,51	9352		,91461		50,82	146,80	4,02	68,12	6886
	,85814.	_	10,00	108,85	1,15	91,87	,9288	62	,91536		51,66	147,59	4,07	67,75	,6849
	,85985	_	10,84	109,60	1,24	91,24	,9224		,91611		52,49	148,38	4,11	67,39	,6813
100 + 15	86152		11,67	110,36	1,31	90,62	,9160		,91684		53,32	149,17	4,15	67,03	,6777
160 + 15	,86476	_	12,49	111,12	1,37	90,00 89,38	,9098 ,9037		,91756 ,91828	_	54,16	149,96	4,20	66,68 66,33	,6741
17	,86634		14,17	112,63	1,54	88,78	,8976		,91020	_	54,99 55,82	150,75	4,24 4,27	65,98	,6705
18	,86789		15,00	113,39	1,61	88,19	,8916		,91971		56,65	152,34	4,31	65,64	,6636
	,86940		15,83	114,15	1,68	87,60	,8856	, 69	,92040		57,49		4,36	65,29	,6602
100 + 20	,87088	-	16,66	114,92	1,74	87,02	,8797		,92109	-	58,32	153,92	4,40	64,97	6567
	,87235 ,87378		17,50	115,68	1,82	86,44	,8739 ,8681		92176	_	59,15	154,71	4,44	64,64	,6534
	,87519		19,16	117,21	1,89	85,87 85,31	,8625		,92242 ,92307		59,98 60,82		4,47 4,52	64,30 63,98	,6500 ,6467
	.87657		20,00	117,98	2,02	84,76	.8569		,92371		61,65	157,10	4,55	63,65	6435
	,87793	_	20,83	118,74	2,09	84,21	,8513	100 + 75	,92434		62,48		4,59	63,34	,6402
	87926		21,66	119,51	2,15	83,67	,8459	76	,92496		63,32	158,68	4,64	63,01	,6370
	,88057 ,88186	-	22,50	120,28	2,22	83,14	,8405		,92558		64,15	159,49	4,66	62,70	,6338
	88312	_	23,33	121,06	2,27	82,61	,8351 ,8298		,92619 ,92680		64,99 65,82		4,72 4,75	62,39	,6307
	,88436		25,00	122,60	2,40	81,57	,8246		,92741		66,65		4,79	61,78	,6245
31	,88558		25,83	123,37	2,46	81,06	,8194		,92800		67,48	162,66	4,82	61,47	6214
32	,88678	-	26,66	124,15	2,51	80,55	,8143		,92858	_	68,32	163,46	4,86	61,18	6184
33	88797	_	27,49	124,92	2,57	80,05	,8093		,92916	-	69,15	164,25	4,90	60,88	,6154
	88914		28,33	125,69	2,64	79,56	,8043		92974		69,99		4,94	60,58	,6125
100 + 35	,89029 ,89141		29,16 29,99	126,46	2,70	79,07		100 + 85	93030	-	70,82	165,84	4,98	60,29	,6095
37	,89252		30,84	128,01	2,75	78,59 78,11	,7945 ,7897	87	,93086 ,93142		71,65		5,00	60,00 59,72	,6067
38	89360	_	31,66	128,79	2,87	77,64	,7849	88	93195	_	73,32	168,24	5,08	59,43	,6009
39	89467	_	32,49	129,57	2,92	77,17	,7802	89	93248		74,16		5,11	59,16	,5981
100 + 40	89572	-	33,33	130,35	2,98	76,71		100 + 90		_	74,99		5,14	58,88	,5952
41	89678	_	34,16	131,12	3,04	76,26	,7709		93351	-	75,82		5,17	58,60	,5924
42	,89781 ,89884		34.99 35,83	131,90	3,09	75,81 75,37	,7664 ,7619		93401	_	76,65		5,21	58,33 58,06	,5897
44	89985	_	36,66	133,46	3,20	74,93	,7575		93451		77,49		5,24 5,27	57,79	,5842
<u> </u>	00084		07.10	70101							· · · · · · · ·			21.12	

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HEAT 41°.

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I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	8,1	mea- sure.	measure.		bulk.	spirit	pliers.	weight.	8-21-07.	mea- sure.	measure.		on of	spirit	pliers.
		sure.		-		per cent.				sure.				per cent.	
W. + Sp.								W. + Sp.							
100+100		100	83,32	177,85	5,47	56,22	,5684	100 + 50	,96404	100	166,64	259,53	7,11	38,53	,3895
99			84,17	178,66	5,5 L	55,97	,5658	49	,96459		170,04	262,90 266,42	7,14	38,04	,3845
98 97	,93879 ,93926	_	85,03 85,91	179,49 180,34	5.54 5.57	55,71	,5631 ,5605	48 47			173,58	270,10		37,53	3794 3743
96	,93972		86,80	181,20	5,60	55,19	•5579	46	,96623		181,13	273,95	7,18	36,50	,3690
100 + 95	,94019 ,94066		87,71 88,64	182,07 182,98	5,64 5,66	54,92	,5552	100 + 45	,96678	_	185,16	277,96 282,16		35,97 35,43	,3637
94 93	,94113		89,59	183,90	5,69	54,6 5 54,38	∍5525 ∍5497	44	,96785	_	193,77	286,58		34,89	,3528
92			90,56	184,84	5,72	54,10	,5469	42	,96838		198,38	291,19		34,34	,3472
91		OTHER DESIGNATION	91,56	185,80	5,76	53,82	,5441		,96890 ,96941		203,22	301,10		33,78	,3415
89			93,62	187,79	5,83	53,24	,5383	39	396994	1	213,64	306,45		32,63	,3299
88	1 / 10/	_	94,68	188,82	5,86	52,95	,5354	38	,97045	_	219,26	312,09		32,04	,3239
87 86	,94406 ,9 4 457	_	95,76	189;88 190,97	5,88 5,91	52,67 52:37	,5324 ,5294		,97096 ,97148		225,19	318,04 324,31		31,44	,3179
100 + 85		_	98,02	192,06	5,96	52,06	,5263	100 + 35			238,06	330,95	7,11	30,22	,3054
84		-	99,19	193,20	5,99	51,76	,5233	34			245,05	337,97		29,59	,2991
83 82			100,38	194,36	6,06	51,45 51,14	,5202	33 32	{		252,48 260,38	345,45 353,38	7,003	28,30	,2861
81	,94712		102,86	196,76	6,10	50,82	,5138	31			268,77	361,82	6,95	27,64	,2794
100 + 80	1 0		104,15	198,03	6,12	50,50	55105	100 + 30		1 .	277,74	370,83		26,97 26,28	,2726
79	1 000		105,47	199,30	6,20	50,17 49,84	,5072		,97507 ,97560	_	287,31 297,57	380,46 390,78		25,59	,2587
77	,94918	-	108,21	201,97	6,24	49,51	,5005	27	,97614		308,59	401,87	6,72	24,88	,2516
76			109,63	203.36	6,27	49,17	34971 1226	I	,97668		320,46	413,82	-	24,16	,2443
100 + 75 74	!		111,09	204,79 206,25	0,34	48,48	,4936	100 + 25 24	97722 97780		333,28	440,67		23,43	,2294
73	,95129		114,14	207,75	6,39	48,13	,4865	23	1,97839		362,26	455,85	6,41	21,93	,2218
72	1 0		115,72	209,30	6,42	47,78	,4830 ,4794		,97898 ,97960		378,73 396,76	472,41 490,54		21,16	,2140
100 + 70		-	119,02	212,55	6,47	47,05	,4750	100 + 20			416,60	510,49		19,59	,1980
69	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		120,74	214,24	6,50	46,68	,4719		,98087	-	438,53	532,52	6,01	18,78	,1898
68	1.77		122,52	215,97 217,77	6,58	46,30	,4681 ,4643		,98152		462,90 490,12	557,02 584,37		17,95	,1815
. 66	,95511		126,24	219,62	6,62	45,53	,4604	16	1 -		520,76	615,14	5,62	16,26	,1643
100 + 65	,95567		128,18	221,52	6,66	45,14	,4564	100 + 15	,98366	-	555,48	650,01	5-47	15,39	,1555
63	,95622 ,95677		130,28	223,49 225,52	6,69	44,74	,4524 ,4483	14	,98443		595,15 640,92	689,85 735,78			,1405
1 .	,95733	-	134,37	227,61	6,76	43,93	,4442	12	,98608		694,34	789,37	4,97	12,67	,1281
61			136,58	229,80	6,78	43,52	,4400		,98698	-	757,46	852,67			,1186
100 + 60	,95845		138,86	232.03 234.36	6,83 6,85	43,10	,4357 ,4314	100 + 10	,98790 ,98889		833,21 925,79	928,59 1021,40	4,02	9,79	,1089
	,95957	_	143,65	236,75	6,90	42,24	,4270	. 8	,98993		1041,51	1137,34	4,17	8,79	,0889
57			146,17	239,25 241,83	6,92	41,80	,4226 ,4181	7			1190,30	1286,34	3,96	7,77	,0786
100 + 55	,96070	-	148,79	241,03	6,98	41,35	,4.135	100 + 5	,99221		1388,69 1656,43	1484,95 1762,94		6,73 5,67	,0681
54	,96182		154,27	247,27	7,00	40,43	,4088	4	,99475		2083,03	2179,81	3,22	4,59	,0464
53	,96238	-	157,17	250,17	7,00	39,97	,404I	3	,99615		2777,36	2874,40	2,96	3,48	,0352
52 51	,96293 ,96348		160,20	253,17 256,28	7,03	39,50	,3993 ,3944		,99765 ,99 9 24		4166,03 8 332, 10				,0237 ,0120
بمييب				***************************************	-						33-7-5	1 7/2			-

HEAT 420.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific	Spirit		Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific		Water	Bolk of	Dimi-	Quan-	Decimal
water by weight.	gravity.		by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent:	1			sure.					
Sp. + W.								Sp. + W.			,				
100 + 0	,83353	100		100,00		100,00	1,0104	100 + 50	,90510	100	41,64	138,14	3,50	72,39	,7314
1	,83582	_	0,83	100,72	0,11	99,28	1,0032	51	1	1 1	42,47	138,93	3,54	71,98	,7273
2	,83807		1,67	101,45	0,22	98,57	,9960	52	1 - 555		43,30	139,71	3,59	71,58	,7232
3	,84026		2,50	102,18	0,32	97,87	,9889	53	1		44,13	140,49	3,64	71,18	,7191
4	,84240		3,33	102,91	0,42	97,18	,9819	54		-	44,97	141,28	3,69	70,78	,7151
100 + 5	,84447 ,84651		4,17 5,00	103,64	0,53	96,49 95,81	,9749 ,9680	100 + 55			45,80 46,63	142,06	3,74	70,39 70,00	77112
. 7	,84849		5,83	105,12	0,71	95,13	,9612	56	,91023	1	47,46	143,64	3,82	69,62	,7073
8	,85042		6,66	105,86	0,80	94,47	9545	58			48,30	144,42	3,88	69,24	,6996
9			7,49	106,60	0,89	93,81	,9478	5 9			49,14	145,21	3,93	68,86	,6958
100 + 10		_	8,33	107,35	0,98	93,16	94:2	100 + 60	,91341	i —	49,96	146,00	3,96	68,49	,6920
11	,85594		9,16	108,10	1,06	92,51	,9347	61	91418	3	50,80	146,79	4,01	68,12	,6883
I 2			10,00	108,85	1,15	91,87	,9283	62	(') 1/2		51,63	147,58	4,05	67,76	,6846
13	1 05-05		10,83	109,60 110,36	1,23 1,30	91,24	,9219	63	1		52,46	148,37	4,09	67,40 67,04	6810
	,86269	-	12,48	111,11				100 + 65	I	·	53,29		4,13	66,68	,6773
160 + 15	,86430		13,32	111,87	1,37	90,00 89,38	,9093	66			54,13 54,96	149,95	4,22	66,33	,6737
17	,86588		14,16	112,63	1,53	88,78	,8971	67			55,79	151,54	4,25	65,99	,6667
18	,86743		14,99	113,39	1,60	88,19	,8911	68	,91928	3 —	56,62	152,33	4,29	65,64	,6633
19	-		15,82	114,15	1,67	87,60	,8851	69	,91998		57,46	153,12	4,34	65,30	,6598
100 + 20		-	16,65	114,91	1,74	87,02	,8792	100 + 70			58,29	153,91	4,38	64,97	,6564
21	,87190		17,49	115,68	1,81	86,45	,8734	71			59,12	154,70	4,42	64,64	,6531
22	1 2,000	_	18,32	116,44	1,88	85,88 85,32	,8677	72	,92265		59,95 60,79	155,50	4.45	63.98	,6497 .6464.
23 24			19,98	117,97	2,0I	84,76	,8564	74	1		61,62	157,08	4,54	63,66	,6432
100 + 25			20,82	118,74	2,08	84,22	,8509	100 + 75		-	62,45	157,88	+,57	63,34	,6399
26	,87881		21,65	119,51	2,14	83,68	,8454	76			63,29	158,67	4,62	63,02	,6367
2 7	,88012		22,49	120,28	2,21	83,14	,8400	77	,92516	<u> </u>	64,12	159,48	4,64	62,71	,6335
28	,88141		23,32	121,05	2,27	82,61	,8347	78		- 1	64,96	160,26	4,70	62,40	,6304
29		·	24,15	121,82	2,33	82,09	,8294	79		-	65,79	161,05	4,74	62,09	,6273
100 + 30	,88390 ,88513		24,98 25,81	122,69	2,39	81,57 81,06	,8241 ,8190	100 + 80			66,62 67,45	161,85	4.77	61,78	,6242
31 32	,88633	_	26,65	123,37	2,44 2,5 I	80,56	,8139	82	1-2		68,28	163,45	4,83	61,18	,6181
33	,88752		27,48	124,92	2,56	80,06	,8089	83	,92874		69,12	164,24	4,88	60,88	,6151
34	,88869		28,32	125,68	2,64	79,57	,8039	84	,92932	2	69,95	165,04	4,91	60,59	,6122
100 + 35	,88984	_	29,15	126,46	2,69	79,08	7989ء	100 + 85			70,78	- 165,83	4,95	60,30	,6093
36	,89096	-	29,98	127,23	2,75	78,60	,7941	.86	,93044	rl —	71,61	166,63	4,98	60,01	,6064
37	,89207		30,82	128,01	2,81	78,12	7893		,93101		72,45	167,43	5,02	59,73	,6035
	,89316		31,65	128,78	2,87 2,91	77,65 77,18	,7845 .7708		,93153 ,93206		73,28	168,23	5,05	59,44 59,16	,6006
	,89423		32,47	129,56	-	76,72	-		-	_	74,11	169,83	5,12	58,88	
100 + 40	,89528 ,89634		33,31	130,34	2,97 3,03	76,72	,7752	100 + 90	,93257		74,95	170,63	5,12	58,61	,5950
42			34,97	131,89	3,08	75,82	,7661		93359		76,61	171,43	5,18		,5894
	,89840		35,81	132,67	3,14	75,37	,7616		,93409		77,45	172,23	5,22	58,06	,5866
	,89941		36,64	133,45	3,19	74,93	>7571		,93459		78,28	173,03	5,25	57,79	,5840
100 + 45			37,47	134,23	3,24	74,50	,7527				79,11	173,83	5,28	57,53	,5813
46	,90138	-	38,30	135,01	3,29	74,07	,7484		,93556		79,93	174,62	5,31	57,27	,5786
	,90232		39,14	135,79	3,35	73,64	77441	97	,93604		80,76	175,42	5,34		,5760
	,90327		39,97 40,80	136,57	3,40	73,22 72,80	,7399 ,7356	90	,93651		81,59	176,21	5,38	56,75	,5734
49	,90419	1	[40,00	1 -3/233	1 3743	, , _,,,,	1 7/ 33	n 95	לפיניןי	7 (1743	///	17/41	・フェッサブ	. , , , , , ,

HEAT 42°.

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I.	II.	III	IV.	v.	νī.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	6,,	mea- sure.	measure.	1111111111111	bulk.	spirit per cent.	pliers.	weight.	6.2	mea- sure.	measure.		on of bulk,	spirit	pliers.
		surc.				per cent.		177 . 0		Suit.				70.00.00	
W. + Sp.								W. + Sp.				<u> </u>			
100+100		-100	83,28	177,83	5,45	56,23		100 + 50	,96373	100	166,55 169,95	259,47 262,84	7,08	38,54 38,05	,3894 ,3844
	,9379 2 ,93838	_	84,13	178,64 179,47	5 49 5,52	55,97 55,72	,5655 ,5629	49 48			173,48		7,11	37,54	,3793
97	,93885	_	85,86 86,75	180,32 181,18	5,54	55,45	,5603	47 46			177,17	270,03 273,88	7,14 7,15	37,03	,3742
100 + 95	,93932 ,93980		87,66	182,05	5,57 5,61	55,19 54,92	,5576	100 + 45	,96650	_	185,06	277,89	7,17	35,98	,3636
94	,94026		88,59	182,95	5,64	54,66	,5522	44	,96703	-	189,26	282,08 286,50	7,18 7,16	35,44	,3582
93	,94074 ,94120		89,54 90,51	183,88 184,82	5,66 5,69	54,39	,5495 ,5467	43 42	,96811	- I	193,66		7,16	34,90	,3527 ,3471
91	,94168		91,51	185,78	5,73	53,82	,5439	41	,96864		203,11		7,18	33,79	,3414
100 + 90		_	92,53	186,77 187,76	5,76	53,54	,5410	100 + 40	1		208,18	301,01	7,17 7,16	33,22 32,64	,3356
88	,94316		94,63	188,80	5,83	52,96	,5352	38	,9702	-	219,14	311,99	7,15	32,05	,3238
87 86	1 / 10		95,71	189,86	5,85	52,67	,5322	37	,97072		225,07	317,94 324.21	7,13	31,45	,3178
100 + 85	1-2111		97,97	192,04	5,93	52,07	,5261	100 + 39	,97176	_	237,93	330,84	7,09	30,23	,3054
84 83	,94519	-	99,13	193,17	5,96	51,77 51,46	,5231	34 33	,97228		244,92	337,86 345,34	7,06 7, 0 0	29,60 28,96	,2991
82	117131	,	101,56	195,52	6,04	51,14	,5168	32			260,24	353,26	6,98	28,31	,2860
81			102,81	196.74	6,07	50,83	,5136	31		-	268,62		6,93	27,65	,2793
100 + 80 79		1	104,09	198,00	6,09	50,51	,5103	100 + 30			277,59	370,69 380,32	6,83	26,98 26,29	,2725
78	,94827		106,76	200,59	6,17	49,85	,5037	28	,97543	<u> </u>	297,41	390,64		25,60	,2586
77 76	,94879 ,94932		108,15	201,94	6,21	49,52	,5003	27	1		308,42	401,72	6,63	24,89	,2515 ,2442
100 + 75	,94985		111,03	204,76	6,27	48,84	,4934	100 + 25			333,10	426,53	6,57	23,44	,2369
74 73			112,53	206,22	6,31	48,49 48,14	,4899 ,4863	24 23	1 ' ' ' ' ' '		346,98		6,50 6,40	22,70	,2294
72	,95145	-	115,66	209.27	6,39	47,78	,4828	22	,97886	<u> </u>	378,52	472,20	6,32	21,17	,2140
$\frac{71}{100 + 70}$			117,28	210,87	6,41	47,42	,4792	100 + 20			396,54	490,32 510,26	$\frac{6,22}{6,11}$	19,60	,1980
69	1	1	120,67	214,20	6,45 6,47	46,68	34754 34717	19	,98077	-	438,29	532,28	6,01	18,79	,1898
68 67	1-233 1		122,45	215,94	6,51	46,30	,4679 ,4641		,98143		462,65		5,89	17,96	,1815
6 6	1-771-7		126,17	217,73	6,59	45,54	,4602	10	1 1	1	520,48	614.84		16,26	,1643
100 + 65	,95531		128,11	221,48	6,63	45,15	,4562	100 + 15	,98359	-	555,18	649,69	5,49	15,39	,1555
63	,95586 ,95641	_	130,21	223,45	6,66	44,75	,4522 ,4481		,98436 .98518] _	594,83 640,56	689,51 735,42	5,14	13,59	,1465
62	,95698	-	134,30	227,57	6,73	43,94	,4440	12	,98603	-	693,96	788,97	4,99	12,67	,1281
100 + 60	1	1	136,51	229.75	6,76	43,52	,4398	100 + 10	,98693		832,76	852,24 928,11	4,81	11,73	,1186
59	,95866	-	141,14	234,31	6,83	42,68	,4312	100 4 10	,9888	: -	925,29	1020,87	4.42	9,79	,0990
58 57	,95923	_	143,57	236,70	6,87	42,24	,4268	8	1 / //		1040,95	1136.74	4,00	8,80	,0889
	,96036		148,71	241,78	6,93	41,36	4179	- 6			1387,94	1484,15	3.79	6,74	.0681
100 + 55	,96092		151,40	244,45	6,95	40,90	,4133	100 + 5			1665.53	1761,99 2178,62	3 54	5 68	,0573
54 53	,96149		154,19	247,22	6,97	40,44	,4087 ,4040	4	1 /	<u> </u>	2775,86	2872,83	3.03	4·59 3 4 ⁸	0352
52	,96261	-	160,11	253,11	7,00	39,51	,3992	' 2	,9976	-	4163,75	4261,01	2,74	2,35	G237
5 1	1.96317	1 -	163.27	256,22	7,05	39,03	,3943]	1,9992	3	1 0320,59	8425.08	2,51	1 1,19	,0120

HEAT 43°.

-			,	- (1 1		-
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
		Spirit		Bulk of	Diminu-	Quan-	Decimal				Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	measure.	mixture.	on of	spirit	multi- pliers.
		sure,				per cent.	•			sure.			bulk.	per cent.	-
Sp. + W.								Sp. + W.				'			
·	,83307	100		100,00		100,00	1,0098	100 + 50	,90467	100	41,61	138,13	3,48	72,40	,7310
100 + 0	10	_	0,83	100,72	0,11		1,0026	51	1	· I	42,45	138,91	3,54	71,99	,7270
2	83761		1,67	101,45	0,22	98,57	,9955	52	1		43,28	139,70	3,58	71,58	,7229
3		_	2,50	102,17	0,33	97,87	,9884	53			44,10	140,48	3,62	71,18	,7188
4	,84194		3,33	102,90	0,43	97,18	,9814	54			44,94	141,27	3,67	70,79	57148
100 + 5	,84401 ,84605		4,17 5,00	103,64 104,38	0,53	96,49 95,81	9744 9675	100 + 55	,90898		45,78 46,60	142,05	3,73	70,40	,7108 ,7069
7			5,83	105,12	0,71	95,13	,9607	57	,91062	_	47,44	143,63	3,81	69,62	,7030
Ś		_	6,66	105,86	0,80	94,47	,9540	58		ŧ	48,27	144,41	3,86	69,24	,6993
9	1		7,49	106,60	0,89	93,81	,9473	59	,		49,11	145,20	3,91	68,87	,6955
100 + 10	,85369	-	8,32	107,35	0,97	93,16	,9407	100 + 60	, , , ,		49,93	145,99	3,94	68,50	,6917
11	85548 85722		9,16	108,10	1,06	92,51	,9342	61	1 - 0, 5		50,77	146,78	3,99	68,13	,6880
	3 ,85893		9,99	100,65	1,14	91,87	,9278	63	1 7 17		52,43	148,36	4,03	67,40	,6807
	,86060		11,65	110,35	1,30	90,62	,9151	64			53,26	149,15	4,11	67,04	,6770
100 + 1	-		12,48	111,11	1,37	90,00	,9088			_	54,10	149,94	4,16	66,69	,6734
10	,86382		13,32	111,87	1,45	89,39	,9027	66	,91742	2 —	54,93	150,73	4,20	66,34	,6699
1		-	14,15	112,63	1,52	88,79	,8966	67	1 -		55,76	151,52	4,24	65,99	,6664
18	1000		14,98	113,39	1,59	88,19		68	1 -	')	56,59 57,43	152,32	4,27	65,65	,6630
100 1 20	_		16,65	114,15		87,60 87,02		69		_	58,26	153,89	4,33	64,98	,6595
100 + 20			17,48	114,91	1,74	86,45	,8729	100 + 70		1	59,09	154,68	4,41	64,65	,6561
2		3 -	18,31	116,43	1,88	85,88		72			59,92	155,48	4,44	64,32	,6494
ł2	3 ,87420	—	19,14	117,20	1,94	85,32	,8616	73	.92222	2 -	60,75	156,27	4.48	63.99	.6461
2.	·		19,97	117,97	2,00	84,77	,8559	74	-	_	61,59	157,07	4,52	63,67	,6429
100 + 2		3 -	20,80	118,73	2,07	84,22			,9234		62,42	157,86	4,56	63,35	,6397
2	1 2		21,64	119,50	2,14	83,68		70			64,08	159,46	4,60 4,62	63,03	,6364
2			23,30	121,05	2,25	82,62	,8343	78			64.92	160,24	4,68	62,40	,6301
2	1 00 -		24,14	121,81	2,33	82,09	,8290	79	,9259		65,75	161,04	4,71	62,10	,6270
100 + 30		; —	24,97	122,59	2,38	81,58	,8237	100 + 80	,92656	5 —	66,58	161,83	4,75	61,79	,6239
3		3 -	25,80	123,36	2,44	81,07		8:	,9271		67,41	162,63	4,78	61,49	,6208
3	100		26,63 27,46	124,14	2,49	80,56		8:	,9277	1 -	68,24	163,43	4,81 4,86	61,19	,6178 ,6148
3 3	4 ,8882.		28,30	124,91	2,55	79,57		82		9 _	69.91	165,02	4,89	60,60	6119
100 + 3			29,13	126,45	2,68	79,08		100 + 8	-		70,74	165,81	4,93	60,31	-
1 3	6 ,8905:	2 -	29,96		2,73	78,60	7937	80	,9300	í –	71,57	166,62	4.95	60,02	,6061
3	7 ,8916	3 -	30,80	128,00	2,80	78,12	,7889	8	7 ,93050	9 —	72,41	167,41	5,00	59,74	,6032
3	8,8927	1 -	31,63		2,85	77,65			,93116	-	73,24	168,21	5,03		
	9 ,8937		32,46	129,56	2,90	77,18		-	,9316.		74,07	169,01	5,06		•5975
100 + 4	0 ,8948 1 ,8959		33,30	130,34	3,02	76,72 76,27		100 + 90	1,9321		74,91 75,74	169,81	5,10	58,89 58,62	
	2,8969		34,95	131,89	3,06	75,82			2,9331		76,57	171,41	5,16	58,34	
4	3 ,8979	6 —	35,79	132,66	3,13	75,38			,9336		77,41	172,21	5,20	58,07	,5864
	4 ,8989		36,62	_	3,18	74,94	,7567	9.	1,9341	7	78,23	173,01	5,22	57,80	,5837
100 + 4			37,45	134,22	3,23	74,50	,7523	100 + 9	,9346	6 –	79,06	173.81		57,54	
4	.6 ,9009	5 -	38,28		3,28	74,07		9	9351.	4 -	79,88	174,60	5,28	1	,5784
	.7 ,9018 .8 ,9028		39,12		3,34	73,65		9	,9356 3,9361	2 —	80,71	175,40	5,31		1
	.9 ,9037		40,78		3,39	73,23	7395, 7353,	9	,9365	7 -	82,38	177,00	5,38		,5732
1	71.7.31	r	1	:1 3/757	1.077	1 / -, 0 1	1 -1 223	ı, 9:	11/10-3	/]		1 1/1	وردرا	10/00	1 (21,73)

HEAT 43°.

			l 1				1	1		()	and a company of a contract and a contract and	er constant and a constant			1
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spiru by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decima multi-
weight.	g,·	mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.	9	mea- sure.	measure.		on of bulk.	spirit per cent.	pliers
W. + Sp.								W. + Sp.						2	
100 + 100	,93703	100	83,23	177,81	5,42	56,24	,5679	100 + 50	,96342		166,46	259,41	7,05	38,55	,3893
٠ ١	,93751		84,09	178,62 179,45	5,47 5,49	55,98 55,72	,5653 ,5626	49 48	,96398 ,96454		169,86 173,39	262,78 266,30	7,08	38,06	,3843
- 1	,93798	_	84,94 85,81	180,29	5,52	55,46	,5600	47	,96509	-	177,08	2 69,97	7,11	37,04	,374
	,93892		86,70	181-15	5,55	55,20	•5574	46	1		180,93	273,81	7,12	36,52	,3688
	,93940	-	87,61	182,02 182,93	5,59 5,61	54,93 54,66	,5547	100 + 45			184,96 189,16	277,82 282,01	7,14	35,99	,363
	,93987 ,94034	_	88,54 89,49	183,85	5,64	54,39	,5520	44	1 - /		193,56		7,14	34,91	,3520
92	,94080		90,46	184,79	5,67	54, 1,1	,5465	42	,96784	. —	198,16	291,03		34,36	,347
-	,94128		91,46	185,75	5,71	53,83	•5437	-	,96838		203,00	295,85		33,80	,341
- 5 1	,94176	_	92,48	186,74 187,73	5,74	53,55	,5407 ,5379	100 + 40 3 9			208,07	300,92 306,27	7,15	33,23	,335
1	,94276	_	93,52 94,58	188,77	5,81	52,97	,5350	38	1 - /		219,02	311,90	7,12	32,06	,323
87	,94326		95,66	189,83	5,83	52,68	,5320	37			224,95	317,84	7,11	31,46	,317
	•94377		96,77	190,92	5,85	52,38	,5290		,97102		231,19	324,11	7,08	30,85	,311
- ~-1	,94428 ,94479	_	97,91 99,08	192,01	5,90	52,08 51,78	,5259	100 + 35	,97154 ,97207		244,79	337,75	7,04	29,61	,299
	,94530		100,27	194,31	5,96	51,47	,5197	33	,97260	-	252,20	345,22	6,98	28,97	,292
82	,94581		101,50	195,50	6,00	51,15	,5166		,97313		260,10 268,48		6,96	28,32	,286 ,279
-	,94632		102,75	196,71	6,04	50,83	,5134	$\frac{31}{100 + 30}$,	277,44	370,55	6,80	26,98	,272
00 + 80	,94003 ,94736		104,03	197,97 199,25	6,10	50,19	,5068		97473ء		286,99	380,18	6,81	26,30	,265
	,94788		106,70	200,56	6,14	49,86	,5035	28	,97527		297,25		6,76	25,61	,258
	,94841		108,09	201,91	6,18	49,52	,5001 ,4967	27	,97582 ,97638		308,26	401,57	6,69 6,62	24,90 24,18	,251 ,244
	•94894 •94947		109,51	203,30	6,25	49,18	,4932	100 + 25			332,92	426,35	6,57	23,45	,236
	•94947 •95000	_	112,47	206,19	6,28	48,50	,4897	24	1	1	346,79	440,30	6,49	22,71	,229
73	,95054		114,02	207,68	6,34	48,15	,4861	23			361,86		6,39	21,95	,221
	,95108	_	115,59	209,24 210,83	6,35	47,79	,4826	22			378,32	472,00	6,32	21,18	,213
-	,95163		117,22	212,48	6,41	47,43	,479° ,4752	100 + 20			416,15	510,03	6,12	19,61	,198
	,95272	_	120,61	214,17	6,44	46,69	,4715	19	,98067	/ —	438,05	532,04		18,80	,189
68	,95327		122,38	215,90	6,48	46,31	,4677	18	, J		462,40	556,50	5,90	17,97	,181
	95383		124,21	217,69 219,54	6,52	45,93	,4639 ,4600	17	1		489,59	583,82 614,55	5,77	17,13	,172 ,164
00 + 65	•95439 •05405		128,04	221,44	6,60	45,16		100 + 15	I	_	554,88	649,38		15,40	,155
	,95550		130,14	223,41	6,63	44,76	,4520		,98430		594,51	689,17	5,34	14,51	,146
63	,95606		132,10	225,44	6,66	44,36	,4479	13	,98512	:	640,20	735,06	5,14	13,00	,137
	,95663		134,23 136,44	227,53	6,70	43,95	,4438 ,4396		,98598 ,98688		693,59 756,64	788,57 851,81	15,02	12,68	,128 ,118
00 + 60	·95719	-	138,71	231,95	6,73	43,53	,4353	100 + 10		_	832,31	927,63	4,68	10,78	,108
59	,95831		141,06	234,27	6,79	42,68	,4310	9	,98882		924,79	1020,34	4,45	9,80	,099
58	,95889		143,49	236,66	6,83	42,25	,4256	8	,98987		1040,39	1136,14	4,25	8,80	,088
	,95948 ,96002		146,01 148,63	239,15	6,86	41,81	,4222	7 6			1189,02	1284,98 1483 36	4,04	7,78	,078 ,068
		_	151,32	241,73	6,92	40,91	,4132	100 + 5			1664,03	1761,04	3,59	5,08	,057
00 + 55	,96116		151,32	247,17	6,94	40,45	,4086	4	,99473	<u> </u>	2080,77	2177,44		4,59	,046
53	,96173		157,00	250,05	6,95	39,99	,4039	3	,99613	-	2773,36	2871,27	3,09	3,48	,035
52	,96229 ,96286	_	160,02 163,18	253,05 256,16	6,97 7,02	39,52 39,04	,3991 ,3942	2	,99763		4161,48 8323,10	4258,69 8420,51	2,79	2,35	1 -

HEAT 44°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-		Spirit and	Specific	Spirit	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	measure.	mixture.	on of	spirit	pliers.
		sure.				per cent.	1			sure.			bulk.	per cent.	
C . W								Sp. + W.	-		,				
Sp. + W.								pp. + 11.						·	
100 + 0	,83261	100		100,00		100,00	1,0092	100 + 50	,90424	100	41,59	138,12	3,47	72,40	,7307
1			0,83	100,72	0,11	77.	1,0020	. 51	1		42,42	138,90	3,52	71,99	,7266
2			1,66	101,44	0,22	98,57	,9949	52		-	43,25	139,69 140,47	3,56 3,61	71,59	,7225 ,7184
3	,83934 ,84148		2,50 3,33	102,17	0,33	97,87 97,18	,9878 ,9808	53 54	1 -	1	44,08 44,9 2	141,26	3,66	70,79	,7145
100 + 5			4,17	103,64	0,43	96,49	,9738	100 + 55	()		45,75	142,04	3,71	70,40	,7105
100 + 5	,84559		4,99	103,04	0,62	95,81	,9670	56			46,58	142,83	3,75	70,01	,7066
7	,84757		5,82	105,11	0,71	95,14	,9602	57	91019)	47,41	143,62	3,79	69,63	,7027
8	84950		6,66	105,85	0,81	94,47	,9535	58	1	- (48,24	144,40	3,84	69,25	,6990
***************************************	,85139		7,49	106,60	0,89	93,81	,9468	59			49,08	145,19	3,89	68,87	,6952
100 + 10			8,32	107,34	0,98	93,16	,9402	100 + 60	1//		49,90	145,98	3,92	68,50 68,13	,6913 ,6877
11	11000		9,15	108,09	1,06	92,52	,9337	62	,91331	•	50,74 51,57	140,77	3,97 4,01	67,77	,6840
13		_	10,82	100,59	1,15	91,00	,9209	11	,91482		52,40	148,35	4,05	67,41	,6803
14			11,65	110,35	1,30	90,62	,9146	64		1	53,23	149,14	4,09	67,05	,6766
100 + 15	,86177	7 -	12,47	III,II	1,36	90,00	,9083	100 + 65			54,07	149,93	4,14	66,70	,6731
16	,86338	3 -	13,31	111,86	1,45	89,39	,9022	66	1 /	- 1	54,90	150,72	4,18	66,35	,6696
17	1		14,14	112,62	1,52	88,79	,8961	67	1		55,73	151,51	4,22	66,00	,6661
16	11-1-2		14,97	113,38	1,59	88,20 87,61	,8901 ,8842	68	,91842		56,56	153,09	4,31	65,32	,6592
	•		15,80	114,14		87,03				-	58,23	153,88	4,35	64,98	,6558
100 + 20	1 ~		17,47	114,91	1,73	86,45	,8725		,9204	1	59,06	154,67	4,39	64,65	,6524
2:		3	18,30	116,43	1,87	85,88		7:	1		59,89	155,47	4.42	64,32	,6491
2.	,8738	,	19,13	117,19	1,94	85,32	,8612	7:			60,72	156,26	4,46	63,99	,6458
2.			19,96	117,96	2,00	84,77	,8556		-	-	61,55	157,05	4,50	63,67	,6426
100 + 2			20,79	118,73	2,06	84,23	,8500	100 + 7	,9230		62,39	157,85	4,54	63,35	,6394 ,6361
20	12/1/		21,63	119,50	2,13	83,69	,8445 ,8392	7	,9237		64,05	159,44	4,61	62,72	,6330
2			23,29	121,04	2,25	82,62	,8339	7			64,88	160,23	4,65	62,41	,6299
20	00	7 -	24,13	121,81	2,32	82,09	,8286	7			65,71	161,02	4,69	62,10	,6268
100 + 30	,88300	0 _	24,96	122,58	2,38	81,58					66,55	161,82	4,73	61,80	1
3	,8842	3 -	25,78	123,36	2,42	81,07		8	1 /		67,37	162,61	4,76		
3:	,8854	3 -	26,61	124,13	2,48	80,56		8 8	2 ,9273 3 ,9278		68,20	163,41	4,79		
	,8866 4,8877		27,44	124,90	2,54	79,58					69,87	165,01	4,86		
100 + 3	-		29,12		2,67	79,09		100 + 8		-	70,70	165,79	4,91	-	
3	6,8900	7 _	29,95		2,73	78,61	,7933	8	6 ,9295	8	71,53	166,60	4,93	60,02	,6058
3	7 ,8911	8 —	30,78		2,79	78,13	,7885	8	7 ,9301	7 -	72,37	167,40	4,97	59,74	,6029
3	8 ,8922	7 -	31,61	128,77	2,84	77,66			9306	7 -	73,20	168,19		59,46	,6001
	9 ,8933		32,44		2,89	77,19	_	-13	9 ,9312	-	74,03	168,99			-
100 + 4	0,8944	0 -	33,28		2,95	76,73	77744	100 + 9	0,9317		74,87 75,70	169,79	5,08	58,90 58,62	
	.1 ,8954 2 ,8965		34,11		3,01	75,83	7698, 3 7653, 3		2,9317		76,53	171,39			
	3,8975		35,77		3,12	75,38			3,9332		77,37	172,19		58,08	,5861
	4 8985		36,60		3,17	74,94	1		4 ,9337		78,19	172,99		1 0	,5834
100 + 4		_	37,43		3,22	74,51	,7519	100 + 9			79,02	173,79			
4	6 9005	I	38,26	134,99	3,27	74,08		11	6,9347		79,84	174,58			1
	.7 ,9014		57		3,33	73,69		11	7 ,9352		80,67	175,38	5,29	57,02 56,76	
	8 ,9024		10000		3,38	73,23		11	8 ,9356 9 ,9361		82,34	176,98			,5729 ,5703
14	9,9033	3 -	140,76	137,33	3,43	1 /2,01	7349	/ [I]	フレップコント	اد		1 -10,90	روزرا	رزدر ا	و ۱۰۵/۷۶

HEAT 44°.

ı.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-		Water and			Water	Bulk of	Dimi-	Quan-	Decimal
Spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	ınulti- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent.			,	sure.			bulk.	per cent.	
W. + Sp.				7.				W∙+Sp.							
100+100	,93662	100	83,18	177,79	5,39	56,24	,5676	100 + 50	,96311		166,37	259,35	7,02	38,56	,3891
	,93710	_	84,04	178,60	5,44	55,99	,5650 ,5624	49	,96368 ,96424		169,77 173,30	262,72 266,24	7,05	38,06 37,56	,3842 ,3791
98 97	,93757 ,93804	_	84,89 85,76	179,43 180,27	5,46	55,73	,5598	48 47	,96480		176,99	269,91		37,05	3740
96	,93852		86,65	181,13	5,52	55,21	,5571	46	,96536		180,83	273,74		36,53	,3687
100 + 95		_	87,56	182,00	5,56	54,94	,5545	100 + 45	,96592		184,86	277,75	7,11	35,00	,3634
	,93947 ,93994		88,49 89,44	182,90	5,59 5,62	54,67 54,40	,5518	44 43	,96647	_	189,06 193,46	281,94 286,34	7,12	35,46 34,92	,3580
	,94041		90,41	184,77	5,64	54,12	,5462	42	,96757		198,06	290,95		34,37	,3469
91			91,41	185,73	5,68	53,84	•5434	-	,96812		202,89		7,12	33,81	,3412
100 + 90			92,43	186,72	5,71	53,55	,5405	100 + 40			207,96	300,83 306,18	7,13	33,24 32,66	,3355
	,94186 ,94236		93,47	187,71 188,75	5,76	53,26	,5377 ,5348	39 38			213,29	311,81		32,07	,3237
87	,94286		95,61	189,80	5,81	52,68	,5318	37	,97026		224,83	317,74		31,47	,3177
	,94337		96,72	190,89	5,83	52,39	,5288		•97°79		231,07		7,06	30,86	,3115
100 + 85 84		i	97,86	191,98	5,88	52,09	,5257	100 + 35	,97132 ,97186		237,67 244,66	330,62 337,64	7,05	30,25	,3052
83			99,03	193,12	5,91	51,79	,5195	34	,97240	_	252,07		6,97	28,98	,2925
82	,94540	-	101,45	195,47	5,98	51,16	,5164	32	,97294	-	259,96	353,02	6,94	28,33	,2859
81	1 1 1 1 1 1 1		102,69	196,68	6,01	50,84	,5132		,9734 8	-	268,34	361,43	6,91	27,67	,2792
100 + 80		_	103,97	197,94	6,03	50,52	,5099	100 + 30			277,29 286,84	370,41 380,04	6,88	27,00 26,31	,2724
79			105,29	199,22	6,11	49,86	,5033	29 28	397511		297,09	390,34		25,62	,2586
77	,94803		108,03	201,88	6,15	49,53	14999	27	,97567	-	308,09	401,42	6,67	24,91	,2515
	,94855	-	109,45	203,27	6,18	49,19	,4965		,97623		319,95	413,34	6,61	24,19	,2442
74	1 - /		110,91	204,69 206,16	6,22	48,85 48,50	,4930	100 + 25 24	1		332,74 346,60	426,18 440,12		23,46	,2368
73	1	1	113,96	207,65	6,31	48,15	,4859	23			361,67	455,28	6,39	21,96	,2217
72	1	.)	115,53	209,20	6,33	47,80	,4824	22			378,12	471,80		21,19	,2139
71		-	117,16	210,80	6,36	47,44	,4788	21			396,12	489,90	-	19,62	,2060
100 + 70	,95180 ,95236		118,83	212,44	6,39	47,07 46,70	,4751 ,4713		,97991 ,98057		415,93	509,80 531,80		18,81	,1980 ,1897
68	,95291	_	122,32	215,86	6,46	46,32	,4675	18	,98125	—	462,15	556,24	5,91	17,98	,1814
66	1 11		124,14	217,65	6,49	45,94	,4637		,98196		489,33	583,55	5,78	17,14	,1729
100 + 65	2013	-	126,03	219,50	6,53	45,56	,4598	100 + 15	,98269	-	519,92	614,26	-	15,41	,1643
	,95459 ,95515		127,97	221,40	6,57	45,17 44,77	,4558		,98424		554,58 594,19	649,07 688,83	5,36		,1555
63	,95571	-	132,03	225,40	6,63	44,37	,4478	13	,98506	_	639,85	734,70	5,15	13,61	,1374
62	,95628 ,95684	-	134,16	227,49	6,67	43,96	,4436	12	,98593		693,22	788,18			,1280
100 + 60			136,37	229,67	6,70	43,54	,4394	100 + 10	,98683		756,23	851,38 927,16		11,74	,1185
59	95797 95797		130,04	231,90	6,74	43,12	,4352 ,4309		,98879		924,29	1019,81		9,80	,0990
58	,95855	-	143,41	236,61	6,80	42,26	,4265	∥ . 8	,98984	-	1039,83	1135,54	4,29	8,81	,0889
	,95915		145.93	239,10 241,68	6,83	41,82	,4220 ,4176	7	,99097		1188,38	1284,30		7,79 6,74	,0786
100 + 55			148,55		6,89	41,37		100 + 5	,99215	-	1663,73	1760,09	-	5,68	,0081
54	,96084		154,03	244,35	6.92	40,46	,4085	4	1		2079,65	2176,26	3,30	4,60	,0464
53	,96141		156,91	249,99	6,92	40,00	,4038	3	,99612		2772,87	2869,71	3,16	3,48	,0352
52	,96197 ,96255		159,94	252,99	6,95	39,53	,3990	. 2	,99762		4159,23 8318,63	4256,39 8415,96	2,84	2,35	,0237
1	179-435)	,,,,,,	, ~50,10	1 2,77	1 33,23	1 2 3 2 4 *	1. T	199941		1 0 3 2 0 3 0 3	, ~+.3,90	12,0/	, ,,,,,	1,0120

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49,90289

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134,20

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136,54

137,32

TABLE I.

HEAT 45°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk,	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spiri by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	1	Decimal multi- pliers.
$Sp_{i} + W$	7-							Sp. + W.							
	83214, 1,83444	100		100,00	_	100,00	1,0087	100 + 50			41,57	138,11	3,46	72,41	,7303
	2 ,83669		0,83	100,72	0,11	99,28	1,0014 ,9943	51 52	,90469 ,90557		42,40 43,23	138,89	3,51	72,00	,7262
	83888, 3 4,84102	_	2,49	102,17	0,32	97,88	,9872	53	,90643	_	44,06		3,55 3,60	71,59	,7221
100 +	,84310		3,32 4,16	102,90	0,42	97,18 96,49	,9802	54			44.89	141,25	3.64	70.80	,7141
1	5 ,84513		4,99	104,37	0,53	95,81	,9733 ,9664	100 + 55 56	,90812 ,90894	_	45:73 46,56	142,03	3.70 3.74	70,41 70,02	,7102
	,84711 8,84904		5,82 6,65	105,11	0,71	95,14	,9596	57	,90975	-	47,39	143,61	3,78	69,63	57024
	,85093	_	7,48	105,85	0,80	94,47 93,81	,9529	58 59	,91054 ,91132	_	48,22 49,05		3,83 3,87	68,88	,6986 ,6948
100 + 10	,85277	_	8,31	107,34	0,97	93,16	,9397	100 + 60	,91211	_	49,88	145,97	3,91	68,51	,6910
1	1 ,85456 2 ,85630	_	9,14	108,09	I,05	92,52	,9332			-	50,72	146,76	3,96	68,14	,6873
ा	,85801		10,81	ro9,59	1,22	91,25	,9204		,91363 ,91438	_	51,55 52,38		4,00 4,04	67,77 67,41	,6836 ,6799
-	,85968		11,64	110,35	1,29	90,63	,9141	64	,91511		53,21	149,13	4.08	67,05	,6763
100 + 1			12,47	111,10	1,37	90,01	,9078	100 + 65	,91584 ,91656	-	54,04	149,92	4,12	66,70	,6728
1.7	,86450		14,13	112,62	1,51	88,79	,8956		,91728	_	54,87 55,70	150,71	4,16 4,20	66,35 66,00	,669 3 ,6658
10	1 ~ 71	_	14,96	113,38	1,58	88,20	,8896		,91799	-	56,53	152,29	4,24	65,66	,6623
100 + 20		_	15,79	114,14	1,65	87,61	,8837		,91869 ,91937		57:37 58,20	-		65,33	,6589
2.1	87054	-	17,46	115,66	1,80	86,46	,8721		,92004	_	59,03		4,33 4,37	64,99 64,66	,6555
22	1	_	18,29	116,42	1,87	85,89	,8664	72	,92071	-	59,86	155,46	4,40	64,33	,6488
	,87477	=	19,12	117,19	1,99	85,33 84,78	,8607 ,8551	1	,92136		60,69		4,44 4,48	64.00	,6455 ,6423
100 + 25			20,78	118,72	2,06	84,23	,8496		,92264	_	62,36	157,83	-	63,36	,6391
26 27	100		21,62	119,49	2,13	83,69	,8441	76	,92327	-	63,19	158,63	4,56	63,04	,6359
28	,88005	_	23,28	121,03	2,25	82,62	,8387 ,8334	77 78	,92389 ,92450		64,02 64,85	159,42		62,42	,6327 ,6296
29			24,11	121,80	2,31	82,10	,8281	79	,92510		65.68	161,01	4,67	62,11	,6265
100 + 30 31	1 00 1	_	24,94 25,77	122,57	2,37	81,58	,8229 ,8177		,92570		66,51 67,34		4,70	61,80	,6234
32	,88498	_	26,60	124,12	2,48	80,57	,8126	82	,92688	_	68,17		4,74 4,77	61,50	,6203 ,6173
33 34	1 00 1		27,43 28,27	124,89	2,54	80,07	,8076	83	,92745	-	69,01	164,19	4,82	60,90	,6143
100 + 35	,88849		29,10	125,66	2,66	79,58	,8026 ,7977	-	,92803 ,92859		70,67			60,61	,6113
36	,88962		29,93	127,21	2,72	78,61	,7929	86	,92915	_	71,50	166,58		60,32	,6084 ,6055
	,89073		30,76	127,99	2,77	78,13	,7881	87	,92970	-	72,33	167,38	4.95	59:75	,6026
	,89290	- 1		128,76	2,83 2,88		,7833 ,7786	89	93024		73,16	168,17 168,97	4,99 5.02	59,46 59.18	,5998
100 + 40			33,26	130,32	2,94	76,73	,7740	100 + 90	,93131		74,83	169,77		58,90	,5970 ,5941
	,89502 ,89606			131,09		76,28 75,83	,7694 ,7649		,93182		75,66	170,57	5,09	58,63	,5913
43	,89708	=	35,75	132,65			,7604		,93233	_	76,49 77,32	171,37	5,12	58.35 58,08	,5886 ,5859
	,89809		36,58	133,42	3,16	74,95	,7560	94	93333	_	78,15	172,97		57,81	,5832
100 + 45	1,899000		37.41	134.20	2.21	74.51	7516	100 + 00	.02282		78.08	T72 72	COX		-0

,7516 100 + 95 ,93382

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,5805

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3,26

3,32

3,37

3,42

74,51

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,7472

,7429

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72,82 ,7345

HEAT 45°.

			,					,							
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and	Specific	Spirit	Water	Bulk of	Diminu- tion of	Quan-	Decimal multi-	Water and spirit by		Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
spirit by weight.	gravity.	by mea-	by measure.	mixture.	bulk.	tity of spirit	pliers.	weight.	gravity.	mea-	measure.	inixtuici	on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.								W. + Sp.							. 1
100+100	,93621	100	83,14	177,76	5,38	56,25	,5674	100 + 50	,96280	100	166,28	259,29	6,99	38,57	,3890
99			83,99	178,58	5,41	56,00	,5648	49		-	169,68	262,66 266,18	7,02	38,07	,3840
98 97	,93717 ,93764		84,85 85,72	179,41 180,25	5,44 5,47	55,74	,5622	48 47	1 - /		173,21 176,90	269,85	7,03	37,57	,3789
96	,93812		86,61	181,11	5,50	55,22	,5569	46	,96507		180,74	273,68	7,06	36,54	,3686
100 + 95			87,52	181,98	5,54	54,95	,5543	100 + 45	1 //		184,76 188,96	277,68 281,87	7,08	36,01	,3633
94 93		_	88,45 89,40	182,88 183,80	5,57 5,60	54,68 54,41	,5515 ,5488	44 43	1 - // -		193,36	286,26	7,10	35,47	3579 3524
92	,94001		90,37	184,75	5,62	54,13	,5460	42	,96730	—	197,96		7,09	34,38	,3468
91			91,36	185,71	5,65	53,85	,5432	41			202,78		7,09	33,82	,3411
100 + 90	,94096 ,94146		92,38 9 3 ,42	186,69 187,69	5,69	53,56	•5403 •5374	100 + 40 39	1 - /		207,85	300,75		33,25	,3354
88	,94196		94,48	188,72	5,76	52,98	,5345	38	,96948	3 -	218,79	311,71	7,08	32,08	,3236
	,94246 ,94 2 97	_	95,56	189,78	5,78	52,69 52,39	,5315	37 36			224,71	317,64	7,04	31,48	,3176
100 + 85			97,81	191,96	5,85	52,09	,5254	100 + 35			237,55	339,52	7,03	30,26	,3052
84	94399	—	98,98	193,09	5,89	51,79	,5223	34	,97164	-	244,53	337,53	7,00	29,63	,2988
83 82		t .	100,17	194,25	5,92	51,48	,5192 ,5161	33	1	1	251,94 259,82		6,9 6 6,9 2	28,99	,2924
81	1	_	101,39	195,44	5,95	51,17	,5129	32 31	,97274		268,20		6,89	27,68	,2792
100 + 80	,94605	_	103,92	197,91	6,01	50,53	,5097	100 + 30	-	.,	277,14	370,28	6,86	27,01	,2724
79		1	105,24	199,19	6,05	50,20	,5064	29 28	1		286,69 296,93	379,90 390,20	6,79 6,73	26,32	,2655
78 77	,94711 ,94764		107,98	200,50	6,09	49,87	,5031	27	1.71	1	307,93		6,66	25,63	,2585
	,94817		109,40	203,24	6,16	49,20	,496 3	26	,97608	3	319,78	413,19	-	24,20	,2441
100 + 75	1	1	110,86	204,66	6,20	48,86	,4928	100 + 25	1 -		332,57	7426,01	6,56	23,47	,2368
74 73		1	112,35	206,12	6,23	48,51	,4893 ,4858	24 23			346,42 361,48	439,94	6,39	22,73	,2293
72	,95033		115,47	209,17	6,30	47,81	,4822	22	,97850	-	377,92	471,60	6,32	21,20	,2139
-	,95088	-	117,10	210,77	6,33	47,45	,4786	21		-	395,91	489,69		20,42	,2060
100 + 70 60		3	118,77	212,41	6,36	47,08	,4749 ,4711	100 + 20			415,71	509,58 531,56		19,62	,1979
68	,95254	-	122,26	215,82	6,44	46,33	,4673	18	,98116	5	461,90	555,99	5,91	17,98	,1814
66	1-770		124,08	217,61	6,50	45,95 45,56	,4635 ,4596	17 16			489,07	58 3,28 61 3, 97	5,79 5,66	17,14	,1729
100 + 65			127,90	221,36	6,54	45,17		100 + 15			554,28	648,76			,1555
64	95479	*****	129,90	223,32	6,58	44,78	,4517	14	. 98417	7 —	593,87	688,50	5,37	14,52	,1465
63	,95535 ,95592		131,96	225,35	6,61	44,38	,4476 ,4434	13 12	1		639,55	734,34 787,79	5,21	13,61	
61			136,30	229,62	6,68	43,55	,4392	11		3 _	755,83	850,95			,1185
100 + 60	,95705		138,57	231,85	6,72	43,13	,4350	100 + 10	,98774	-	831,42	926,69	4,73	10,79	,1088
59	,95762 ,95820	_	140,91	234,17	6,74	42,70	,4307	9	,98875 ,98981		923,80	1019,29		9,81	
	,95878		143,34	236,57	6,77	42,27	,4263	7	,9999		1039,27	1134,95		8,8 ₁	,0889
	,95935		148,47	241,63	6,84	41,38	,4174	6	,99213	3	1385,70	1481,78	3,92	6,75	,0681
100 + 55			151,16	244,30	6,86	40,93	,4129	100 + 5	.99338		1662,83	1759,14			,0573
54	,96051 ,96108		153,93	247,06 249,93	6,87	40,47	,4083	4 3	1 2		2078,54	2175,09 2868,16	3,45	4,60	,0464
52	,96165	_	159,86	252,93	6,93	39,54	,3988	2	,9976	1 -	4156,99	4254,09	2,90	2,35	,0237
51	1,96223		163,01	256,05	6,96	39,06	,3939]] 1	1,99919	9 —	8314,17	8411,41	2,76	1,19	,0120

TABLE Í.

HEAT 46°.

with the part of] I.	II.	Ш.	IV.	v .	VI.	VII.	VIII.	Ι.	II.	Ш	IV.	v.	VI.	VII.	Ain.
wight wigh	Spirit and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water by	Bulk of	Dimi-	Quan-	Decimal
Sp. + W Sp.	water by	gravity.		by.	mixture.		tity of	multi-		gravity.		measure.	mixture.			
Sp. + W	weight.			measure		bulk.		pliers.	weight.							pliers.
100 + 0			suie.				per cent.				sure.			Duik.	per cent.	
100 + 0	Sp. + W.			<i>'</i>				1	Sp. + W.						l	1 • • •
1,83397	ор. т. т.				*									.		
1,83397	100 + 0	,83167	100		100,00	_	100,00	1,0081	100 + 50	,90336	100	41,55	138,09	3,46		,7300
3,83842	1	,83397			100,72	0,11	99,28			,90426	-	42,38		3,51		,7259
4, 34956 - 3,332 102.90 0,42 97.18 97.97 54 99.685 - 44.87 141.23 3.04 70.81 27.18 100 + 5	2	,83622		1,66	101,44	0,22						43,20			71,60	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3			2,49	102,17	0,32		9867وو	53			44,03	140,44	3,59	1 "	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4	,84056	- :	3,32	102,90	0,42	97,18	•9797	54	,90685		44.87	141,23	3,64	70.81	,7138
6	100 + 5	,84263	_	4,16	103,63	0,53	96,49	9727	100 + 55	,90768		45,70		3,69	70,42	,7098
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	,84467			104,37			,9659	56	,90851	-		142,80	3,73	70,03	,7059
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7				105,11	0,71	95,14	,9591	57	,90932	_	47,36	143,59		69,64	
9, 85046 — 7,48 106.59 0,89 93.81 9458 59.91089 — 49.02 145.10 3.80 08.89 ,0945 110 + 10 ,85230 — 8,31 107,34 0.97 93.16 ,9302 100 + 60 .91166 — 49.85 145.95 3.90 68.51 .0987 111,85410 — 9,14 108.09 1,05 92.52 ,9327 61.91244 — 50.69 146.74 395 68.14 .0876 112,85584 — 9,97 108.84 1.13 91.88 ,9263 62.91320 — 51.52 147.53 3.99 67.8 .0833 13,85755 — 10.81 10.95 1.22 91.22 91.25 .9199 64.91468 — 53.18 149.11 4.07 67.06 .6706 14 ,85922 — 11.63 110.35 1.28 90.63 .9136 64.91468 — 53.18 149.11 4.07 67.06 .6706 100 + 15, 86085 — 12.46 111.10 1.36 90.01 90.74 100 + 65, 91542 — 54.01 149.90 4.11 60.71 .076.0 17.86404 — 14.12 112.62 1.50 88.79 .8992 68.91757 — 50.50 15.42 7 4.23 65.63 66.0 1.6655 19.8672 — 15.78 114.14 1.56 87.61 .88.92 68.91757 — 50.50 152.27 4.23 65.30 .6655 19.86712 — 15.78 114.14 1.56 87.61 .88.33 69.91826 — 57.33 153.06 4.27 65.33 .9586 100 + 20, 86859 — 16.62 114.90 1.72 87.03 .8716 — 70.91895 — 58.10 153.85 4.31 65.00 4.22 .87152 — 118.28 116.42 1.86 85.86 85.86 .8665 — 72.92028 — 59.82 155.44 44.38 64.34 .0486 2.23 .87292 — 19.11 117.18 1.93 85.33 .8603 — 73.192094 — 60.65 156.23 4.42 64.01 .6655 2.24 .87300 — 21.61 119.48 2.13 83.60 .8437 — 74.92158 — 61.48 157.02 4.46 63.69 .6422 2.878700 — 21.61 119.48 2.13 83.60 .8437 — 74.92158 — 61.48 157.02 4.46 63.69 .6422 2.88 87960 — 22.47 121.03 2.24 82.63 .8330 — 74.92158 — 61.48 157.02 4.46 63.69 .6422 2.88 87960 — 23.27 121.03 2.24 82.63 .8330 — 77.92245 — 60.64 11.10 121.80 2.30 82.10 82.77 .92245 — 63.15 158.61 4.54 63.05 .6323 31.88332 — 22.577 123.34 2.42 82.63 .8330 — 78.9228 — 79.9228 — 60.64 11.10 63.77 4.88 60.15 .33 .88034 — 29.90 12.43 2.26 79.58 .8227 — 79.9248 — 60.81 160.39 4.88 60.1 60.1 60.1 60.1 60.1 60.1 60.1 60.1	8	,84858	-	6,65	105,85	0,80	94,47	,9524	5.8	,91011		48,19	144,37			
11,85410	9	,85046	_	7,48	106,59	0,89	93,81		59	,91089		49,02	145,16	3,86		
11 85410 9,14 108,09 1,05 92,52 9327 611,91244 50.69 146,74 3.95 68.14 .0875 12,85584 9.97 108,84 1,13 91,88 9263 62,91320 51,52 147,53 3.96 67,42 67,06 146,74 3.95 68.14 .0875 14,85922 11,63 110,35 1,28 90,63 .9136 64,91468 53,18 149,11 407 67,66 .670	100 + 10	,85230	_	8,31	107,34	0,97	93,16	,9392	190 + 60	,91169	_	49.85	145,95	3,90	68,51	,6907
12,85584	11	,85410			108,09						_		146,74	3.95	68.14	,6870
13 85755 - 10,81 100,55 1,22 91,25 91,99 63 91,906 - 52,35 148,32 4-3 67,42 97,06 100 + 15 86085 - 12,46 111,10 1,36 90,01 90,74 100 + 65 91,542 - 54,01 149,90 4,11 60,71 67,06 67,00 17 86404 14,12 112,62 1,50 88,79 88,52 68 91,757 - 55,65 152,27 4-33 65,67 6622 19,86712 - 15,78 114,14 1,64 87,61 8833 69 91826 - 57,33 153,06 4-27 65,33 65,86 100 + 20 86859 - 16,62 114,90 1,72 87,03 87,74 100 + 70 91895 - 58,10 153,85 4,31 65,67 6622 1,87088 17,45 115,66 1,79 86,46 8,8716 88,89 8666 72 92028 - 59,90 154,64 4,56 64,7 65,10 65,23 24,87431 19,94 117,95 1,99 84,78 88,47 74,92158 - 61,48 15,702 4,40 64,61 64,13 64,61 64,13	12			- ' '	108,84	_	91,88	,9263	62	,91320		51.52	147,53			,6833
14	13						91,25		63	,91395		52.35	148.32	4,03	67,42	,6796
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14			11,63		1,28	90,63	,9136	64	,91468		53,18	149,11	4,07	67,06	,6760
16	100 + 15			12,46	111,10	1,36	90,01	,9074	100 + 65	,91542		54.01	149,90	4,11	66,71	,6725
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$,86247										54,84	150,69	4,15	66,36	,6500
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	17	,86404	1			1			67	,91686	-		151,48	4.19	66,01	,6655
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					113,38	- 1	88,20	,8:92	68	,91757			152,27		65,67	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	19	,86712						,8833	69	,91826	_	57.33	153,06	4,27	65,33	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 + 20	,86850		16.62	114.00	1.72	87.03		100 + 70	,91895	_	58.16	153,85	4.31	65,00	,6552
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							86,46	,8716			1.	59,00	154,64	4,36	64 67	,6519
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	t i				116,42				72	.92028	_	59.82	155.44	4,38	64,34	,6486
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	23	,87293		19,11		1,93	85,33	.8603	73	,92094	-			4,42	64,01	,6453
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				19,94	117,95		84,78	,8547		,92158		61,48		4.46	63,69	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 + 25	,87568		20,77	118,72	2,05	84,23	,8491	100 + 75	,92221	_	62,32	157,81	4,51		,6388
27, 87832 — 22,44	26						83,69	,8437	76		1	63.15		4.54	63,05	,6356
28, 87960 — 23.27 121,03 2,24 82,63 8330 78 92408 — 64,81 160,20 4.65 62,42 ,0293 62,10 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,11 62,65 62,61 62,11 62,65 62,11 62,65 62,61 62,11 62,55 62,61 62,11 62,55 62,61 62,11 62,55 62,61 62,11 62,55 62,61 62,11 62,55 62,61 62,11 62,55 62,61	27	,87832		22,44		2,18	83,16	,8383	77	,92347		63,98		4.58	62,73	,6324
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	28	,87960	-		121,03	2,24	82,63	,8330	78					4.61	62,42	,6293
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	29	,88086		24,10	121,80	2,30	82,10	,8277	79	_						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 + 30			24,93	122,57	2,36	81,59		100 + 80			66,47				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 - 1	,88332						,8173	81			67,30		4,72	1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,88454	_	26,59		2,48	80,57		1			68,13				,0170
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	33	,88573		27,42	124,88	2,54	80,07				1			4,80	00,91	,0140
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34	,88690		28,25		· 2, 60	79,58	,8022			-	69,80	-			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	100 + 35			29,09	126,43	2,66	79 10	7973					165,76	4,87	60,32	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 - 2			29,91	127,20	2,71		,7925	1							,0053
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	37	,89029	-	30,74	127,98	2,76					-		167,36	4,93	59.75	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,7829	88				108,10			,5990
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				32,40	129,53	2,87						-				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				33,24	130,31	2,93										
4 TT (177) - 1 JT 2 1 TO 1 JOT 1 JOT 1 JOT 1 JOT 1 JOT 1 JOT 1 JOY 2 1 1 1 1 18 1 1 8 1 1 1 1 1 1 1 1 1 1	41	,89458	-											1- '		
	42	,89562						,7646	92					1-		
	1	1 0 6														
1 1 2 7 7 3 3 3 7 3 7 1 2 7 1 2 7 2 7 2 7 2 7 2 7 2 7 2 7 2		1	commence.		133,41	3,15	74,95				-			-	_	
1555 1 TURY DESTRUCTION OF THE STEED A DESCRIPTION OF THE PROPERTY OF THE STEED AS A STEED AS A STEED A STEED A	100 + 45	,89864		37,39	134,19	3,20								1		,5802
46[.89962] - [38.22] 134.97 [3.25] 74.09 [.7469]90[.93389] - [.79.75] 174.53 [5.22] 57.30 [.577]	46	,89 9 62		38,22		3,25	74,09	,7469					174.53			
47 ,90058 3905 135,75 3,30 73,66 ,7426 97 ,93437 80,59 175,33 5,20 57,04 5755 3,50 57,04 5755 3,50 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755 57,04 5755				39.05	135,75	3,30		,7426					175,33		57,04	,5750
1 "Tolygon Tolygon												81,41				
49,90245 - 40,72 137,31 3,41 72,82 ,7342 99,93533 - 82,25 176,93 5,32 56,52 ,569	49	1,90245		40,72	137,31	3,41	1 72,82	7342	99	9353	31 -	1 02,25	1 170,93	15,32	1,50,52	,5698

HEAT 46°.

		-	1	·	(1	1					-	i i
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Water and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Water and			Water	Bulk of	Dimi-	Quan-	Decimal
spirit by	gravity.	by	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
weight.		mea- sure.	incasure.		Duik.	per cent.	pilers.	weight.		sure.				per cent.	
777 . C								W. + Sp.			-				
W. + Sp.															
100+100	,93580	100	83,09	177,74	5,35	56,26	,5672		,96250		166,19	259,22	6,97	38,57	,3889
	,93629		83,94	178,55	5,39	56,00	,5646	* 49			169,59 173,11	262,60 266,11	7.00	38,08	,3839 ,3788
Z	,93676	1	84,80	179,38	5,42	55,74	,5619	48 47			176,80	269,78		37,07	3737
97 96	1		86,56	181,08	5,48	55,22	,5567	46	,964.78		180,64	273,61		36,55	,3685
100 + 95			87,47	181,95	5,52	54,95	,5540	100 + 45	,96535		184,66	277,60	7,06	36,02	,3632
94	,93867		88,40	182,85	5,55	54,69	,5513	44			188,86	281,79 286,18	7,07	35,48 34.94	,3578
93			89,35	183,77 184.72	5,58	54,41 54,14	,5486 ,5458	43 42		_	193,23	290,78	7,07	34,39	,3467
	,93961 ,94008		90,32	185,68	5,63	53,86	,5430	41			202,67	295,60	7,07	33,83	,3410
100 + 90			92,33	186,67	5,66	53,57	,5400	100 + 40	,96814		207,74	300,66	7,08	33,26	,3353
89	,94106	-	93,37	187,66	5,71	53,28	,5372	39	,96869		213,06	305,99	7,07	32,68	,3295
	,94156		94,43	188,70	5,73	52,99	,5343	38 37			218,67		7,06 7,06	32,09	,3235
	,94207 ,94258		95,51	189,75 190,84	5,76	52,70 52,40	,5313	37 36		1	230,82	323,80	7,02	30,88	,3113
100 + 85			97,75	191,93	5,82	52,10	-	100 + 35			237,42	330,41	7,01	30,27	,3051
	,94360		98,92	193,07	5,85	51,80	,5221	34	,97142		244,40	337,42	6,98	29,64	,2988
83	,94411	_	100,12	194,22	5,90	51,49	,5190	33		1	251,80 259,68		6,94 6,91	29,00	,2924
82	,94462	_	101,33	195,41	5,92 5,95	50,86	,5159	32 31			268,05	1	6,87	27,69	,2792
100 + 80	,94514		103,86	197,88	5,98	50,54	,5094	100 + 30		-	276,99		6,85	27,02	,2724
79	1 5 1 7		105,18	199,16	6,02	50,21	,5062	29	,97420		286,53	379,76	6,77	26,33	,2655
78			106,53	200,47	6,06	49,88	,5029	28	7	1	296,77		6,72	25,64	,2585
77	,94727		107,92	201,81	6,11	49,54	,4995 ,4961	27 26			307,76	401,11	6,65	24,93 24,21	,2514
76 100 + 75	,94780 ,94834		109,34	203,21	6,18	48,87		100 + 25		-	332,39	425,83		23,48	,2367
74	,94888		112,29	206,08	6,21	48,52	,4892	24	1	2	346,23	439,75	6,48	22,74	,2293
73			113,82	207,58	6,24	48,17	,4857	23			361,28	454,89		21,98	,2217
72	1		115,40	209,13	6,27	47,81	,4821 ,4784	22 21	1		377,71 395,70	471,39 489,47	6,23	21,21	,2139
71			117,03	210,73	6,30	47,46	,4747	100 + 20			415,48		6,13	19,63	,1979
100 + 70 60	,95106	1	120,42	212,37	6,33	46,72	,4710	19	1 0 (437,35	531,32		18,82	,1897
68			122,19	215,78	6,41	46,34	,4672	18	1 -		461,65	555,73		17,99	,1814
67			124,01	217,57	6,44	45,96	,4634	17 16) - ~		488,81	583,00	5,67	17,15	,1729 ,1643
	,95331		125,89	219,42	6,47	45,57	,4595 ,455 5	100 + 15			553,98	648,44		15,42	,1555
100 + 65 64	,95387 ,95444	1	127,83	221,31	6,53	44,79	,4515	14	,98409		593,55	688,16	5,39	14,53	,14.65
	,95500	1 -	131,89	225,31	6,58	44,38	,4475	13	,98493		639,21	733,97	5,24	13,62	,1374
62	,95557		134,02	227,41	6,61	43,98	,4433	I 2	,98580		692,48	787,39 850,52		12,70	,1280
	,95615	-	136,22	229,58	6,64	43,56	,4391	100 + 10	,98672		755,42 830,97	926,21		10,79	,1088
100 + 60	,95671		138,49	231,81	6,68	43,14	,4349 ,4306	100 + 10		_	923,30	1018,76	4,54	9,81	,0990
	,95787		143,26		6,74	42,28	,4262	- 8	,98976		1038,71	1134,36	4,35	8,81	,0889
57	,95845		145,78	239,00	6,78	41,84	,4218	7	,99090	1 .	1187,10	1282,95		7,79	,0786
	,95902		148,39	241,58	6,81	41,39	,4173		,99210	-	1384,96	1481,00		5,69	,0081
100 + 55	95959	-	151,08	244,25	6,83 6,84	40,94	,4082	100 + 5	,99334 ,99467	1	2077,42	2173,93	3,73	4,60	,0464
54	,96019 ,96076		156,74	249,87	6,87	40,02	,4035		,99608	-	2769,91	2866,63	3,28	3,49	,0352
52	,96134		159,77	252,87	6,90	39,55	,39 ⁸ 7	2	,99758	-	4154,78	4251,80	2,98	2,35	,0237
51	1,96192		162,92	255,99	6,93	39,06	,3938	I-	,99916	_	8309,71	8406,88	2,83	1,19	,0120

HEAT 47°.

1								1	Γ			Physics in system in the state of			
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	Ι.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	Stavicy.	mea-	measure.	mixture.	bulk.	spirit	pliers.	weight.	gravity.	mea-	measure.	mixture.	on of	spirit	pliers.
		sure.				per cent.				sure.			Bulk.	per cent.	
Sp. + W.				•				Sp. + W.							
100 + 0		100		100,00		100,00		100 + 50	,90292	100	41,52	138,08	3,44	72,42	,7296
1	,83350	-	0,83	100,72	0,11	99,28		51	,90382		42,35	138,86	3,49	72,01	,7255
2	,83575 ,83795		1,66 2,49	101,44	0,22	98,58 97,88	,9933 ,9862	52 53			43,18 44,01	139,65	3,53	71,61 71,21	,7214 ,7174
4		_	3,32	102,90	0,42	97,18	,9792		,90642		44,84	141,22	3,62	70,81	,7135
100 + 5			4,16	103,63	0,53	96,49	,9722	100 + 55	,90725		45,68	142,00	3,68	70,42	,7095
0 7	,84420 ,84618	_	4,98 5,81	104,37	0,61	95,81	,9654 ,9586	56	,90808 ,90889		46,51	142,79	3,72	70,03 69,64	,7056
, 8		_	6,64	105,85	0,80	94,47	,9519	57 58	,90969	1	47,33 48,17	143,58	3,75 3,81	69,27	,7018 ,6980
9			7,47	106,59	0,88	93,81	•9453	59	1		49,00	145,15	3,85	68,89	,6942
100 + 10		_	8,30	107,34	0,96	93,16	,9387		1.7	1	49,82	145,94	3,88	68,52	,6903
11	,85363 ,85538		9,13	108,09	1,04	92,52	,9322 ,9258	61 62			50,66 51,49	146,73	3,93	68,15 67,79	,6867 ,6830
13	,85709	-	10,80	109,59	1,21	91,25	,9194		,91353		52,32	148,31	3,98 4,01	67,43	,6793
14	,85876		11,63	110,34	1,27	90,63	,9131	64	,91426		53,15	149,10	4,05	67,07	6757ء
100 + 15	1		12,46	111,09	1,37	90,01	,9069				53,98	149,89	4,09	66,72	,6721
16 17	1 00 0		13,29	111,85	I,44 I,50	89,40 88,80	,9008 ,8947	66 6 ₇	[]],/		54,81 55,64	150,68 151,47	4,13	66,37	,6687 ,6652
18			14,94	113,37	1,57	88,21	,8887	68	,91714		56,47	152,25	4,22	65,67	,6617
19			15,77	114,13	1,64	87,62	,8828	69	-		57,30	153,05	4,25	65,34	,6583
100 + 20			16,61	114,89	1,72	87,04	,8769	100 + 70		1 1	58,13	153,84	4,29	65,00	,6549
2 I 2 2	,86962 ,87106		17,44	115,65	1,79 1,86	86,46 85,89	,8712 ,8655	7 I 7 2	,91919	1 1	58,96 59,79	154,63	4,33	64,67 64,34	,6516
23	,87247		19,10	117,18	1.92	85,33	,8598		1	! !	60,62	156,22	4,40	64,01	,6450
24			19,93	117,95	1,98	84,79	,8542	74			61,45	157,01	4.44	63,69	,6417
100 + 25 26	10.2.		20,76	118,71	2,05	84,24 83,70	,8487	100 + 75 76	,92178		62,29	157,80	4,49	63,37	,6385
27	,87787		22,43	119,48	2,12	83,16	,8432 ,8378	77			63.12 63,95	158,59	4,53	63,05 62,74	,6353
28	,87915		23,26	121,02	2,24	82,63	,8325	78	1		64,78	160,18	4,60	62,43	,6290
29	,88041		24,09	121,79	2,30	82,11	,8273	79		-	65,61	160,97	4,64	62,12	,6259
100 + 30	,88165 ,88288		24,92	122,56	2,36	81,59	,8221 ,8160	100 + 80			66 44 67,27	161,77	4,67	61,82	,6228
31	0.0		25,74	123,33	2,41	80,58	,8118	82	1 1 1		68,09	162,57	4,70 4,73	61,51	,6198
33	,88528	—	27,40	124,87	2,53	80,08	,8068	83	,9266i		68,93	164,15	4,78	60,91	,6138
34			28,24	125,64	2,60	79-59	,8018	84	-		69.76		4,80	60,62	,6108
100 + 35	,88873		29,07	126,42	2,65 2,71	79,10 78,62	,7969 ,7921	100 + 85	,92773 ,92831	_	70,59 71,42	165,75 166,55	4,84 4,87	60,33 60,04	,6079 ,6050
37	,88984	_	30,73	127,97	2,76	78,14	,7873	87	,92886		72,25	167,34	4,91	59,76	,6021
38	,89093		31,56	128,74	2,82	77,67	,7825	88	,92940	-	73,08	168,14	4,94	59,48	,5993
	,89202		32,39	129,52	2,87	77,20	,7778		,92994		73,91	168,93	4,98	59,20	,5965
100 + 40	,89307 ,89413	-	33,22	130,30	2,92 2,98	76,74 76,29		100 + 90	,93047 ,93098		74,75 75,58	169,73	5,02	58,92 58,64	,5936
42	,89517		34,88	131,85	3,03	75,84			,93150		76,41	171,32	5,09	58,37	,5881
43	,89619	_	35,71	132,63	3,08	75,40	,7597	93	,93201	1	77,23	172,12	5,11	58,10	,5854
44			36,54	133,40	3,14	74,96	,7553		,93251		78,06	172,92	5,14	57,83	,5827
100 + 45	,89819 ,89917		37,37	134,18 134,96	3,19 3,24	74,52 74,09		100 + 95	,93301		78,89 79,71	173,72	5,17	57,56 57,30	,5800
47	,90014	-	39,03	135,74	3,29	73,67	,7422	97	,93397	—	80,54	175,30	5,24	57,04	
48	,90108	-	39,86	136,52	3,34	73,25	,7380	98	,93445		81,37	176,10	5,27	56,78	,5721
1 49	,90201		40,70	137,30	3,40	72,83	,7338	99	,93492	1	82,21	176,91	5,30	59,53	,5696

HEAT 47°.

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I.	и.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by weight.	Specific gravity.		Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
W. + Sp.								W . + Sp.			,				
	,93588 ,93636 ,93683 ,93731	_	83,05 83,90 84,76 85,63 86,52	177,71 178,53 179,36 180,20 181,06	5,34 5,37 5,40 5,43 5,46	56,27 56,01 55,75 55,49 55,23	,5643 ,5617 ,5592 ,5565	100 + 50 49 48 47 46	,96276 ,96334 ,96391 ,96449		166,10 169,50 173,02 176,70 180,55		6,94 6,97 6,98 7,00 7,02	38,58 38,09 37,59 37,08 36,56	,3888 ,3838 ,3787 ,3736 ,3684
91	,93827 ,93874 ,93921 ,93968		*87,42 88,35 89,30 90,27 91,26	181,93 182,83 183,75 184,70 185,66	5,49 5,52 5,55 5,57 5,60	54,96 54,70 54,42 54,15 53,87	,5538 ,5511 ,5483 ,5455 ,5427	100 + 45 44 43 42 41	,96562 ,96619 ,96675 ,96732		184,56 188,76 193,15 197,74 202,56	277,53 281,71 286,10 290,70 295,52	7,03 7,05 7,05 7,04 7,04	36,03 35,49 34,95 34,40 33,84	,3630 ,3577 ,3522 ,3466 ,3409
88 87 86	,94066 ,94116 ,94167 ,94218		92,28 93,32 94,38 95,46 96,57	186,64 187,64 188,67 189,73 190,81	5,64 5,68 5,71 5,73 5,76	53,58 53,29 53,00 52,71 52,41	,5398 ,5369 ,5340 ,5310 ,5280	100 + 40 39 38 37 36	,96843 ,96898 ,96953 ,97009		207,63 212,95 218,55 224,47 2:0,70	300,57 305,89 311,51 317,43 323,68	7,06 7,06 7,04 7,04 7,02	33,27 32,69 32,10 31,50 30,89	,3352 ,3294 ,3234 ,3174 ,3112
100 + 85 84 83 82 81	,94320 ,94372 ,94424 ,94475	_	97,70 98,87 100,06 101,28	191,90 193,04 194,19 195,38 196,60	5,80 5,83 5,87 5,90 5,93	52,11 51,81 51,50 51,18 50,87	,5250 ,5219 ,5188 ,5157 ,5125	35 34 33 32 31	,97176 ,97 23 1	_	237,29 244,27 251,67 259,54 267,91	344,73 352,64 361,04	6,87	30,28 29,65 29,01 28,36 27,70	,3050 ,2987 ,2923 ,2858 ,2791
100 + 80 79 78 77 76	,94582 ,94635 ,94689	_	103,81 105,13 106,47 107,86 109,28	197,84 199,12 200,43 201,78 203,17	5,97 6,01 6,04 6,08 6,11	50,54 50,22 49,89 49,55 49,22	,5092 ,5060 ,5027 ,4993 ,4959	29 28 27 26	,97401	_	276,84 286,38 296,61 307,59 319,43	379,61 389,90 400,94 412,85	6,65 6,58	27,03 26,34 25,65 24,94 24,22	,2723 ,2654 ,2584 ,2513 ,2440
100 + 75 74 73 72 71	,94850 ,94904 ,94959	_	110,74 112,23 113,76 115,34 116,97	204,59 206,05 207,55 209,09 210,70	6,15 6,18 6,21 6,25 6,27	48,88 48,53 48,18 47,82 47,47	,4925 ,4890 ,4855 ,4819 ,4782	24 24 23 22 21	,97634 ,97697 ,97759 ,97823	_	332,21 346,05 361,09 377,51 395,49	425,66 439,56 454,69 471,19 489,25	6,32	23,49 22,75 21,99 21,22 20,44	,2367 ,2292 ,2216 ,2138 ,2059
100 + 70 69 68 67 66	,95125 ,95181 ,95237 ,95294	_	118,64 120,35 122,12 123,94 125.82	212,33 214,01 215,74 217,53 219,37	6,31 6,34 6,38 6,41 6,45	47,10 46,73 46,35 45,97 45,58	,4745 ,4708 ,4670 ,4632 ,4593	18 17	,97956 ,98024 ,98095 ,98167 ,98242	_	415,26 437,11 461,40 488,55 519,07	509,12 531,08 555,47 582,73 613,39	6,03 5,93 5,82 5,68	19,64 18,83 18,00 17,16 16,30	,1979 ,1897 ,1814 ,1729 ,1643
63 62 61	,95408 ,95464 ,955 2 2 ,95580		127,76 129,76 131,82 133,95 136 14	221,27 223,24 225,26 227,36 229,53	6,49 6,52 6,56 6,59 6,61	45,19 44,79 44,39 43,99 43,57	,4553 ,4513 ,4473 ,4431 ,4389	13 12 11	,98401 ,98485 ,98573 ,98666		553,68 593,23 638,87 692,11 755,02	648,13 687,82 733,61 787,00 850,09	5,41 5,26	15,43 14,54 13,63 12,70 11,76	,1555 ,1465 ,1373 ,1280 ,1185
58 57 56	,95695 ,95753 ,95812 ,95870		138,42 140,75 143,19 145,70 148,31	231,76 234,07 236,47 238,94 241,52	6,66 6,68 6,72 6,76 6,79	43,15 42,72 42,29 41,85 41,40	,4347 ,4304 ,4260 ,4216 ,4172	8	,98864 ,98971 ,99085		830,53 922,81 1038,15 1186,47 1384-22	9 ² 5,74 1018,23 1133,77 1282,28 1480,22	4,79 4,58 4,38 4,19 4,00	10,80 9,82 8,82 7,80 6,76	,1088 ,0990 ,0889 ,0786 ,0681
53 52	,95927 ,95987 ,96045 ,96102 ,96161	<u>-</u>	151,00 153,77 156,66 159,68 162,83	244,19 246,95 249,81 252,81 255,92	6,81 6,82 6,85 6,87 6,91	40,95 40,49 40,02 39,55 39,07	,4126 ,4080 ,4033 ,3985 ,3937	4 3 2	,99330 ,99463 ,99604 ,99754 ,99913		1661,05 2076,31 2768,43 4152,58 8305,28	1757,28 2172,78 2865,10 4249,52 8402,37	3,33 3,06	5,69 4,60 3,49 2,35 1,19	,0573 ,0464 ,0352 ,0237 ,0120

HEAT 48°.

	(1				i			1 1	·		1		
I.	и.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Spirit and	Specific			Bulk of	Diminu-	Quan-	Decimal			Spirit	Water	Bulk of	Dimi-	Quan- tity of	Decimal multi-
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of Spirit	multi- pliers.	Water by weight.	gravity.	by mea-	measure.	mixture.	nuti- on of	Spirit	pliers.
weight.		sure.	incusure.		Duik.	per cent.	piters			sure.				per cent.	
								0 . 377							
Sp. + W.	` `			•				Sp. + W.				·		·	
100 + 0		100		100,00				100 + 50		1	41,50	138,07	3,43	72,43	,7293
1	1, 3323	_	0,83	100,72	0,11	99,28	,9998	51	,90338	1	42,33	138,85	3.48	72,02 71,62	,7252 ,7211
2	())	_	1,66	101,44	0,22	98,58	,9927			1	43,16	139,63 140,42	3,53	71,21	,7171
3	,83748		2,49	102,17	0,32	97,88	,9857 ,9787	53	,90513		43,99 44,82	141,21	3,57 3,61	70,82	,7131
4	,83962		3,32	102,90	0,42	97,19	,9717				45,65	141,98	3,67	70,43	,7091
100 + 5			4,16 4,98	103,63	0,53	95,81	,9/1/ ,9649	56			46,48	142,77	3,71	70,04	,7053
7	,84571		5,81	105,11	0,70	95,14	,9581	57			47,31	143,56	3,75	69,65	,7014
8		_	6,64	105,85	0,79	94,47	,9514	58			48,14	144,35	3,79	69,27	,6976
9		_	7,47	106,59	0,88	93,81	,9448	59		1	48,97	145,13	3,84	68,90	,6938
100 + 10			8,30	107,34	0,96	93,16	,9381		,91083		49,80	145,92	3,88	68,53	,6900
11			9,13	108,09	1,04	92,52	,9316	61	1 7 77		50,64	146,71	3,93	68,16	,6864
	,85491		9,96	108,84	1,12	91,88	,9253		1 7 77		51,46	147,50	3,96	67,79	,6827
13	,85663		10,80	109,59	1,21	91,25	,9189	63		t	52,29	148,29	4,00	67,43	,6790
14			11,62	110,34	1,28	90,63	,9126		-		53,12	149,08	4,04	67,07	,6754
100 + 15		-	12,45	111,09	1,36	90,01	,9064				53,95	149,87	4,08	66,72	,6719 ,6684
16		-	13,28	111,85	1,43	89,40	,9003	66 6 7			54,78 55,61	150,66 151,46	4,12	66,02	,6649
17	1		14,11	112,61	1,50	88,80	,8943 ,8883	68			56,44	152,24	4,20	65,68	,6614
18	1 000		14,93	113,37	1,56 1,63	87,62	,8823	4	,91740		57,27	153,03	4.24	65,35	,6580
19			15,76	114,13		87,04	,8764				58,10	153,82	4,28	65,01	,6540
100 + 20			16,60	114,89	1,71	86,47	,8707	100 + 70 71	1		58,93	154,61	4,32	64,68	,6513
21	1 ~ / ~		17,43	115,05	1,85	85,90	,8550	72			59,76	155,41	4,35	64,35	,6480
23	1 0'		19,09	117,17	1,92	85,34	,8593	73			60,59	156,20	4,39	64,02	,6447
24	1 0'		19,92	117,94	1,98	84,79	,8537	74	,92072	-	61,42	156,99	4,43	63,70	,6414
100 + 25		-	20,75	118,71	2,04	84,24		100 + 75	,92136	_	62,25	.157,78	4,47	63,38	,6382
26	1 0 2		21,58	119,47	2,11	83,70	,8428	76	,92199		63,08	158,57	4,51	63,06	,6350
27	87741	-	22,41	120,24	2,17	83,17	,8374	77			63,91	159,37	4,54	62,75	,6318
28	1	1	23,25	121,02	2,23	82,64	,8321	78			64,74	160,17 160,95	4,57	62,44	,6256
20		-	24,07	121,78	2,29	82,11	,8269	79	,	-	65,57		4,62	61,82	,6225
100 + 30	,88120		24,90	122,55	2,35	81,60		100 + 80	1 / 1 1		66,40 67,23	161,75	4,65	61,52	
31	,88243	3 -	25,73	123,33	2,40	81,09	,8165 ,8114	82	1 / /		68,05	163,35	4,70	61,22	1 1
32	1 00 0	_	26,56	124,10	2,46	80,58	,8064	83	1'/ 2		68,89	164,14	4.75	60,92	,6135
33	1 002		27.39	124,67	2,58	79,59	,8014	.84		5 -	69,72	164,94	4,78	60,63	
34			29,05	126,41	2,64	79,11	1	100 + 89			70,55	165,73	4,82	60,34	,0076
100 + 39	,88828		29,88	120,41	2,69	78,63	7917	86	,92789) —	71,38	166,53	4,85	60,05	,6047
2	,88940	J -	30,71	127,96	2,75	78,15	7869	87	,92844	H —	72,21	167,32	4,89		,6018
38		9 —	31,54	128,74	2,80	77,68	,7821	88	92898	3	73,04	168,12	4,92	59,48	
39	1 0		32,37	129,51	2,86	77,21	<i>></i> 7774]]	,92952	2	73,87	168,91	4,96		-
100 + 40	,8926	2 —	33,21	130,29	2,92	76,75	,7728	100 + 90			74,7 I	169,71	5,00		
4	89368	8 -	34,04	131,07	2,97	76,30	,7683	9	,93056		75,54	170,51	5.03		
4	8947	z	34,87	131,84	3,03	75,85			,93108		76,37	171,30	5.09	58,37 58,10	
4:			35,69	132,62	3,07	75,40			,93159		77,19	172,90	5,12	1 - 0	
4			36,52	133,39	3,13	74,96			,93210		78,85	173,70	5,15	-	-
100 + 4	,8977	4 —	37,35	134,17	3,18	74,53		100 + 9	,93200		79,67	174,48	5,19		
	8987		38,18	134,95	3,23	74,10	,7462 ,7418		9335		80,50	175,28	5,22		
4	~ *		39,84	135,73	3,28	73,26	,7376		,9340		81,33	176,08	5,25		
4	9015		40,67	137,29	3,38	72,84	7335	90	,9345		82,10	176,88		56,53	
4	7177	/ (1 T-7-/	1 3/7-9	1 3.3	<u> </u>	1 , 303	11				THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.			

HEAT 48°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal		Specific	Spirit	Water	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.						***************************************		W. + Sp.							
100+100			83.01	177,69	5,32	56,27	,5667	100 + 50	,96188	100	166,01	259,10 262,46	6,91 6,95	38,59	,3886 ,3836
99			83,85 84,71	178,50 179,33	5,35 5,38	56,02 55,76	,5641 ,5614	49 48			169,41		6,96	37,60	,3786
97	,93643		85,58	180,17	5,41	55,50	,5589	47	,96362		176,60	269,63	6,97	37,09	,3735
96			86,47	181,03	5.44	55,24	,5563	46		-	180,45		6,99	36,57 36,04	,3683
100 + 95	06		87,37 88,30	181,90 182,80	5,47	54,97 54,70	,5536 ,5509	100 + 45	,96479 ,96534	_	184,46 188,66	277,46 281,63	7,03	35,50	3575
94	,93834		89,25	183,72	5,53	54.43	,5481	43	,96591		193,04	286,02	7,02	34,96	,3521
92	,93881	-	90,22	184,67	5,55	54,15	,5453	42	,96648		197,63	290,61	7,02	34,41 33,85	,3465
91		-	91,21	185,63	5,58	53.87	,5425	§	.96705 .96762	-	202,45	295,43 300,48	7,02	33,28	,3408
100 + 90			92,23	186,62 187,61	5,61 5,66	53,59	,5396 ,5367	100 + 40	,96817	_	212,84	305,80	7,04	32,70	,3293
88	,94076		94,33	188,65	5,68	53,01	,5338	38	,96873		218,43	311,41	7,02	32,11	,3233
8 ₇ 86			95,41	189,70	5,71	52,71	,5308 ,5278	37	,96929		224,35	317,32	7,03	31,51	,3173
100 + 85	-		96,52	190,78	5,74	52,42	,5248	$\frac{30}{100 + 35}$			237,16	330,18	6,98	30,29	,3050
84			98,81	193,01	5,87	51,82	,5217	34			244,14	337,18	6,96	29,66	,2987
83	,94333	-	100,01	194,16	5,85	51,51	,5186	33	,97154		251,53	344,61	6,89	29,02	,2922
82	1	1	101,22	195,34	5,88	51,19	,5155 ,5123	32 31			259,40	352,51 360,91	6,85	28,37	,2790
100 + 80		-}	103,75	197,81	5,94	50,55	,5090		,97324	-	276,69	369,87	6,82	27,04	,2722
79		ł	105,07	199,09	5,98	50,23	,5058	2 9	,97382	-	286,23	379,47	6,76	26,35	,2653
78			106,42	200,40	6,02	49,90	,5025	28	1 //		296,45	389,74	6,65	25,66	,2583
77	,94651	_	107,80	201,74 203,14	6,06	49,56	,4991 ,4957	27 26			319,26	412,68		24,23	,2440
100 + 75			110,68	204,55	6,13	48,88	,4923	100 + 25			332,03	425.48	6,55	23,50	,2367
74	,94812	-	112,17	206,02	6,15	48,53	,4888	24	,		345,85	439,38	6,48	22,76	
73			113,70	207,51 209,06	6,19	48,18	,4853	23 22	1		360,90	454,49 470,98	6,41	22,00	,2216
71	1		116,91	210,66	6,25	47,47	,4780	21		_	395,28	489,03		20,45	,2059
100 + 70	,95032	_	118,58	212,29	6,29	4.7,11	14743	100 + 20	1 - 1 - 1	•	415,04	508,89		19,65	,1979
	,95088		120,29	213,97	6,32	46,73	,4706 ,4668	18	1 - 0 - 0		436,88	530,84	6,04 5,94		
68	1 2 11	3	122,06	215,70	6,36	46,36	,4630	17	1 0		488,29	582,46	5,83	17,17	,1728
66	,95258		125,76	219,33	6,43	45,59	,4591	16	,98232	<u> </u>	518,79	613,10	5,69	16,31	
100 + 65			127,70	221,23	6,47	45,20	,4551	100 + 15	,98311	-	553,38	647,82			
	,95372		129,69	223,19	6,50	44,80	,4511	14	,98393 ,98477		592,91 638,53	687,49 733,25	5,42	14,55	,1464
	,95429 ,95487		131,75	225,23	6,56	44,40	,4471		,98566		691,74	786,61	5,13	12,71	,1280
61	,95545		136,07	229,48	6,59	43,58	,4388	11	.98660		754-62	849.66			-
100 + 60	,95602	-	138,35	231,71	6,64	43,16		100 + 10	,98756		830,08	925,27		10,80	1
59	,95661		140,68	234,02 236,41	6,66	42,73	,4303		,98858 ,98966		922,32	1133,18			
	95779		145,62	238,89	6,73	41.86	,4215	1 7	,99080	—	1185,84	1281,61	4,23	7,80	,0786
56	,95837		148,23	241,47	6.76	41,41	,4170				1383,48	1479,44		6.76	-
100 + 55			150,92	244,13	6,80	40,96		100 + 5	99320		1660,17	1756,36			,0573
	,95955 ,96013		153,69		6,83	40,50	,4079	1	99459		2766,95	2863,58	3,37		
52	,96071	-	159,59	252,74	6,85	39,56	,3984		,99750	 -	4150,38	4247,26	3,12	2,36	,0237
51	,96130	1-	162,74	255,86	6,88	39,08	,3936]	,99900)	8300.85	8397,88	12,97	1,19	,0120

HEAT 49°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
Sp. + W.						,		Sp. + W.							
100 + 0 1 2 3 4	,83256 ,83481 ,83701	_	 0,83 1,66 2,49 3,32	100,00 100,72 101,44 102,17 102,90	0,11 0,22 0,32 0,42	100,00 99,28 98,58 97,88 97,19	1,0064 ,9992 ,9921 ,9851	100 + 50 51 52 53	,90294 ,90383 ,90470		41,48 42,31 43,14 43,97 44,80	138,06 138,84 139,62 140,41	3,42 3,47 3,52 3,56 3,61	72,43 72,02 71,62 71,22 70,82	,7289 ,7248 ,7207 ,7167 ,7127
100 + 5 6 7 8 9	,84524 ,84717		4,16 4,98 5,81 6,64 7,47	103,63 104,37 105,11 105,84 106,59	0,53 0,61 0,70 0,80 0,88	96,50 95,81 95,14 94,48 93,82	,9711 ,9643 ,9576 ,9509 ,9443	100 + 55 56 57 58	,90639 ,90722 ,90803 ,90883		45,63 46,46 47,28 48,12 48,94	141,97 142,76 143,55 144,34 145,12	3,66 3,70 3,73 3,78 3,82	70,43 70,04 69,66 69,28 68,90	,7088 ,7050 ,7011 ,6973
100 + 10 11 12 13	,85089 ,85269 ,85444 ,85616	_	8,30 9,13 9,96 10,79 11,62	107,33 108,08 108,83 109,58	0,97 1,05 1,13 1,21 1,28	93,17 92,53 91,89 91,26 90,63	,9376 ,9311 ,9247 ,9184 ,9121	100 + 60 61 62 63 64	,91040 ,91116 ,91192 ,91267		49,77 50,61 51,43 52,26 53,09	145,91 146,70 147,49 148,28	3,86 3,91 3,94 3,98 4,02	68,53 68,17 67,80 67,44 67,08	,6897 ,6861 ,6824 ,6787 ,6751
100 + 15 16 17 18	,86109 ,86266 ,86421		12,45 13,28 14,10 14,93 15,75	111,09 111,85 112,60 113,36 114,12	1,36 1,43 1,50 1,57 1,63	90,02 89,41 88,80 88,21 87,62	,9059 ,8998 ,8938 ,8878 ,8819	100 + 65 66 67 68 69	,91413 ,91485 ,91557 ,91628		53,92 54,75 55,58 56,41 57,24	149,86 150,65 151,44 152,23 153,01	4,05 4,10 4,14 4,18 4,23	66,73 66,38 66,03 65,69 65,35	,6715 ,668 r ,6646 ,6611 ,6577
100 + 20 21 22 23 24	,86721 ,86870 ,87014 ,87155		16,59 17,42 18,25 19,08	114,89 115,64 116,41 117,17	1,70 1,78 1,84 1,91	87,04 86,47 85,90 85,34 84,79	,8702 ,8645	7 I 7 2	,91766 ,91833 ,91899	_	58,07 58,90 59,73 60,56 61,39	153,81' 154,60 155,39 156,19	4,26 4,30 4,34 4,37 4,42	65,02 64,69 64,36 64,03 63,70	,6543 ,6510 ,6477 ,6444 ,6411
100 + 25 26 27 28 29			20,74 21,57 22,40 23,24 24,06	118,70 119,47 120,24 121,01 121,78	2,04 2,10 2,16 2,23 2,28	84,25 83,71 83,17 82,64 82,12	,8478 ,8423 ,8369 ,8317 ,8265	700 + 75 76 77 78 79	,92094 ,92156 ,92218		62,22 63,05 63,88 64,71 65,54	157,77 158,55 159,35 160,15 160,93	4,45 4,50 4,53 4,56 4,61	63,38 63,06 62,75 62,44 62,14	,6379 ,6347 ,6315 ,6284 ,6253
100 + 30 31 32 33 34	,88075 ,88198 ,88319 ,88438 ,88555		24,89 25,71 26,54 27,37 28,21	122,55 123,32 124,09 124,86 125,63	2,34 2,39 2,45 2,51 2,58	81,60 81,09 80,59 80,09 79,60	,8212 ,8161 ,8110 ,8060 ,8010	100 + 80 81 82 83 84	,92400 ,92459 ,92518 ,92577	_	66,37 67,19 68,02 68,85 69,68	161,73 162,53 163,33 164,12 164,92	4,64 4,66 4,69 4,73 4,76	61,83 61,53 61,23 60,93 60,63	,6222 ,6192 ,6162 ,6132 ,6102
39	,88895 ,89004 ,89113	_	29,03 29,87 30,70 31,53 32,36	126,40 127,18 127,95 128,73 129,50	2,63 2,69 2,75 2,80 2,86	79,11 78,63 78,15 77,68 77,21	,7770	8 ₇ 88 89	,92689 ,92746 ,92801 ,92855 ,92909		70,51 71,34 72,17 73,00 73,83	168,10	4,80 4,83 4,87 4,90 4,94	60,34 60,05 59,77 59,49 59,21	,6073 ,6044 ,6015 ,5987 ,5959
42 43	,89218 ,89324 ,89427 ,89530 ,89630	_	33,19 34,02 34,85 35,67 36,50	130,28 131,06 131,83 132,61 133,39	2,91 2,96 3,02 3,06 3,11	76,75 76,30 75,85 75,41 74,97	,7724 ,7679 ,7634 ,7589	92 93	,92962 ,93014 ,93066 ,93118 ,93169	_	74,67 75,50 76,33 77,15 77,98	172,08 172,87	4,98 5,01 5,05 5,07 5,11	58,93 58,65 58,38 58,11 57,84	,5930 ,5902 ,5875 ,5848 ,5821
47 48	,89729 ,89827 ,89924 ,90019	_	37,33 38,16 38,99 39,82 40,65	134,17 134,94 135,72 136,50 137,28	3,16 3,22 3,27 3,32 3,37	74,53 74,10 73,68 73,26 72,84	,7458 ,7415	97 98	,93219 ,93267 ,93316 ,93364 ,93411	_	78,81 79,63 80,46 81,29 82,12	175,26 176,05	5,13 5,17 5,20 5,24 5,26	57,58 57,32 57,06 56,80 56,54	,5794 ,5768 ,5742 ,5716 ,5690

HEAT 49°.

<u> </u>	1		1		1	ì	1	1	1)	1		1	1	1
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decima multi-
weight.	,	mea- sure.	measure.		bulk.	spirit	pliers.	weight.	8	mea- sure.	measure.		on of	spirit	pliers.
		suite.				per cent.				suic.		<u>-</u>	- Durk.	per cent.	
W. + Sp.						-		W. + Sp.							
100+100	,93459	100	82,96	177,67	5,29	56,28	,5664	100 + 50	,96157	100	165,92	259,03	6,89	38,60	,3885
99			83,81	178,48	5,33	56,02	,5638 ,5612		,96216		169,32 172,84	262,39 265,90	6,93	38,11 37,61	,3835
98 97	1		85,54	179,31	5,36	55,76	,5586	48	,96274 ,96333	_	176,51	269,56	6,05	37,10	,3734
	,93651	-	86,44	181,01	5,43	55,24	,5560	46	,96391		180,35	273,38		36,58	,3681
100 + 95		-	87,32	131,88	5,44	54,98	,5533	100 + 45	,96451	-	184,36	277,38		36,05	,3628
94			88,25	182,78	5,47	54,71	,5506	44	,96506 ,96564	_	188,56	281,55 285,94	7,01	35,51	,3574 ,3520
93 92	1		89,20 90,17	183,70 184,65	5,50	54,44	,5478 ,5450	43	,96621		192,94	290,53	7,00	34,97 34,42	,3464
91		_	91,16	185,61	5,55	53,88	,5422	41	,96678		202,34	295,34		33,86	,3407
100 + 90			92,18	186,59	5,59	53,59	•5393	100 + 40	,96736		207,41	300,39		33,29	,3350
- 89	1 / / /	_	93,22	187,59	5,63	53,30	,5365	39	,96791		212,73	305,71		32,71	,3292
88 87	,94036 ,94087		94, 2 8 95,36	188,62 189,67	5,66 5,69	53,01	,5336 ,5306	38 37	,96848 ,96905		218,32	311,32	' (32,12	,3233
86			96,47	190,75	5,72	52,42	,5276	3/ 36	,96962		230,45	323,46		30,91	,3111
100 + 85	,94189		97,60	191,85	5,75	52,12	,5245	100 + 35			237,03	330,06	6,97	30,30	,3049
84		-	98,76	192,98	5,78	51,82	,5215	34	,9.7075		244,01	337,06	6,95	29,67	,2986
83 82	1 - 1 - 2		99,95	194,13	5,82 5,86	51,51 51,20	,5184 ,5153	33	1 0	_	2 51,40 259,26	344,48 35 2, 38	0 ,92 6 88	29,03 28,38	,2922
81	394346 394399		101,17	195,31	5,89	50,88	5121	32			267,62	352,30	6,85	27,72	,2790
100 + 80			103,70	197,78	5,92	50,56	,5088		,97304		276,54	369,73		27,05	,2722
79			105,02	199,05	5,97	50,24	,5056	29	,97363		286,08	379,32	6,76	26,36	,2653
78	1 - 1 - 1 - 1		106,36	200,36	6,00	49,91	,5023		,97422		296,29	389,59		25,67	,2583
77	,94613	_	107,74	201,71	6,06	49,57	,4989 ,4955		,97482 ,97643	_	307,27 319,09	400,62	1	24,96	,2512
100 + 75	-		110,62	204,52	6,10	48,89	,4921		,97604		331,85		6,54	23,51	,2366
74	1		112,11	205,98	6,13	48,54	,4886	24			345,68	439,20		22,77	,2292
7.3			113,64	207,48	6,16	48,19	,4851	23			360,71	454,30		22,01	,2215
72	,94885	-	115,22	209,02 210.62	6,20	47,84	,4815	22	,97797 ,97864		377,11	470,78 488,82	6.25	21,24	,2137 ,2058
$\frac{71}{100 + 70}$		=	118,52	212,25	6,23	47,48	,4778 ,4741	100 + 20			395,07	508,66	-	19,66	,1978
69			120,23	213,93	6,30	46,74	34794 34704		,98002		436,65	530,60		18,85	,1896
68	,95108	_	122,00	215,66	6,34	46.37	,4666	18		_	460,91	554,96		18,02	,1813
67 66	,95165		123,82	217,45	6,37	45,99	,4628 ,4589		,98147		488,03 518,52	582,19 612,81		17,18	,1728
100 + 65	,95222		125,70	219,29	6,41	45,00	,4509 I	100 + 15				647,51			,1642
	,95336		129,62	223,15	6,47	44,81	,4510	14	,98385		553,09 592,60	687,16	5,44	15,44	,1554 ,1464
63	,95394		131,68	225,17	6,5 I	44,41	,4469	13	,98470		638,19	732,89	5,30	13,64	,1373
	,95452		133,81	227,26	6,55	44,00	,4428	12	,98559		691,37	786,22	5,15	12,72	,1280
	,95510		136,00	229,43	6,57	43:59	,4386		,98654		754,22	849,23		11,78	,1185
100 + 60	,95508		138,27	231,66 233,97	6,61 6,63	43,17	,4344 ,4301	100 + 10	,98750 ,98853	_	829,64 921,83	924,80	4,65	9,83	,1088 ,098g
58	,95687	1	143,04	236,36	6,68	42,31	,4258	8			1037,05	1132,60	4,45	8,83	,0888
57	,95746		145,54	238,83	6,71	41,87	,4214	7	,99075		1185,21	1280,94	4,27	7,81	,0786
	<u>,95804</u>		148,15	241.41	6,74	41,42	,4169		,99196		1382,74	1478,67		6,76	,0681
100 + 55	,95862		150,84 153,61	244,07 246,83	6,77 6,78	40,97 40,51	,4123	-	,99321		1659,29	1755,44		5,70	,0573
54	,95923 ,95981	_	156,50	249,69	6,81	40,04	,4031		,99454 ,99596		2765,48	2862,07		3,49	,0464
52	,96040		159,51	252,68	6,83	39,57	,3983	2	,99746	-	4148,20	4245,02	3,18	2,36	,0237
51	1,96099		162.65	255,80	6,85		,3935	I	,99905	1	8296,45	8393,42		1,19	,0120

HEAT 50°.

			l .							1 1			-		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.		Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	Quantity of spirit per cent.	Decimal multi- pliers.
Sp. + W.								Sp. + W.					Ł		
100 - - C	,83208 ,83434 ,83654		-,83 1,66 2,49 3,32	100,00 100,72 101,44 102,16 102,89	0,11 0,22 0,33 0,43	100,00 99,29 98,58 97,88	1,0058 ,9986 ,9915 ,9845 ,9776	53	1		41,46 42,29 43,12 43,95 44,78	138,05 138,83 139,61 140,40 141,18	3,41 3,46 3,51 3,55 3,60	72,44 72,03 71,63 71,23 70,83	,7286 ,7245 ,7204 ,7164 ,7124
100 + 5	,84076 ,84279 ,84477 ,84670		4,15 4,97 5,80 6,63 7,46	103,63 104,36 105,10 105,84 106,58	0,52 0,61 0,70 0,79 0,88	96,50 95,82 95,15 94,48 93,82	MARKET PROPERTY.	100 + 55 56 57 58	-		45,61 46,43 47,26 48,09 48,92	141,96 142,75 143,54 144,33 145,11	3,65 3,68 3,72 3,76 3,81	7°,44 7°,05 69,67 69,29 68,91	,7085 ,7046 ,7007 ,6969 ,6931
100 + 10 11 12 13	,852 2 2 ,85397 ,85569 ,85738		8,29 9,12 9,95 10,78 11,61	107,33 108,08 108,83 109,58	0,96 1,04 1,12 1,20 1,28	93,17 92,53 91,89 91,26 90,64	,9371 ,9306 ,9242 ,9179 ,9116	61 62 63	,90997 ,91073 ,91149 ,91224	_	49,75 50,58 51,41 52,24 53,07	145,90 146,69 147,48 148,26	3,85 3,89 3,93 3,98 4,01	68,54 68,17 67,81 67,45 67,09	,6894 ,6857 ,6820 ,6784 ,6748
100 + 15	,86063 ,86226 ,86375	3 -	12,44 13,27 14,09 14,92 15,75	111,08 111,84 112,60 113,36 114,12	1,36 1,43 1,49 1,56 1,63	90,02 89,41 88,81 88,22 87,63	,9054 ,8993 ,8933 ,8873 ,8814	66 67 68	,91370 ,91442 ,91514 ,91585	_	53,90 54,73 55,56 56,38 57,21	149,85 150,64 151,42 152,21 153,00	4,05 4,09 4,14 4,17 4,21	66,74 66,39 66,04 65,70 65,36	,6712 ,6677 ,6642 ,6608 ,6574
20 + 20 21 22 23	,86823 ,86967 ,87108	3 -	16,58 17,41 18,24 19,07	114,88 115,64 116,40 117,16	1,70 1,77 1,84 1,91	87,05 86,48 85,91 85,35 84,80	,8755 ,8697 ,8640 ,8584	72 73	,91790 ,91856	_	58,04 58,87 59,70 60,53 61,36	153,79 154,58 155,37 156,17 156,96	4,25 4,29 4,33 4,36 4,40	65,02 64,69 64,36 64,03 63,71	,6540 ,6507 ,6474 ,6441 ,6408
100 + 25 26 27 28 29	,87384 ,87518 ,87649 ,87778		20,73 21,56 22,39 23,22 24,05	118,70 119,46 120,23 121,00	2,03 2,10 2,16 2,22 2,28	84,25 83,71 83,18 82,65 82,12	,8474 ,8419 ,8365 ,8312 ,8260	100 + 75 7 ⁶ 77 78	,92051 ,92113		62,19 63,02 63,85 64,68 65,51	157,75 158,54 159,33 160,13 160,92	4,44 4,48 4,52 4,55 4,59	63,39 63,07 62,76 62,45 62,14	,6376 ,6344 ,6312 ,6281 ,6250
100 + 30 31 32 33 34	,88153 ,88274 ,88393 ,88510		24,88 25,70 26,53 27,36 28,19	122,54 123,31 124,08 124,85 125,62	2,34 2,39 2,45 2,51 2,57	81,61 81,10 80,59 80,09 79,60	,8157 ,8106 ,8056 ,8006	82 83 84	,92417 ,92476 ,92534 ,92591	_	66,34 67,16 67,99 68,82 69,65	161,72 162,51 163,31 164,10 164,90	4,62 4,65 4,68 4,72 4,75	61,84 61,53 61,23 60,94 60,64	,6219 ,6189 ,6159 ,6129 ,6099
37 38	,88626 ,88739 ,88850 ,88960 ,89068		29,02 29,85 30,68 31,51 32,34	126,40 127,17 127,94 128,72 129,49	2,62 2,68 2,74 2,79 2,85	79,12 78,64 78,16 77,6) 77,22	,7909 ,7861 ,7814	87 88	,92647 ,92703 ,92758 ,92812 ,92866	_	70,48 71,31 72,14 72,97 73,80	167,28 168,08 168,87	4,89 4,9 3	60,35 60,06 59,78 59,50 59,22	,6012 ,5984 ,5956
42	,89279 ,89382 ,89484 ,89585		33,17 34,00 34,83 35,65 36,48	130,27 131,05 131,82 132,60 133,38	2,90 2,95 3,01 3,05 3,10	76,76 76,31 75,86 75,41 74,97	,7675 ,7630 ,7585 ,7541	92 93 94	,9 2 972 ,9 3 024 ,93076 ,93127		74,63 75,46 76,29 77,11 77,94	170,47 171,26 172,06 172,85	4,96 4,99 5,03 5,05 5,09	58,94 58,66 58,39 58,12 57,85	,5928 ,5900 ,5872 ,5845 ,5818
47 48	,89684 ,89782 ,89879 ,89974		37,31 38,14 38,97 39,80 40,63	134,16 134,93 135,71 136,49 137,27	3,15 3,21 3,26 3,31 3,36	74,54 74,11 73,69 73,27 72,85	,7454	97 9 8	,93177 ,93226 ,93275 ,93323 ,93371	_	78,77 79,59 80,42 81,25 82,08	174,44 175,23 176,03	5,12 5,15 5,19 5,22 5,25	57,59 57,33 57,07 56,81 56,55	,5792 ,5766 ,5740 ,5714 ,5688

HEAT 50°.

								-							
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Water and spirit by weight.	Specific gravity.	by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	tity of	Decimal multi- pliers.
W. + Sp.								$\overline{W. + Sp.}$							
	,93467	_	82,92 83,76	177,64 178,46	5,28	56,29 56,03	,5662 ,5636	100 + 50	,96185		165,84 169,23	262,32	6,88 6,91	38,61 38,12	,3884
98 97 96	,93562		84,62 85,50 86,38	179,29 180,13 180,98	5,33 5,37 5,40	55,77 55,51 55,25	,5610 ,5584 ,5558	48 47 46		 —	172,75 176,42 180,26	265,83 269,49 273,31		37,62 37,11 36,59	,3783 ,3732 ,3680
94	,93658 ,93705 ,93753		87,28 88,21 89,16	181,85 182,75 183,67	5,43 5,46 5,49	54,99 54,72 54,44	,5531 ,5504 ,5476	100 + 45 44 43	,96478	-	184,27 188,46 192,84		6,97 6,98 6,08	36,06 35,52 34,98	,3627 ,3573 ,3518
92 91	,93801 ,93848	_	90,13	184,62 185,58	5,51 5,54	54,17 53,89	,5448 ,5420	42 41	,96593 ,96651	_	197,43	290,45 295,26	6,98 6,98	34,43 33,87	,3463 ,3406
89 88	,93897 ,93946 ,93996		92,13 93,17 94,23	186,56 187,56 188,59	5,57 5,61 5,64	53,60 53,31 53,02	,5391 ,5362 ,5333	100 + 40 39 38	,96765 ,96823	_	207,30 212,62 218,21	300,31 305,62 311,22	6,99 7,00 6,99	33,30 32,72 32,13	,3349 ,3291 ,3232
86	,94047 ,94098 ,94149		95,31 96,42 97,55	189,64 190,72	5,67 5,70	52,73 52,43 52,13	,53°3 ,5273	37 36	,96880 ,96938		224,11 230,33	323,35	6,99 6,98 6,96	31,53 30,92 30,31	,3171
84 83	,94201 ,94254	_	98,71	192,95 194,10	5,73 5,76 5,80	51,83	,5213 ,5182	100 + 35 34 33	,97052 ,97110	_	243,88 251,27	344,36	6,94 6,91	29,68 29,04	,2985
81			101,12	195,28	5,84 5,87	51,21 50,89	,5150	32 31	,97225		259,13 267,48	360,64		28,39 27,73	,2856
79 78	,94467 ,94521		104,96	197,74	5,91 5,94 5,98	50,57 50,25 49,92	,5054 ,5021	100 + 30 29 28	97343 97403	_	276,40 285,93 296,14	389,44	6,75 6,70	27,06 26,37 25,68	,2652
	,94575 ,94629 ,94683	-	107,69	201,68	6,01 6,05 6,08	49,58 49,24 48,90	,4988 ,4954 ,4919	27 26 100 + 25	-713		307,11	412,34	6,65 6,58	24,97	,2439
74 73	,94737 ,94792	_	112,05	205,94 207,44	6,11 6,14	48,55 48,20	,4884 ,4849	24 23	,97652 ,97717	_	331,68 345,50 360,52	439,02 454,11	6,54 6,48 6,41	23,52 22,78 22,02	,2291
71	,94847 ,94902 ,94958		115,16 116,79 118,46	208,99 210,58	6,17 6,21 6,25	47,85 47,49 47,12	,4813 ,4776 ,4739	22 21 100 + 20	,9785 i		376,91 394,86 414,60		6,33 6,25 6,16	21,25	,2137
68	,95014 ,95071 ,95128	-	120,17 121,94 123,76	213,89 215,62 217,41	6,28 6,32 6,35	46,75 46,38 46,00	,4702 ,4664 ,4626		,97990 ,98062	_	436,42 460,67 487,77	530,36	6,06 5,96 5,85	18,86 18,03 17,18	,1896 ,1813 ,1728
66 100 + 65	,95185 ,95243	_	125,64	219,25	6,39	45,61	,4587 ,4548	16	,98213		518,25	612,53	5,72 5,60	16,32	,1642
63	,95300 ,95358 ,95416	-	129,56 131,61 133,74	223,11 225,13 227,22	6,45 6,48 6,52	44,82 44,42 44,01	,4508 ,4467 ,4426	13	,98376 ,98462 ,98552		592,29 637,85 691,00	686,83 732,53 785,83	5,32	14,56 13,65 12,72	,1464 ,1373 ,1280
100 + 60	,95475 ,95534	=	135,93	229,38	6,59	43,60	,4384	1100 + 10	,98647 ,98745	=	753,82 829,20	924,33	5,02 4,87	11,78	,1185
58 57	,95593 ,95653 ,95712	_	140,53 142,96 145,47	233,92 236,30 238,78	6,61 6,66 6,69	42,75 42,32 41,88	,4299 ,4256 ,4212	7	,98955 ,99070	_	921,34 1036,50 1184,58	1016,66 1132,02 1280,28	4,48 4,30	9,84 8,83 7,81	,0989 ,0888 ,0786
100 + 55	,95771 ,95831 ,95890		148,07	241,35 244,01 246,77	6,72 6,75 6,76	40,98		100 + 5	,99 19 0 ,99316		1382,00	1477,90	4,10 3,89	5,70	,0681
53 52	,95949 ,96008	_	153,53 156,42 159,43	249,63 252,62	6,76 6,79 6,81	40,52 40,05 39,58	,4076 ,4029 ,3981		,99591 ,99742	_	2073,01 2764,02 4146,03	2169,35 2860,57 4242,79	3,45 3,24	4,61 3,50 2,36	,0464 ,0352 ,0237
51	,96067		162,57	255,73	6,84	39,10	,3933	I	,99901	-	8292,06	8388,98	3,08	1,19	,0120

HEAT 51°.

	<u> </u>	1	1		1	1	1	1	1	1					
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	5.41.12	mea- sure.	measure.	Imixtare.	bulk.	spirit	pliers.	weight.	gravity.	mea-	measure.	mixture.	on of	spirit	pliers.
		surc.				per cent.				sure.			bulk.	per cent.	
$\frac{\operatorname{Sp.} + \operatorname{W.}}{-}$								Sp. + W.							
100 + 0				100,00		100,00	1,0052	100 + 50		100	41,44	138,04	3,40	72,44	,7282
1 2	,83160 ,83386		0,83	100,72	0,11	99 ,2 9 98 ,5 8	,9981 ,9910	51 52	,90205 ,90294		42,27 43,09	138,82	3,45	72,03 71,63	,7241 ,7201
3	,83606		2,49	102,16	0,33	97,88	,9840	53	,90381	-	43,92	140,38	3,54	71,23	,7161
100 + 5	,83820	_	3,32 4,15	102,89	0,43	97,19	,9770 ,9700	54 100 + 55	,90467 ,90551	=	44,75	141,17	3,58	70,84	,7121
6	,84231		4,97	104,36	0,61	95,82	,9632	56			46,40	142,74	3,66	70,06	,7042
7 8	,844 2 9 ,84622	_	5,80 6,63	105,10	0,70	95,15	,9565	57	,90715	-	47 ,23 48,06	143,52	3,71	69,67 69,29	,7004 ,6966
9	,84810	_	7,46	105,54	0,88	94,48 93,82	,9498 ,9432		,90795 ,90874	_	48,89	144,31	3,75 3,80	68,92	,6928
100 + 10		_	8,29	107,33	0,96	93,17	,9366	100 + 60	,90952	_	49,72	145,88	3,84	68,55	,6890
I I I 2	,85174 ,85350	_	9,12	108,08	1,04	92,53	,9301		,91028 ,91104		50,55	146,67	3,88	68,18 67,81	,6853
13	,85522	-	10,78	109,58	1,20	91,26	,9174	63	,91179	-	52,21	148,24	3,97	67,45	,6781
	,85691 ,85855		11,60	110,33	1,27	90,64	,9111		91252		53,04	149,04	4,00	66,74	,6745 ,6709
16	,86016	_	12,43	111,08	1,35	90,02	,9049. ,8988	100 + 65 66	,91324 ,91397	_	53,87 54,70	149,83	4,04 4,08	66,39	,6674
17	,86173		14,09	112,59	1,50	88,81	,8928	67	,91469	-	55,53	151,40	4,13	66,04	,6639
	,86328 ,86480	_	14,92	113,35	1,57	88,22 87,63	,8868		,91541 ,91610	_	56,35 57,18	152,19	4,16 4,20	65,70 65,36	,6605 ,6571
100 + 20	,86629	_	16,57	114,88	1,69	87,05	,8750	100 + 70	,91679		58,01	153,77	4,24	65,03	,6537
2 I 2.2	,86776		17,40	115,64	1,76	86,48 85,91	,869 2 ,8635	71 72	,91747 ,91813	_	58,84 59,67	154,56	4,28 4,32	64,70 64,37	,6504 ,6471
23	,87062	-	19,06	117,16	1,90	85,35	,8579	73	,91879		60,49	156,15	4,34	64,04	,6438
	,87201		19,89	117,93	1,96	84,80	,8524		<u>,91944</u>		61,32	156,94	4,38	63,72	,6405
100 + 25 26	,87337 ,87472		20,72	118,69	2,03	84,25	,8469 ,8415	100 + 75 76	,92009 ,92070		62,15 62,98	157,73 158,52	4,42 4,46	63,40 63,08	,6373
27	,87603		22,38	120,23	2,15	83,18	,8361	77	,92133	-	63,81	159,31	4,50	62,77	,6309
	,87732 ,87859	_	23,21	120,99	2,22	82,65	,8308 ,8256		,92195 ,92256	_	64,64 65,48	160,11 160,90	4,53 4,58	62,46 62,15	,6278 ,6247
-	,87984		24,87	122,54	2,33	81,61	,8204	100 + 80	,92316		66,30	161,70	4,60	61,84	,6217
31	,88107	-	25,69	123,30	2,39	81,10	,8153	81	,92375	_	67,12		4.63	61,54	,6187
32	,88228		26,51	124,07	2,44 2,5 I	80,60	,8102 ,8052		,92434 ,92492	_	67,95 68,78	163,29 164,08	4,66 4,70	61,24	,6157
34	,88464		28,18	125,62	2,56	79,61	,8002	84	,92549		69,61	164,88	4,73	60,65	,6097
100 + 35	,88580 ,88693	_	29,01	126,39	2,62 2,67	79 ,12 78 ,64	,7953 ,7905	100 + 85 86	,92604 ,92661	_	70,44 71,27	165,67 166,47	4,77 4,80	60,36	,6067 ,6038
37	,88804		30,66	127,16	2,73	78,16	,7857	87	,92716		72,10	167,26	4,84	59.79	,6010
38	,88914	-	31,49	128,71	2,78	77,69	,7810	88	,92770 ,92824		72,93	168,06 168,85	4,87	59,50	,5982
100 + 40	,89022	_	32,32	129,48	2,84	77,22	,7763	100 + 90		_	73,76	169,64	4,91 4.95	59,22	,5954 ,5925
41	,89234	-	33,98	131,04	2,94	76,31	,7671	91	,92930	-	75,42	170,44	4,98	58,67	,5898
	,89337 ,89439	_	34,81 35,63	131,81	3,00	75,86	,7626 ,7582		,92982 ,93034	_	76,25 77,07		5,01 5,03	58.40 58,13	,5870
	,89540	_	36,46	132,39	3,09	74,98	,7538		,93085		77,90		5,07	57.86	,5816
100 + 45		_	37,29	134,15	3,14	74,54	₂ 7494	100 + 95	,93135		78,73		5,10	57,59	,5789
40 47	,89737 ,89834		38,12 38,95	134,92	3,20	74,11	,7450 ,7408		,93184	_	79,55 80,37		5,13	57,33 57,07	,5763 ,5737
48	,89929		39,78	136,48	3,30	73,27	,7366	98	,93281		81,20	176,00	5,20	56,81	,5711
49	,90023	1	40,60	137,26	3,34	72,85	,7324	9 9	,93329		82,03	176,80	5,23	56,56	,5685

HEAT 510.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.		II.	III.	IV.	v.	VI.	VII.	VIII.
Water and Spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal ınulti-	Water an		Specific gravity.	Spirit by	Water by	Bulk of mixture,	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	8	mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		Staticy.	mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
						per cent.			_	<u></u>	suic.				per cont.	
$W_{\bullet} + Sp_{\bullet}$						-		W. + S	p.							
100 + 100		100	82,87	177,61	5,26	56,30	,5659	100 +				165,75	258,89	6,86	38,62	,3883
	,93425 ,93474		83,71	178,43 179,27	5,28 5,30	56,04 55,78	,5633 ,5607			,96154 ,96213		169,14 172,66	262,26 265,76		38,13 37,63	,3833
97	,93521		85,45	180,10	5,35	55,52	,5581		47	,96273		176,32	269,41	6,91	37,12	,3731
$\frac{90}{100 + 95}$,93569	-	86,33	180,95	5,38	55,26	,5555 ,5528	·		,96331 ,96391		180,16		6,93 6,94	36,60	,3679
94	,93664	_	88,16	182,73	5,40 5,43	54,99 54,72	,5502		45 44	,96449		188,36	281,40	6,96	35,53	,3572
93 92	,93713 ,93761	_	90,08	183,64	5,47	54,45	•547 <u>4</u>		43	,96508 ,96566		192,73	285,77 290,37	6,96	34,99	,3517
, ,	,93701		91,07	184,59 185,55	5,49 5,52	54,18 53,90	,5446		42 41	,96624		197,32	295,17		34,44	,3406
100 + 90	,93856	_	92,08	186,53	5,55	53,61	,5389	100 +	40	,96682		207,19	300,22	6,97	33,31	,3348
	,93906 ,93956		93,12 94,18	187,54 188,56	5,58	53,32 53,03	,5360 ,5331			,96739 ,96798		212,50	305,52	6,98 6,97	32,73	,3290
87	,94007		95,26	189,61	5,65	52,74	,5301		37	,96856		223,99	317,02	6,97	31,54	,3170
86			96,37	190,69	5,68	52,44	,5271			,96914		230,21	323,25		30,93	,3109
100 + 85 84	,94108 ,94161	1	97,50 98,65	191,79	5,71 5,73	52,14 51,84	,5241		35 34	,96972 ,97029		236,78 243,75	329,84 336,82	6,94 6,93	30,32	,3047
83			99,84	194,07	5,77	51,53	,5180		33	,97088		251,14	344,24	6,90	29,05	,2920
81	,94267 ,94320		101,07	195,25 196,47	5,82	51,22	,5148 ,5116			,97146 ,97204		258,99 267,34	352,12 360,50	6,8 ₇	28,40 27,74	,2855
100 + 80	-		103,59	197,71	5,88	50,58	,5084	·	30	,97264	-	276,25	369,46	6,79	27,07	,2721
79 78	,94427		104,90	198,99	5,91	50,25	,5052		29	,97323		285,78		6,75	26,38	,2652
70	,94481 ,94536		107,63	200,29 201,64	5,96	49,92	,5019 ,4986	i	28 27	,97384 ,97446		295,98 306,95	389,28 400,30	6,65	24,98	,2511
	,94590		109,05	203,03	6,02	49,25	,4952			,97508	_	318,75	412,17	6,58	24,26	,2439
100 + 75 74	1		110,50	204,44	6,06	48,91 48,56	,4917 ,4882	100 +	25 24			331,50	424,97 438,84	6,53	23,53	,2366
73	1		113,52	207,40	6,12	48,21	,4 ⁸ 47	3	23	,97701		360,33	453,92	6,41	22,03	,2215
72 71	,94809 ,94864		115,10	208,96 210,54	6,14	47,86	,4811	1		,97768 ,97836		376,71 394,65	470,38 488,40	6,33	21,26	,2137
100 + 70			118,39	212,17	6,22	47,13	•4774 •4737		20		-	414,38	508,22	$\frac{6,16}{6,16}$	19,67	,1978
69	,94976		120,10	213,85	6,25	46,76	,4700	·	19	,97977	 	436,19	530,12	6,07	18,86	,1896
68	1 / 2 / 1		121,87	215,59	6,28	46,38	,4663 ,4625	1	18 17	,98049 ,98124		460,43 487,51	554,46 581,65	5,97 5,86	18,03	,1813
66	,9514.8		125,57	219,21	6,36	45,62	,4586		16	,98202	-	517,98	612,24	5,74	16,33	,1642
100 + 65	,95206	_	127,50	221,10	6,40	45,23	,4546	100+	15	,98283		552,51	646,89		15,46	,1554
	,95264	-	129,49	223,07	6,42	44,83	,4506 ,4466		13	,98366 ,98453		591,98 637,51	686,50 732,17	5,34	14,57	,1464
62	,95380	-	133,67	227,18	6,49	44,02	,4425		I 2	,98543		690,64	785,44	5,20	12,73	,1280
100 + 60	,95440		135,86	229,34	6,52	43,61	,4383	100 +		,98638		753,42 828,76	923,87		10,82	,1185
59	,95558	s —	140,45	233,87	6,58	42,76	4298ء	100 +	9	,98839	—	920,86	1016,15	4,7 I	9,84	,0989
,	,95619 ,95678		142,88	236,25	6,63	42,32	,4255 ,4211		8	,98948		1035,96	1131,44		8,84 7,81	,0888 ,0785
57 56	·95737		145,39	241,30	6,69	41,69	,4166		6	,99063 ,99184		1381,28	1477,14		6,77	,0680
100 + 55	,95798	=	150,68	243,96	6,72	40,99	,4120	100 +	5	,99310	_	1657,54	1753,61	3,93	5,70	,0573
	,95857		153,45	246,72 249,58	6,73	40,53	,4075		4	,99443 ,99586		2071,91	2168,21 2859,06	3,70	4,61 3,50	,0464 ,0352
52	,95976	—	159,34	252,56	6,78	39,59	,3980			,99737	_	4143,84	4240,54	3,30	2,36	,0237
51	1,96035	-	162,48		6,82	39,11	,3932	l	1	,99896	- I	8287,67	8384,55	3,12	1,19	,0120

T t 2

HEAT 52°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by mcasure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
Sp. + W.								Sp. + W.							
100 + 0 1 2 3	,82881 ,83112 ,83337 ,83558 ,83771		0,83 1,66 2,49 3,32	100,00 100,72 101,44 102,16 102,89	0,11 0,22 0,33 0,43	100,00 99,29 98,58 97,88 97,19	1,0046 ,9975 ,9904 ,9834 ,9764	52	,90160 ,90248 ,90336	_	41,41 42,24 43,07 43,90 44,73	138,03 138,81 139,59 140,37 141,16	3,38 3,43 3,48 3,53 3,57	72,45 72,04 71,64 71,24 70,84	,7278 ,7237 ,7197 ,7157 ,7118
100 + 5 6 7 8	,83980 ,84183 ,84381 ,84574 ,84762	_	4,15 4,97 5,80 6,63 7,45	103,63 104,36 105,10 105,84 106,58	0,52 0,61 0,70 0,79 0,87	96,50 95,82 95,15 94,48 93,82	,9695 ,9627 ,9560 ,9493 ,9427	100 + 55 56 57 58	,90505 ,90588 ,90669		45,56 46,38 47,21 48,04 48,87	141,94 142,73 143,51 144,30 145,08	3,62 3,65 3,70 3,74 3,79	70,45 70,06 69,68 69,30 68,92	,7078 ,7039 ,7001 ,6962 ,6924
100 + 10 11 12 13	,85126 ,85302 ,85474 ,85643	—	8,28 9,11 9,94 10,77 11,60	107,33 108,08 108,82 109,57 110,33	0,95 1,03 1,12 1,20 1,27	93,17 92,53 91,89 91,26 90,64	,9361 ,9296 ,9232 ,9169 ,9106	62	,90982 ,91059 ,91134	_	49,69 50,52 51,36 52,18 53,01	145,87 146,66 147,45 148,23	3,82 3,86 3,91 3,95 3,98	68,55 68,18 67,82 67,46 67,10	,6887 ,6850 ,6814 ,6778 ,6741
17 18	,85969	_	12,43 13,25 14,08 14,91 15,73	111,08 111,83 112,59 113,35 114,11	1,35 1,42 1,49 1,56 1,62	90,02 89,42 88,82 88,22 87,63	,9044 ,8983 ,8923 ,8863 ,8804	100 + 65 66 67 68	,91352 ,91424 ,91496		53,84 54,67 55,50 56,32 57,15	149,82 150,61 151,39 152,18 152,97	4,02 4,06 4,11 4,14 4,18	66,75 66,40 66,05 65,71 65,37	,6706 ,6671 ,6636 ,6602 ,6568
100 + 20 21 22 23 24	,86729 ,86873 ,87015	_	16,56 17,39 18,22 19,05 19,88	114,87 115,63 116,39 117,15	1,69 1,76 1,83 1,90	87,05 86,48 85,92 85,36 84,81	,8746 ,8688 ,8631 ,8575 ,8520	100 + 70 71 72 73	,91703 ,91770 ,91836		57,98 58,81 59,64 60,46 61,29	153,76 154,55 155,34 156,13 156,92	4,22 4,26 4,30 4,33 4,37	65,03 64,70 64,37 64,04 63,73	,6534 ,6501 ,6468 ,6435 ,6402
100 + 25 26 27 28 29	,87556 ,87685	_	20,7 I 21,54 22,37 23,20 24,02	118,69 119,45 120,22 120,99 121,76	2,02 2,09 2,15 2,21 2,26	84,26 83,72 83,18 82,65 82,13	,8465 ,8410 ,8357 ,8304 ,8252	100 + 75 76 78 78	,92028 ,92090 ,92153		62,12 62,95 63,78 64,61 65,44	157,71 158,50 159,29 160,09 160,88	4,41 4,45 4,49 4,52 4,56	63,41 63,09 62,78 62,47 62,16	,6370 ,6338 ,6306 ,6275 ,6245
100 + 30 31 32 33 34	,88060 ,88181 ,88300 ,88418	-	24,86 25,68 26,50 27,33 28,16	122,53 123,30 124,07 124,84 125,61	2,33 2,38 2,43 2,49 2,55	81,62 81,11 80,60 80,10 79,61	,8199 ,8148 ,8097 ,8047 ,7998	83 84	,92333 ,92392 ,92450 ,92507		66,27 67,09 67,92 68,75 69,57	161,68 162,47 163,27 164,06 164,86	4,59 4,62 4,65 4,69 4,71	61,85 61,55 61,25 60,95 60,66	,6214 ,6184 ,6154 ,6124 ,6094
37 38	,88533 ,88647 ,88758 ,88868		28,99 29,82 30,65 31,48 32,30	126,39 127,16 127,92 128,70 129,47	2,60 2,66 2,73 2,78 2,83	79,13 78,65 78,17 77,70 77,23	,7901 ,7853 ,7806	87 88	,92562 ,92619 ,92674 ,92728	1 -	70,41 71,24 72,06 72,89 73,72	165,65 166,45 167,24 168,03 168,83	4,76 4,79 4,82 4,86 4.89	60,08 59,80 59,51	,6065 ,6036 ,6007 ,5979
100 + 40 41 42 43			33,13 33,96 34,79 35,61 36,44	130,25 131,03 131,80 132,58 133,36	2,88 2,93 2,99 3,03 3,08	76,77 76,32 75,87 75,42 74,98	,7713 ,7667 ,7622	92 93	,92839 ,92887 ,92939 ,92991		74,55 75,38 76,21 77,03 77,86	169,62 170,42 171,22 172,02 172,81	4,93 4,96 4,99 5,01 5,05	58,40 58,13	,5922 ,5895 ,5867 ,5840 ,5813
100 + 45 46 47 48	,89593		37,27 38,10 38,93 39,76 40,58	134,14 134,91 135,69 136,47	3,13 3,19 3,24 3,29 3,33	74,55 74,12 73,70 73,28 72,86	,7490 ,7446 ,7404 ,7362	100 + 95 96 97 98	**************		78,69 79,51 80,33 81,16 81,99	173,61 174,40 175,19 175,98 176,78	5,18	57,34	,5787 ,5760 ,5734 ,5708

HEAT 52°.

I. Water and spirit by weight.	II. Specific gravity.	III. Spirit by mea- sure.	IV. Water by measure.	V. Bulk of mixture.	VI. Diminution of bulk.	VII. Quantity of spirit per cent.	VIII. Decimal multi- pliers.	I. Water and spirit by weight.	II. Specific gravity.	III. Spirit by mea- sure.	IV. Water by measure.	V. Bulk of mixture.	VI. Diminution of bulk.	VII. Quantity of spirit per cent.	VIII. Decimal multi- pliers.
$\overline{W_{\cdot} + Sp_{\cdot}}$						-		₩. + Sp.						1	
97 96 100 + 95	,933 ⁸ 3 ,9343 ² ,93479 ,935 ² 8 ,935 ⁷ 5	_	82,83 83,67 84,53 85,41 86,29	177,59 178,41 179,24 180,08 180,93	5,24 5,26 5,29 5,33 5,36 5,39	56,30 56,05 55,79 55,53 55,27 55,00	,5631 ,5605 ,5579 ,5553 ,5526	100 + 50 49 48 47 46 100 + 45	,96122 ,96182 ,96242 ,96301		165,66 169,05 172,57 176,23 180,06	277,16	6,88 6,89 6,90	38,63 38,14 37,63 37,13 36,61	,3881 ,3832 ,3781 ,3730 ,3678
93 92 91 100 + 90	,93672 ,93720 ,93768 ,93816		88,12 89,06 90,03 91,02 92,03	182,70 183,62 184,56 185,53	5,42 5,44 5,47 5,49 5,53	54,73 54,46 54,19 53,91 53,62	,5499 ,5471 ,5443 ,5415 ,5387	44 43 42 41 100 + 40	,96420 ,96479 ,96538 ,96597 ,96655		188,26 192,63 197,21 202,02 207,08	285,69 290,28 295,08 300,12	6,94 6,93 6,94 6,96 6,96	35,54 35,00 34,45 33,89 33,32	,3571 ,3516 ,3461 ,3405
88 87 86 100 + 85			93,07 94,13 95,21 96,32 97,45 98,60	187,51 188,53 189,58 190,66 191,76 192,89	5,57 5,60 5,63 5,66 5,69 5,71	53,33 53,04 52,75 52,45 52,15 51,85	,5358 ,5329 ,5299 ,5269 ,5239	39 38 37 36 100 + 35 34	,96772 ,96831 ,96890 ,96949	_	212,39 217,97 223,87 230,09 236,66 243,62	311,02 316,93 323,15 329,73	6,95 6,94 6,94 6,93 6,91	32,74 32,15 31,55 30,94 30,33 29,70	,3289 ,3230 ,3169 ,3108 ,3047 ,2984
83 82 81 100 + 80	,94173 ,94226 ,94280	_	99,79 101,01 102,26 103,54 104,85	194,04 195,22 196.44 197,68 198,96	5,75 5,79 5,82 5,86 5,89	51,54 51,22 50,91 50,59 50,26	,5178 ,5146 ,5114 ,5082 ,5050	$ \begin{array}{r} 33 \\ 32 \\ 31 \\ \hline 100 + 30 \end{array} $,97065 ,97124 ,97183 ,97244 ,97303		251,01 258,85 267,20 276,10 285,63	344,12 352,00 360,37	6,89 6,85 6,83 6,78	29,06 28,41 27,75 27,08 26,39	,2920 ,2855 ,2788 ,2720 ,2651
78 77 76 100 + 75	,94441 ,94496 ,94550 ,94604 ,94659		106,20 107,57 108,99 110,44	200,26 201,61 202,99 204,41 205,87	5,94 5,96 6,00 6,03 6,06	49,93 49,59 49,26 48,92 48,57	,5017 ,4984 ,4950 ,4915 ,4880	28 27 26 100 + 25	,97364 ,97427 ,97490 ,97554 ,97618		295,82 306,79 318,58 331,33 345,14	389,13 400,14 412,00 424,80	6,69 6,65 6,58 6,53 6,48	25,70 24,99 24,27 23,54 22,79	,2581 ,2510 ,2438 ,2365 ,2290
72 71 100 + 70	,94715 ,94770 ,94825 ,94881 ,94938		113,46 115,04 116,66 118,33	207,37 208,92 210,51 212,14 213,82	6,09 6,12 6,15 6,19 6,22	48,22 47,86 47,50 47,14 46,76	,4845 ,4809 ,4773 ,4736 ,4699	22 21 100 + 20 19	,97684 ,97752 ,97821 ,97892 ,97963	_	360,14 376,51 394,44 414,16 435,96	453,73 470,18 488,19	6,41 6,33 6,25 6,16 6,08	22,04 21,27 20,48 19,68 18,87	,2214 ,2136 ,2058 ,1978 ,1896
67 66 100 + 65 64	,95227		121,80 123,62 125,50 127,43	215,55 217,33 219,17 221,06 223,02	6,29 6,33 6,37	46,01 45,62 45,23	,4661 ,4623 4584	17 16 100 + 15	,98036 ,98112 ,98190 ,98272 ,98355		460,19 487,25 517,71 552,22 591,67	554,21	5,98 5,87 5,76 5,64	18,04 17,20 16,34 15,47 14,57	,1813 ,1728 ,1642 ,1554 ,1464
63 62 61 100 + 60	,95285 ,95344 ,95404		131,47 133,60 135,79 138,05	225,04 227,13 229,29 231,52 233,82	6,43 6,47 6,50	44,43 44,02 43,61 43,19	,4464 ,4423 ,4382	13 12 11 100 + 10	,98443 ,98534 ,98629		637,18 690,28 753,03 828,33	731,81 785,06 847,96	5,37 5,22 5,07 4,92	13,66 12,74 11,80	,1373 ,1280 ,1185
58 57 56 100 + 55	,95584 -95643 -95703 -95764	—]	142,80 145.31 147,91 150,60	236.20 238.67 241.24 243.90	6,60 6.64 6.67	42,33 41,89 41,45 41.00	,4253 ,4209 ,4164 ,4119	8 7 6	,98940 ,99056 ,99177 .99304	Property of the control of the contr	920,38 1035,42 1183,34 1380,56 1656,67	1278,97 1476,38 1752,70	4,55 4,37 4,18 3,97	9,85 8,84 7,82 6,77 5,70	,0989 ,0888 ,0785 ,0680
53 52	95943	i	53.37 56,25 59,26 62,39	246,65 249,52 252,50 255,60	6,76	40,07 39,60	,4073 ,4026 ,3979 ,3930	3 2	,99437 ,99580 ,99731 ,99890		2070,83 2761,11 4141,66 8283,32	2167,08 2857,56 4238,31	3,75 3,55 3,35	3,50	,0464 ,0352 ,0237 ,0120

HEAT 53°.

							1			1	<u> </u>		1		
. Г.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
	Specific		Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.			,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	per cent.	Priorei	0.8		sure.			bulk.	per cent.	-
Sp. + W.	**************************************							Sp. + W.							
***	0.0										47.40	* a 0 o a		72.16	7055
100 + 0	,82833 ,83063	100	0,83	100,00	0,11	99,29	1,0040 ,9969	100 + 50	,90024	1	41,39 42,22	138,02 138,80	3,37	72,46 72,05	,7275 ,7234
2			1,66	101,44	0,22	98,58	,9898	52	,		43,05	139,58	3,47	71,64	,7194
	,83509		2,49	102,16	0,33	97,88	,9828	53			43,87	140,36	3,51	71,24	,7154
4	,83723		3,32	102,89	0,43	97,19	,9758		,90375		44:70	141,15	3,55	70,85	,7114
100 + 5	,83932		4,14	103,63	0,51	96,50	,9689	100 + 55	,90459	1	45,53	141,93	3,60	70,46	,7074
. 6		_	4,97	104,36	0,61	95,82	,9622	56			46,35	142,72	3,63	70,07	,7036 ,6997
7 8	,84332 ,84526	_	5,80 6,63	105,10	0,70	95,15 94,48	,9555 ,9488	57 58	,90623		47,18 48,01	143,50 144,29	3,72	69,30	,6958
9		_	7,45	106,58	0,87	93,82	,9422	59			48,84	145,07	3,77	68,93	,6921
100 + 10			8,28	107,33	0,95	93,17	,9355	100 + 60	-		49,67	145,86	3,81	68,56	,6883
	,85078		9,11	108,08	1,03	92,53	,9291		,90937		50,50	146,65	3,85	68,19	,6846
I 2			9,93	108,82	1,11	91,90	,9227	62	,91013	<u> </u>	51,33	147,44	3,89	67,82	,6811
13		-	10,76	109,57	1,19	91,27	,9164		,91088		52,15	148,22	3,93	67,46	,6775
	,85595		11,59	110,33	1,26	90,65	,9101	-	,91161	-	52,98	149,01	3,97	67,11	,6738
100 + 15		_	12,42	111,08	1,34	90,03	,9039	100 + 65			53,81	149,80	4,01	66,76	,6702
17	,85921 ,86078		13,25	111,83	1,42 1,48	89,42 88,82	,8978 ,8918	6.	,91307		54,64 55,47	150,59	4,05	66,06	,6633
18			14,90	112,35	1,55	88,22	,8858	68	1 2 21 2	1	56,29	152,16	4,13	65,72	,6599
19	,86386		15,72	114,10	1,62	87,63	,8799	60	1 / 1/		57,12	152,95	4,17	65,38	,6565
100 + 20	,86535	_	16,56	114,87	1,69	87,05	,8741	100 + 70	,91590	5	57,95	153,74	4,21	65,04	,6531
21	,86682	:	17,39	115,63	1,76	86,48	,8684	7		51	58,78	154,53	4,25	64,71	,6498
22			18,21	116,39	1,82	85,92	,8627	7:	1 -	1	59,61	155,32	4,29	64,38	,6465
2.3	,86968 ,87107		19,04	117,15	1,89	85,36 84,81	,8571 ,8516	7.			60,43	156,11	4,32	64,05	,6432 ,6399
100 + 25			20,70	117,91	2,02	84,26		7/			62,09	157,69	4,40	63,41	,6367
26			21,52	119,44	2,08	83,72		100 + 7		-1	62,91	158.48	4,43	63,09	,6335
27) -	22,35	120,21	2,14	83,18	,8352	7		~ 1	63,75	159,27	4,48	62,78	,6303
28	,87638	3	23,19	120,98	2,21	82,66	,8299	7	9211	0 —	64,57	160,08	4,49	62,47	,6272
	,8776		24,01	121,75	2,26	82,13	_	7	-		65,41	160,86	4,55	62,16	,6242
100 + 30			24,84	122,52	2,32	81,62	,8195	100 + 8	1		66,23	161,66	4,57	61,86	,6211
31	1 00 .		25,67	123,29	2,38	81,11		8 8	1	1	67,88	162,46 163,25	4,59	61,25	,6151
33		1	27,32	124,83	2,49	80,11		8	1 / / 1	- 1	68,71	164,04	4,67	60,96	
34	,8837	i	28,15	125,60	2,55	79,62	7994	8			69,53	164,84	4,69	60,66	,6091
100 + 3	,8848	5 —	28,98	126,38	2,60	79,13	7945	100 + 8	5 ,9252	0 -	70,37	165,63	4,74	60,37	,6062
30	6 ,8860	o —	29,80	127,15	2,65	78,65	,7897	8	6 ,9257		71,20	166,42	4,78	60,09	,6033
	7 ,8871		30,63	127,92	2,71	78,17			,9263 8,9268	2 -	72,02	167,22	4,80		,6004
	8 ,8882 9 ,8893		31,46	128,70	2,76	77,70			9,9200		72,85	168,81	4,87		
100 + 4			33,12	129,47	2,87	77,23		100 + 9	_	-	74,51	169,60	4,91		_
	1,8914		33,95	130,25	2,93	76,32		100 7 9	1,9284	4 -	75,34	170,40	4,94	58,68	,5892
	2 ,8924		34,78	131,79	2,99	75,87		9	2 ,9289	7 -	76,17	171,20	4,97	58,41	,5865
4	3 ,8934	9 —	35,60	132,57	3,03	75,43	7574	9	3 ,9294		76,99	172,00	4,99		
	4 ,8945		36,43	133,35	3,08	74,99		.[]	4 ,9299		77,82	172,79	5,03	-	
100 + 4	5,8954	8 -	37,26	134,13	3,13	74,55		100 + 9			78,65	173,59	5,06		
	6 ,8964 7 ,8974		38,08	134,90	3,18	74,13			6 ,9309 7 ,9314		79,47	174,38	5,09		
	8 ,8983		39,74		3,23	73,28			8,9319		81,12	175,96			,5706
1 4	9,8993	3 -	40,56		3,32	72,86	,7316		9,9324		81,95	176,76	5,19		

HEAT 53°.

<u> </u>	1	1	1	· · · · · · · · · · · · · · · · · · ·	Ī	<u> </u>	1	1)	1					
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and		Spirit	Water	Bulk of	Diminu-	Quan-	Decimal		Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decima
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
Ū		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.								W. + Sp.							
													-	10.6	-00-
100+100	,93291	100	82,78	177,57 178,38	5,21 5,25	56,31 56,05	,5654 ,5628	100 + 50 49			165,57 168,96	258,76 262,14		38,64 38,14	,3880
98			84,49	179,22	5,27	55,79	,5602	48			172,48	265,62		37,64	,3780
97	,93438		85,36	180,06	5,30	55,53	,5576	47	,96211		176,14	269,27		37,14	,3729
	,93486		86,24	180,91	5,33	55,27	,5550	46			179,97	273,08		36,62	,3677
100 + 95 94	,93534 ,93582		87,14 88,08	181,78 182,68	5,36	55,01 54,74	,5523	100 + 45 44			183,97 188,16	277,08 281,24	6,89	35,55	,3624 ,3570
93	,93631		89,01	183,59	5,42	54,47	,5469	43	1		192,53	285,60		35,01	,3515
92	,93679	_	89,98	184,53	5,45	54,19	,5441	42	,96510		197,11		6,92	34,46	,3460
91			90,97	185,50	5,47	53,91	,5413	41			201,92		6,93	33,90	,3404
100 + 90	,93776 ,938 2 6		91,98	186,47 187,48	5,51 5,54	53,62 53,33	,5384 ,5356	100 + 40			206,97 212,28	300,03	6,94 6,94	33,33	,3346
88	,93876		94,08	188,50	5,58	53,05	,5327	39 38		_	217,86	310,93	6,93	32,16	,3229
87	,93927		95,16	189,55	5,61	52,75	,5297	37	,96806	-	223,75	316,83	6,92	31,56	,3169
86	-2377		96,27	190,63	5,64	52,45	,5267		,96866		229,97	323,05		30,95	,3108
100 + 85 84	,94028 ,94081		97,40	191,73 192,86	5,67	52,15 51,85	,5237 ,5207	100 + 35		1	236,54		6,92 6,91	30,34 29,71	,3046
83	,94133	_	99,74	192,00	5,69	51,55	,5176	34 33			243,50 250,88		6,88	29,07	,2919
82	,94186		100,96	195,19	5,77	51,23	,5144	32			258,71		6,84	28,42	,2854
81	,94240		102,20	196,41	5,79	50,91	,5112	31			267,06	360,24		27,76	,2788
100 + 80	,94293		103,48	197,65	5,83	50,59	,5080	100 + 30			275,96	369,19	6,77	27,09	,2719
79 78	,94347 ,94401		104,79	198,92	5,87 5,91	50, 2 7 49,94	,5048 ,5015	29 28			285,48 295,67	378,75 388,98	6,73	26,40 25,71	,2651
76 77	,94456		107,51	201,58	5,93	49,60	,4982	27	,97408		306,63	399,98	6,65	25,00	,2510
76			108,93	202,96	5,97	49,27	,4948	26			318,41,	411,83	6,58	24,28	,2438
100 + 75	,94564		110,38	204,38	6,00	48,93	,4913	100 + 25	1	1	331,16	424,63	6,53	23,55	,2364
74	.94620 ,94676		111,87	205,83	6,04 6,06	48,58 48,23	,4878 ,4843	24	1	_	344,96 359,95	438,48 453,54	6,48	22,80 22,05	,2290
73 72	,94731		114,98	208,89	6,00	47,87	,4807	23			376,31	469,98	6,33	21,28	,2136
71	,94787		116,60	210,47	6,13	47.51	,477 I	21			394,23	487,98	6,25	20,49	,2057
100 + 70	,94843		118,27	212,11	6,16	47,14	,4734	100 + 20	1 / / /	1	413,94	507,78	6,16	19,69	,1977
69 68	,94900		119,96	213,78	6,20 6,24	46,77 46,40	,4697 ,4659	19 18	1		435,73	529,65 553,96		18,88 18,05	,1895
6 ₇	,94958 ,95015		121,74	215,51	6,24	46,02	,4621	17	1 - 2		459,95 487,00	581,12	5,88	17,21	,1727
66	,95073		125.44	219,13	6,31	45,63	,4582	16	1		517,44	611,66	5,78	16,35	,1641
100 + 65			127,37	221,02	6,35	45,24	,4543	100 + 15	,98261		551,93	646,28	5,65	15,48	,1553
	,95190		129,35	222,98	6,37	44,84	,4503	14	,98345		591,36 636,85	685,84	5,52	14,58	,1463
62	,95249 ,95308		131,40	225,00	6,40	44,44	,4462 ,4421		,98433 ,98525		689,92	731,46 784,68		13,67	,1372 ,1280
61			135,72	229,25	6,47	43,62	,4380	11			752,64	847,54		11,80	,1185
100 + 60	,95428		137,98	231,47	6,51	43,20		100 + 10	,98720	_	827,90	922,95	4,95	10,84	,1088
59	,95488		140,31	233,77	6,54	42,77	,4295	9	,98823	-	919,90	1015,13	4,77	9,85	,0989
58	,95549		142,72	236,15	6,57	42,34	,4251 ,4207		1		1034,88	1130,30	4,58	8,84 7,8 2	,0888 ,0786
57 56	,95609 ,95669		145,24	238,62 241,19	6,62 6,64	41,46	,4163	7 6			1379,84	1475,62		6,78	,0680
100 + 55	-		150,52	243,85	6,67	41,01	-	100 + 5			1655,81	1751,79	4,02	5,71	,0573
	,95790	-	153,29	246,60	6,69	40,55	,4071	4	,99431		2069,75	2165,96	3.79	4,62	,0464
53			156,17	249,46	6,71	40,08	,4025				2759,66	2856,06	3,60	3,50	,0352
52 51	,95910 ,95970		159,18	252,44 255,54	6,74	39,61	,3978	2 I	,99725 ,99884		4139,50 8279,00	4236,09 8375,77		2,36	,0237
7 1	⇒939/ ^O l		102,51	~33,34°	1 57//	1 272 7	(フラダギダー	1	(JZZ004	.1		(2/3//	. <u> </u>	-7-3	, ,

HEAT 54°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific			Bulk of	Diminu-	Quan-	Decimal			Spirit	Water by	Bulk of	Dimi-	Quan-	Decimal
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent.			•	sure.				per cent.	1
Sp. + W.								Sp. + W.							
ор. т т.				-									.		
100 + 0		100		100,00			1,0034	100 + 50			41,37	138,01	3,36	72,46	,7271
I	,83015		0,83	100,72	0,11	99,29	,9963	51		1	42,20	138,79	3,41	72,05	,7230
3	,83240 ,83460		2,49	101,44 102,16	0,22	98,58 97,88	,9892 ,9822	52 53	,	1	43,03 43,85	139,57	3,46	71,65	,7190 ,7150
4	,83674		3,31	102,89	0,42	97,19	,9752	54		1	44,68	141,14	3,54	70,85	,7110
100 + 5	,83883	_	4,14	103,63	0,51	96,50	,9683	100 + 55	,90413		45,51	141,92	3,59	70,46	,7071
6	-		4,96	104,36	0,60	95,82	,9616	56	1	1	46,33	142,71	3,62	70,07	,7032
- 7 8	,84283 ,84477	_	5,79 6,62	105,10	0,69 0,78	95,15 94,48	,9549 ,9482	57 58	,90577 ,90657	_	47,16	143,49	3,67	69,69	,6993
9	,84666	_	7,45	105,58	0,87	93,83	,9416	59			47,99 48,81	145,06	3,75	68,93	,6917
100 + 10	,84850		8,28	107,32	0,96	93,18	,9350	100 + 60		-	49,64	145,85	3,79	68,56	,6880
11	,85030		9,11	108,07	1,04	92,54	,9286	61	,90891	_	50,47	146,64	3,83	68,20	,6843
I 2	,85206		9,93	108,82	1,11	91,90	,9222	62	1771	1	51,30	147,43	3,87	67,83	,6807
13 14	,85378 ,85547	_	10,76	109,57	1,19 1,27	91,27 90,65	,9159 ,9096	63 64			52,12 52,95	148,21	3,91	67,47	,6771 ,6734
100 + 15	,85712		12,41	111,08	1,33	90,03	,9034	100 + 65			53,78	149,79	3,99	66,76	,6699
16	,85873	_	13,24	111,83	1,41	89,42	,8973	66	1	į.	54,61	150,58	4,03	66,41	,6664
17	,86031		14,07	112,58	1,49	88,82	,8913	67	1 2 2 3 1		55,44	151,36	4,08	66,06	,6630
18	,86186	-	14,90	113,34	1,56	88,23	,8853	68 69	1 - 1	-	56,26	152,15	4,11	65,72	,6596
19	,86339 ,86488		15,71	114,10	1,61	87,64 87,06	,8794				57,09	152,94	4,15	65,38	,6562
100 + 20	,86635	_	16,55	114,86 115,62	1,69 1,76	86,49	,8736 ,8679	100 + 70 71	1		57,92 58,75	153,73	4,19	65,05	,6528 ,6495
22	,86779		18,20	116,38	1,82	85,92	,8622	72	1		59,58	155,31	4,27	64,39	,6462
23	,86921		19,03	117,14	1,89	85,36	,8566	73		-	60,40	156,09	4,31	64,06	,6429
24	,87060		19,86	117,91	1,95	84,81	,8511		,91815		61,23	156,88	4,35	63,74	,6396
100 + 25 26	,87197 ,87331		20,69	118,68	2,01	84,26 83,72	,8455 ,8401	100 + 75 76	,91880 ,91944		62,06 62,88	157,68	4,38	63,42 63,10	,6364 ,6332
20 27	,87462	_	22,34	120,21	2,13	83,19	,8348	77	,92006		63,71	159,25	4,41 4,46	62,79	,6300
28			23,18	120,98	2,20	82,66	,8295	78		_	64,54	160,06	4,48	62,48	,6269
	,87718		23,99	121,75	2,24	82,14	,8243	79			65,37	160,84	4,53	62,17	,6239
100 + 30	,87843	-	24,83	122,52	2,31	81,62	,8190	100 + 80		-	66,20	161,64	4,56	61,86	,6208
3 I 32	,87966 ,88087	_	25,65	123,29	2,36 2,41	81,11	,8139 ,8088	82	,92247 ,92307	_	67,02 67,85	162,44 163,23	4,58	61,56	,6178 ,6148
33	,88207	_	27,30	124,83	2,47	80,11	,8039	83	,92365	_	$68,6\tilde{7}$	164,02	4,65	60,96	,6118
34	,88324		28,14	125,60	2,54	79,62	,7990	84	,92421		69,50	164,82	4,68	60,67	,6088
100 + 35			28,96	126,37	2,59	79,13		100 + 85	,92478	-	70,33	165,61	4,72	60,38	,6059
36	,88554 ,88666	-	29,79	127,14	2,65 2,71	78,65 78,18	,7893 ,7845	86	,92535 ,92590	_	71,17 71,98	166,40 167,20	4,77 4,78	60,09 59,81	,6030 ,6001
37	,88776	_	30,62	128,69	2,76	77,71	3/045 37798	88	,92590	_	72,81	167,99	4,82	59,52	,5973
	,88884	_	32,26	129,46	2,80	77,24	57751	89	,92797		73,64	168,79	4,85	59,24	,5945
100 + 40	,88991	_	33,10	130,24	2,86	76,78	,7705	100 + 90	,92751	_	74,47	169,58	4,89	58,96	,5917
41	,89097	-	33,93	131,01	2,92	76,33	,7659		,92802	-	75,30	170,38	4,92	58,69	,5889
	,89201 ,89304		34,76 35,58	131,78	2,98 3,02	75,88 75,43	,7614 ,7570		,92854 ,92905	_	76,13 76,95	171,18 171,98	4,95 4,97	58,42 58,15	,5862
43 44	,89405	_	36,41	133,34	3,07	74,99	,7526		,92956		77,78	171,98	5,0I	57,88	,5808
100 + 45	,89503		37,24	134,12	3,12	74,56		100 + 95			78,61	173,57	5,04	57,61	,5781
46	,89602	_	38,06	134,89	3,17	74,13	,7438	96	,93055		79,43	174,36	5,07	57,35	,5755
4.7	,89699		38,89	135,67	3,22	73,71	,7396	97	,93105	-	80,25	175,15	5,10	57,09	,5729
	,89794 ,89887		39,72	136,45	3,27	73,29	,7354 ,7312		,93154 ,93 2 02		81,08	175,94 176,74	5,14	56,83	,5703 ,5677
491	,0900/1	- 1	40,54	-3/343	3,31 ,	12,0/1	3/3141	99	1,75404		01,91	-/5/4	13,1/1	50,50	1 25º//-

HEAT 54°.

							111111				Allen phintride	***************************************			
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
$W_{\bullet} + S_{P}$.								W. + Sp.							
100 + 100	,93249 ,93299	100	82,74 83,59	177,55 178,36	5,19 5,23	56,32 56,06	,5652 ,5626	100 + 50	,95998 ,96059	100	165,49 168,87	258,70 262,08	6,79 6,70	38,65	,3879
98		_	84,44 85,32	179,19	5,25 5,28	55,80	,5600 ,5574	48 47	,96120		172,39 176,05	265,55 269,20	6,84	37,65	,3779
96	, 93445		86,20	180,89	5,31	55,28	,5548	46	,96241		179,88	273,01	6,87	36,63	,3676
	,93541	_	87,10	181,76 182,66	5,34 5,37	55,02	,5521 ,5494		,96362		183,88 188,06	277,00 281,16	6,90	36,10 35,56	,3623
92	,93590 ,93639		88,96 89,93	183,57	5,39 5,43	54,47 54,20	,5466 ,5439	43 42	,96482		192,43	285,52 290,10	6,91	35,02 34,47	,3514
91 100 + 90	,93688 ,93736	_	90,92	185,47	5,45	$\frac{53,92}{53,63}$,5410		,96543 ,96601		201,82	294,90 299,94		33,91	,3403
89	,93786 ,93836	_	92,97 94,03	187,45 188,47	5,52 5,56	53,34 53,05	,5353 ,5324	39	,96661 ,96722		212,17	305,25	6,92	32,76	,3287
87	,93887 ,93938	_	95,11	189,52	5,59 5,62	52,76 52,46	,5295 ,5265	37		_	223,64	316,74 322,95	6,90	31,57	,3168
100 + 85	,93988	_	97,35	191,70	5,65 5,67	52,16 51,86	,5235	100 + 35	,96901		236,42	329,51 336,48	6,91	30,35	,3045
83	,94041	_	99,69	192,83	5,71	51,55	,5205 ,5174	33	,96960		243,37 250,75	343,89	6,86	29,72	,2982
81	,94146 ,94200	_	100,91	195,16	5,75 5,77	51,24	,5142 ,5110	31	,97081 ,97141	1 '	258,58 266,92	351,75 360,11	6,81	28,43	,2853 ,2787
100 + 80 79	,94253 ,94307	_	103,43	197,62 198,89	5,81 5,85	50,60 50,28	,5078 ,5046	100 + 30	,97263		275,82 285,33	369,05 378,60		27,10 26,41	,2719
	,94361 ,94416		106,08 107,46	200,20 201,55	5,88 5,91	49,95 49,61	,5013 ,4980	28 27	1 7 7 5		295,52 306,47	388,83	6,65	25,72 25,01	,2581
76	,94471 ,94525		108,87	202.93	5,94 5,97	49,28	,4946 ,4910	$\frac{26}{100 + 25}$	2/131		318,25	411,66	6,59	24,29	,2437
	,94581		111,81	205,80	6,01 6,04	48, 5 9 48, 2 4	,4876 ,4841	24	,97584	_	344,78 359,76	438,30	6,48	22,81	,2289
72	,94693 ,94749		114,92	208,85 210,44	6,07	47,88 47,52	,4805 ,4769	22	1	_	376,11	469,78 487,77	6,33	21,29	,2135
100 + 70	,94805		118,21	212,07	6,14	47,15	,4732	100 + 20	,97862	_	394,03 413,73	507,56	6,17	19,70	,1977
6 8	,94862	_	119,92	213,74 215,47	6,18	46,78 46,41	,4695 ,4657	18	,97935 ,98010		435,51 459,71	529,42 553,71	6,00	18,89	,1895 ,1812
66	,94978 ,95036		123,50	217,25 219,09	6,25 6,28	46,03 45,64	,4619 ,4580	16	,98088 ,98168		486,75 517,17	580,86 611,38	5,79	17,22	,17 27 ,1641
100 + 65 64	,95094 ,95153		127,31	220,98	6,33 6,34	45,25 44,85	,4541 ,4501	100 + 15	,98250 ,98335	_	551,64 591,05	645,98 685,51	5,66 5,54	15,48	,1553
63	,95213		131,33 133,46	224,95	6,38 6,42	44,45 44,04	,4461 ,4420	13	,98423	—	636,52 689,56	731,11 784,30	5,41	13,68	,1372
61 100 + 60	,95332		135,65	229,20	6,45	43,63	4378و		,98611		752,25	847,13	5,12	11,81	,1184
59	,95453		137,91		6,49 6,52	43,21	,4293	9	,98815	—	827,47 919,42	922,49	4,80	9,86	,0989
57	,95514		142,65	236,10	6,55 6,59	42,35	,4250 ,4206	7	99042		1034,34	1129,73	4,43	8,85 7,83	,0888
100 + 55	,95635 ,95696		147,76	241,14	6,62	41,47	,4162		,9916 <u>3</u>	=	1379,12	1474,86	4,06	6,78 5,71	,0680
54	,95757 ,95817		153,21 156,09	246,54	6,67 6,69	40,56 40,09	,4024	4 3	,99425 ,99568		2068,67 2758,23	2164,83 2854,58	3,84 3,65	4,62 3,50	,0463 ,0351
52	,95877 ,95938		159,10		6,7 2 6,75	39,62		2 1			4137,35 8274,71	4233,89	3,46	2,36	,0237

HEAT 55°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	by	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of Bulk.	Quan- tity of spirit per cent.	Decima multi- pliers.
Sp. + W.								Sp. + W.		,					
100 + 0 1 2 3 4	,83192	_	0,83 1,65 2,48 3,31	100,00 100,72 101,44 102,16 102,89	0,11 0,21 0,32 0,42	100,00 99,29 98,58 97,88 97,19	1,0029 ,9957 ,9886 ,9816		,90023 ,90111 ,90198		41,35 42,18 43,01 43,83 44,66	138,00 138,78 139,56 140,34 141,13	3,35 3,40 3,45 3,49 3,53	72,47 72,06 71,65 71,25 70,86	,7267 ,7226 ,7186 ,7146
100 + 5 6 7 8	,84235 ,84429		4,13 4,96 5,79 6,62 7,44	103,62 104,36 105,10 105,84 106,58	0,51 0,60 0,69 0,78 0,86	96,50 95,82 95,15 94,49 93,83	,9678 ,9610 ,9543 ,9476 ,9410	100 + 55 56 57 58 59	,90531 ,90611		45,49 46,31 47,14 47,97 48,79	141,91 142,70 143,48 144,27 145,05	3,58 3,61 3,66 3,70 3,74	70,47 70,08 69,69 69,31 68,94	,7067 ,7028 ,6989 ,6951
12	,84982 ,85158 ,85330 ,85499		8,27 9,10 9,92 10,75 11,58	107,32 108,07 108,81 109,56	0,95 1,03 1,11 1,19 1,26	93,18 92,54 91,90 91,27 90,65	,9345 ,9280 ,9216 ,9153 ,9091	100 + 60 61 62 63 64	,90845 ,90921 ,90996		49,62 50,45 51,28 52,10 52,93	145,84 146,63 147,42 148,20 148,99	3,78 3,82 3,86 3,90 3,94	68,57 68,20 67,83 67,48 67,12	,6876 ,6839 ,6803 ,6767
100 + 15 16 17 18	,85825 ,85984 ,86139 ,86292		12,41 13,23 14,06 14,89 15,71	111,07 111,82 112,58 113,34 114,09	1,34 1,41 1,48 1,55 1,62	90,03 89,43 88,83 88,23 87,64	,9029 ,8968 ,8908 ,8848 ,8789	100 + 65 66 67 68 69	,91217 ,91289 ,91361	=	53,76 54,58 55,41 56,24 57,07	149,78 150,57 151,35 152,14 152,93	3,98 4,01 4,06 4,10 4,14	66,77 66,42 66,07 65,73 65,39	,6696
20 + 20 21 22 23 24	,86588 ,86732 ,86874	=	16,54 17,37 18,19 19,02 19,85	114,86 115,62 116,38 117,14 117,90	1,68 1,75 1,81 1,88 1,95	87,06 86,49 85,93 85,37 84,82	,8731 ,8674 ,8617 ,8561 ,8506	72 73	,91571		57,89 58,72 59,55 60,37 61,20	153,71 154,50 155,29 156,08 156,87	4,18 4,22 4,26 4,29 4,33	65,06 64,73 64,40 64,07 63,75	,652, ,649, ,6458 ,642
100 + 25 26 27 28 29	,87150 ,87284 ,87415 ,87544		20,68 21,50 22,33 23,16 23,98	118,67 119,43 120,20 120,97 121,74	2,01 2,07 2,13 2,19 2,24	84,27 83,73 83,19 82,66 82,14	,8451 ,8397 ,8343 ,8290 ,8238	100 + 75 76 77 78 78	,91837 ,91901 ,91963 ,92024		62,03 62,85 63,68 64,51 65,34	157,66 158,45 159,24 160,04 160,83	4,37 4,40 4,44 4,47 4,51	63,43 63,11 62,80 62,49 62,18	,636 ,632 ,629 ,626
100 + 30 31 32 33	,87919 ,88040 ,88160		24,81 25,64 26,46 27,29 28,12	122,51 123,28 124,05 124,82	2,30 2,36 2,41 2,47 2,53	81,63 81,12 80,62 80,12 79,63	,8186 ,8135 ,8084 ,8034 ,7985	100 + 80 81 82 83 84	,92205 ,92264 ,92322		66,16 66,99 67,82 68,64 69,47	161,62 162,42 163,21 164,00 164,79	4,54 4,57 4,61 4,64 4,68	61,87 61,57 61,27 60,97 60,68	,620 ,617 ,614 ,611
37 38	,88393 ,88507 ,88619 ,88729		28,95 29,77 30,60 31,43 32,25	126,36 127,13 127,90 128,68 129,45	2,59 2,64 2,70 2,75 2,80	79,14 78,66 78,18 77,71 77,25	,7936 ,7888 ,7840 ,7793 ,7747	8 ₇ 88	,92436 ,92492 ,92547 ,92601		70,30 71,13 71,95 72,78 73,61	165,59 166,38 167,18 167,97 168,77	4,71 4,75 4,77 4,81 4,84	60,39 60,10 59,82 59,53 59,25	,599 ,597
100 + 40 41 42	,88945 ,89051 ,89155 ,89258		33,08 33,91 34,74 35,56 36,39	130,23 131,00 131,77 132,55 133,33	2,85 2,91 2,97 3,01 3,06	76,79 76,33 75,88 75,44 75,00	,7701 ,7655 ,7610	100 + 90 91 92 93			74,43 75,26 76,09 76,91 77,74	169,56 170,36 171,16 171,96 172,75	4,87 4,90 4,93 4,95 4,99	58,97 58,70 58,43 58,16 57,89	,591, ,5886 ,5856
100 + 45 46 47 48	,89458 ,89556 ,89653		37,22 38,04 38,87 39,70 40,52	134,11 134,88 135,66 136,44	3,11 3,16 3,21 3,26 3,30	74,57 74,14 73,71 73,29 72,88	,7478 ,7435 ,7392 ,7350	100 + 95 96 97 98		-	78,57 79,39 80,21 81,04 81,87	173,55	5,02 5,05 5,08 5,12	57,62 57,36 57,10 56,84	,5779 ,5754 ,5727 ,5701

HEAT 55°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
W. + Sp				***************************************				W. + Sp.						***************************************	
100+100	,93208	100	82,70	177,53	5,17	56,33	,5649	100 + 50	,95966		165,41	258,64	6,77	38,66	,3877
	,93257	_	83,55 84,40	178,34	5,21 5,23	56,07 55,81	,5623		,96027 ,96088	_	168,79	262,03	6,76	38,16 37,66	,3828
97	,93354		85,27	180,02	5,25	55,55	,5571	47	,96150		175,96	269,13	6,83	37,16	,3726
100 + 95			86,16 87,06	180,87	5,29	55,29	,5545 FF18		,96211		179,79		6,85	36,64	,3674
	,93500		87,98	182,64	5,32 5,34	55,03 54,76	,5518 ,5491	100 + 45 44	,96333	_	187,96	281,08	6,88	35,58	,3568
	93549 93598		88,9 2 89,89	183,55 184,48	5,37	54,48	,5464	43	1 /		192,33		6,8 9 6,90	3 5 ,03 34,48	,3513
1	,93547		90,88	185,44	5,41 _5,44	54,21 53,93	,5436 ,5408	42 41		_	201,72	294,80	6,92	33,92	,3458
100 + 90	,93696	-	91,89	186,42	5,47	53,64	,5380	100 + 40	,96575		206,76	299,85	6,91	33,35	,3345
88	,93746 ,93796		9 2,92 93,98	187,4 2 188,44	5,50 5,54	53,35 53,06	,5351 ,5322	39 38	,96635 ,96696	_	212,06	310,74	6,90 6,90	32,77 32,18	,3286
87	,93846		95,06	189,49	5,57	52,77	,5292	37	,96756		223,53	316,64	6,89	31,58	,3167
100 + 85	,93897	_	96,17	190,57	5,63	52,47	,5262	$\frac{36}{100 + 35}$,96817 ,96877		229,73		6,89	30,36	,3106
84	. 94000		98,45	192,80	5,65	51,87	,5202	34	,96937	_	243,25	336,37	6,88	29,73	,2981
	,94052 ,94105		99,64	193,95	5,69 5,73	51,56 51,25	,5171 ,5139	33 32	,96998 ,97059		250,62 258,45	343,77 351,63	6,85	29,09 28,44	,2917
81	,94159		102,10	196,35	5,75	50,93	,5107	31	,97120	_	266,79	359,98	6,81	27,78	,2786
100 + 80			103,38	197,59	5,79	50,61	,5075	100 + 30	,97181		275,68	368,92	6,76	27,11	,2718
	,94267 ,94321	_	104,69	198,86 200,17	5,83 5,86	50,29 49,96	, 5 043 ,5010	29 28	,97243 ,97306	_	285,19 295,37	378,46 388,68	6,69	26,42 25,73	,2650 ,2580
77	,94376	-	107,41	201,52	5,89	49,62	,4977	27	,97370		306,31	399,66	6,65	25,02	,2509
100 + 75	,94431 ,94486	·	108,82	202,90	5,92 5,95	49,29	34943 34908	26 100 + 25	,97435 ,97500		318,09	411,49	6,60	24,30	,2437
74	,94542		111,76	205,77	5,99	48,60	,4874	24	,97567		344,60	438,13	6,47	22,82	,2289
73	,94598 ,94654		113,29	207,27 208,81	6,02 6,05	48,25 47,89	,4839 ,4803	23 22	,97635 ,97704	_	359,58 375,92	45 3 ,18 469,59		22,06	,2213
71	(1)		116,48	210,40	6,08	47,53	,4767	2 I	•97775		393,83		6,26	20,51	,2057
100 + 70		1	118,15	212,03	6,12	47,16	,4730		,97847		413,52	507,34	6,18	19,71	,1977
68	,94824 ,9488 2		119,86	213,70	6,16	46,79 46,4 2	,4693 ,4655	18	,97921 ,97997		435,29 459,47	529,19 553,47	6,00	18,90	,1895 ,1812
67			123,44	217,21	6,23	46,04	,4617	17	,98075	_	486,50	580,60		17,22	,1727
100 + 65	,94998 ,95057		125,31	219,05	6,30	45,65	,4578 ,4539	100 + 15	,98156	_	516,90	645,68		15,49	,1641
64	,95116		129,22	222,89	6,33	44,86	,4499	14	,98324	-	590,75	685,19	5,56	14,59	.1463
	,95176 ,95236		131,27	224,90 226,99	6,37	44,46	,4459 ,4418	13	,98413 ,98506		636,19 689,20	730,76 783,92		13,68	,1372 ,1279
61	,95296		135,58	229,15	6,43	43,64	,4376	11	,98602		751,86	846,72	5,14	11,81	,1184
100 + 60			137,84	231,37	6,47	43,22			,98702	_	827,04	922,04		10,85	,1088
	,95418		140,17	233,67	6,50	42,79 42,36	,4292 ,4249		,98807 ,98918	_	918,94	1014,12		9,86 8,85	,0989 ,0888
57	,95540	-	145,09	238,52	6,57	41,92	,4205	7	,99034	-	1181,49	1277,02	4,47	7,83	,0785
$\frac{50}{100 + 55}$,95601 ,95662		147,69	241,09	6,60	41,48	,4160 ,4114		,99156 ,99284		1378,41	1474,11	4,30	5,71	,0680
54	,95723	-	153,13	246,48	6,65	40,57	,4068	4	,99419		2067,61	2163,71	3,90	4,62	,0463
	,95784 ,95844		156,01	249,34 252,32	6,67	40,10	,402 2 ,3975	3	,99562		2756,81	2853,11		3,50	,0351
	,95905			255,42	6,73	39,15		1	,99871			8367,12		1,19	,0120

HEAT 56°.

· I.	11.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminution of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.		Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
Sp. + W.								Sp. + W.							
100 + 0 1 2 3 4		_	 0,83 1,65 2,48 3,31	100,00 100,72 101,44 102,16 102,89	0,11 0,21 0,32 0,42	100,00 99,29 98,58 97,88 97,19	1,0023 ,9952 ,9881 ,9811	100 + 50 51 52 53	,89978 ,90066 ,90153	_	41,33 42,16 42,98 43,80 44,63	137,99 138,77 139,55 140,33 141,11	3,34 3,39 3,43 3,47 3,52	72,47 72,06 71,66 71,26 70,87	,7264 ,7223 ,7183 ,7143 ,7103
100 + 5 6 7 8	,84188 ,84382 ,84571		4,13 4,96 5,79 6,62 7,44	103,62 104,36 105,10 105,84 106,58	0,51 0,60 0,69 0,78 0,86	96,50 95,82 95,15 94,49 93,83	,9672 ,9605 ,9538 ,9471 ,9405	100 + 55 56 57 58 59	,90405 ,90487		45,46 46,28 47,11 47,94 48,76	141,90 142,68 143,46 144,25 145,03	3,56 3,60 3,65 3,69 3,73	70,47 70,09 69,70 69,32 68,95	,7004 ,7025 ,6986 ,6948 ,6910
12	,84935 ,85111 ,85283 .85452	=	8,27 9,10 9,92 10,74 11,57	107,32 108,07 108,81 109,56	0,95 1,03 1,11 1,18 1,25	93,18 92,54 91,90 91,27 90,65	,9339 ,9275 ,9211 ,9148 ,9086	62 63	,90724 ,90801 ,90877 ,90953 ,91026		49,59 50,42 51,25 52,07 52,90	145,82 146,61 147,40 148,18	3,77 3,81 3,85 3,89 3,93	68,58 68,21 67,84 67,48 67,13	,6873 ,6836 ,6800 ,6764 ,6728
100 + 15 16 17 18	,85778 ,85938 ,8609 2 ,86246		12,40 13,23 14,05 14,88 15,70	111,07 111,82 112,58 113,33 114,09	1,33 1,41 1,47 1,55 1,61	90,04 89,43 88,83 88,23 87,64	,9024 ,8963 ,8903 ,8844 ,8785	66 67 68	,91100 ,91173 ,91246 ,91318		53,73 54,55 55,38 56,21 57,04	149,76 150,55 151,33 152,12 152,91	3.97 4,00 4,05 4,09 4 I 3	66,77 66,42 66,07 65,73 65,40	,6658 ,6623 ,6589 ,6555
100 + 20 21 22 23 24	,8654 <u>2</u> ,86686 ,86828	_	16,53 17,36 18,19 19,01 19,84	114,86 115,62 116,38 117,14	1,67 1,74 1,81 1,87 1,94	87,06 86,49 85,93 85,37 84,82	,8727 ,8670 ,8613 ,8557 ,8502	73	,91528 ,91596	_	57,86 58,69 59,52 60,34 61,17	153,70 154,48 155,27 156,06 156,85	4,16 4,21 4,25 4,28 4,32	65,00 64,73 64,40 64,07 63,75	,6488 ,6455 ,6422 ,6390
100 + 25 26 27 28 29	,87238 ,87369 ,87498	_	20,67 21,49 22,32 23,15 23,97	118,66 119,43 120,20 120,96 121,74	2,01 2,06 2,12 2,19 2,23	84,27 83,73 83,19 82,67 82,15	,8447 ,8393 ,8339 ,8286 ,8234	76 77 78	,91858 ,91920	=	62,00 62 82 63,64 64,47 65,30	157,64 158,43 159,22 160,02 160 81	4,36 4,39 4,42 4,45 4,45	63,43 63,12 62,80 62,49 62,18	,6358 ,6326 ,6295 ,6264 ,6233
100 + 30 31 32 33 34	,87874 ,87994 ,88115	=	24,80 25,63 26,45 27,28 28,11	122,50 123,27 124,04 124,81 125,58	2,30 2,36 2,41 2,47 2,53	81,63 81,12 80,62 80,12 79,63	,8182 ,8131 ,8080 ,8030 ,7981	82	,92163 ,92222 .92280	_	66,12 66,95 67,78 68,60 69,43	161,60 162,40 163,19 163,98 164,77	4,52 4,55 4:59 4.62 4,66	61,88 61,58 61,28 60,98 60,69	,6202 ,6172 ,6142 ,6112 ,6083
37 38	,88348 ,88462 ,88574 ,88685		28,93 29,76 30,58 31,41 32,23	126,35 127,12 127,89 128,67 129,44	2,58 2,64 2,69 2,74 2,79	79,14 78,66 78,19 77,72 77,25	,7884	87 88	.92393 .92450 ,92505 ,92559		70,26 71,09 71,91 72,74 73,57	167,95	4,69 4,73 4,75 4,79 4,82	60,40 60,11 59,82 59,54 59,26	,5996
42 43 44	,89006 ,89110 ,89213 ,89314	-	33,06 33,89 34,72 35,54 36,37	130,22 130,99 131,76 132,54 133,32	2,84 2,90 2,96 3,00 3,05	76,79 76,34 75,89 75,44 75,00	,7097 ,7652	100 + 90 91 92 93	.92666 ,92717 ,92769 ,92821 ,92871		74,39 75,22 76,05 76,87 77,70		4,89 4,92 4,94 4,97	58,98 58,70 58,43 58,16 57,89	,5912 ,5884 ,5857 ,5830 ,5803
100 - - 45 46 47 48		_	37,20 38,02 38,85 39,68 40,50	134,10 134,87 135,65 136,43 137,21	3,10 3,15 3,20 3,25 3,29	74,57 74,14 73,72 73,30 72,88	,7432 ,7389	97 98	,92922 ,92971 ,93020 ,93069		78,53 79,35 80,17 81,00 81,83	174,31 175,11 175,90	5,01 5,04 5,06 5,10 5,13	57,63 57,37 57,11 56,85 56,59	,5776 ,5750 ,5724 ,5698 ,5672

HEAT 56°.

1	,		1		T				,			1	1		ſ
.1	11.	ſΊ.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nu i-	tity of	Decima multi-
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.	,	mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
$W_{\bullet} + Sp.$								W I Co							
								W. + Sp.							
100+100		100	82,66	177,50	5,16	56.33	,5646	100 + 50		100	165,32	258,58	6,74	38,67	,3876
99	,93215		83,50	178,31	5,19 5,21	56,08 55,82	,5621	49 48	,95995 ,96057	_	168,70		6,74 6,79	38,17	,3827
97	,93313		85,22	179,99	5,23	55,56	,5569	47	,96119	_	175,87	209,06	6,81	37,17	,3725
	,93362	-	86.11	180.84	5.27	55,30	•5543	46			179,70		$\frac{6,83}{6,85}$	36,65	,3673
100 + 95	1		87,01	181,71	5,30	55,03 54,76	,5516	100 + 45 44			183,70	276,85	6,86	35,59	,3567
93	,93509		88,87	183,52	5.35	54,49	,54.62	43	,96364		192,23		6,87	35,04	,3512
	,93558 ,93607		89,84	184,45 185,41	5,39	54.21	,5434	42)	196,81		6,88	34,49	,3457
100 + 90			91,84	186,39	5,42	53.93 53.65	,5406 ,5377	100 + 40		=	206,65	-	6,90	33,93	,3401
89	,93706	_	92,87	187,39	5,48	53,36	,5349	39	,96608		211,95	305,07	6,88	32,78	,3285
88		-	93,93	188,41	5,52	53,07	.5320	38			217,53	1 - 1	6,89	32,19	,3226
8 ₇ 86	.93806 ,93857	_	95,01	189:47 190:54	5,54 5,58	52,78 52,48	,5290 ,5260	37 36	,96730 ,96792	_	223,41	316,55	6,86	31,59	,3166
100 + 85			97:25	191,65	5,60	52.18	,5230	100 + 35	,96852		236,18		6,87	30,37	,3044
	,93960		98,40	192.77	5,63	51,88	,5200	34	,96913		243,13	336,26	6,87	29.74	,2981
82	,94013		99,59	193,92	5,67. 5,71	51,57 51,26	,5169 ,5137	33 32	,96975 ,97036	_	250,49 258,32	343,65	6,84	29,10 28.45	,2917
81			102,05	196,32	5,73	50,94	,5105		,97098	_	266.65	359,86	6,79	2 7,79	2786
100 + 80			103,32	197,50	5,70	50,61	,5073	100 + 30	,97160	_	275,54	368,79	6,75	27,11	,2718
79 78	,94228 ,94282	_	104,63	198,83 200,14	5,80 5,83	50,29 49.96	,5040 ,5008	29 28	,97223 ,97286	-	285,04 295,22		6,72 6,68	26,43 25.74	,2649 ,2580
77	.94337		107.35	201,49	5,86	49,63	,4975	27	97250 97351	_	306,16		6,65	25,03	,2509
76			108,75	202,86	5,90	49.30	,4941	26	,97416		317,93	1	6,59	24,31	,2437
100 + 75	,94448		110 21	204,29	5,9 2	48,95	,4906	100 + 25	,97482	-	330.65	424,12	6,53	23,58	,2363
74 73	,94504 ,94560	_	111,70	205,7 ₄ 207,24	5.96 5.99	48,60 48 25	,4872 ,4837	24 23		_	344,43 359,40	437,96	6,47 6,40	22,83	,2289 ,2213
72	,94617		114,80	208,77	6,03	47,90	,4801	22	,97688		375,73	469,40	6,33	21,30	,2135
71	,94.672		110,42	210,37	6,05	47.54	4.765	2 I	<u>,97760</u>		393.63		6,26	20,51	,2056
100 + 70 69	94729 94787	_	118,09	212,00 213,66	6,14	47,17 46,80	,4728 ,4691		,97831		413,31 435,07		5,18 6,10	19,72	,1976
68	,94845		121,56	215,39	6,17	46.43	,4654		97983		459,24		6,01	18,07	,1812
. 6 7 66	,94903 ,94962	-	123,37	217,17	6,20	46,05 45,66	,4616		,98062	-	486,25	580,3	5,91	17,23	,1727
100 + 05	-		125,24	219,01	0,27	45,27	,4577 ·	16	,98143		516,64		5,81 5,69	16,37	,1641
64	,95080	_	129,15	222,85	6,30	44,87	,4497		,98312	_	590,45	684,88		14,60	
	,95140		131.20	224,86	6,34	44,46	4457	13	,98402	-	635,87	730,42	5,45	13,69.	
62 61	,95201 ,95261		133,32	226,94	6,38 6,41	44,06 43,65	,4416		,98496 ,98592		688,86 751,48	783,55 846,32		12,76	,1279 ,1184
100 + 60		-	137,77	231,34	6,43	43,23			,98693		826,63	921,60	5,03	10,85	,1087
59	,95383		140,10	233,63	6,47	42,80	,4291	9	,98798		918,48	1013,63	4,85	9,86	,0989
	,95445 ,95506		142,51	230,01	6,50	42,37	,4248 ,4204		,98909 ,990 2 6	_	1033,29	1128,61	4,68 4,50	8,86 7,83	,0888
	.95567		147,51	241,03	6,58	41.49	,4159		,99148	_	1377,72		4,34	6.79	,0680
100 + 55	,95629		150,29	243,68	6,61	41,04			,99276		1053,27	1749,13	4,14	5,72	,0573
	,95690 ,95751		153,05	246,42	6,63	40,58	,4067	4	,99412	-	2066,57	2162,63		4,62	,0464
53	,95811		158,94	252,26		39,64	,4021 ,3974		,99555		2755,42	2851,67 4229,57		3,50 2,36	,0352
	,95873	- 1	162,07	255,37	6,70		,3925		,99864	-	8266,29	8363,90	3,39	1,20	

HEAT 57°.

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I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	. V.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	gravity.	,	measure.	mixture,	bulk.	spirit	pliers.	weight.	gravity.	mea-	measure.	mixture.	on of	spirit	pliers.
		sure.				per cent.	-			sure.			bulk.	per cent.	
Sp. + W.								Sp. + W.							
100 + 0	,82642	100		100,00		100,00	1.0017	100 + 50	80842	100	47.27	127.08	2 22	72,48	,7260
100 4 0	82872		0,83	100,72	0,11	99,29	•9947	51	,89933		41,31	137,98	3,33	72,40	57219
2	,83098		1,65	101,44	0,21	98,58	,9876	52			42,96	139,54	3,42	71,66	,7179
3	,83318		2,48	102,16	0,32	97,88	,9806	53			43,78	140,32	3,46	71,26	,7139
4	,83532		3,31	102,89	0,42	97,19	.9736		,90194	-	44,61	141,10	3,51	70,87	,7100
100 + 5	,83740		4,13	103,62	0,51	96,50	,9667 ,9600	100 + 55	,90279		45,44	141,89	3,55	70,48	,7060
6 7	,83943 ,84141		4,96 5,78	104,36 105,10	0,60 0,68	95,82 95,16	,9533	56	,90361 ,90442		46,26 47,09	142,67	3,59 3,64	70,09 69,70	,7021
	,84335	_	6,61	105,84	0,77	94,49	,9466	58		_	47,91	144,24	3,67	69,32	,6945
9		_	7,43	106,58	0,85	93,83	,9400	5 9			48,74	145,02	3,72	68,95	,6907
100 + 10	,84709		8,26	107,32	0,94	93,18	,9334	100 + 60	-		49,57	145,81	3,76	68,59	,6870
			9,09	108,06	1,03	92,54	,9270	61	,90758		50,40	146,60	3,80	68,22	,6833
	,85064		9,91	108,81	1,10	91,90	,9206	62	12		51,23	147,39	3,84	67,85	,6797
13	,85236 ,85405	_	10,74	109,56	1,18 1,26	91,27	,9143 ,9081	63	,90910		52,05 52,88	148,17	3,88	67,49	,6761 ,6724
	,85,571		12,39	111,07	1,32	90,04	,9019	100 + 65			53,70	149,75	3,92	66,78	,6689
16		_	13,22	111,87	1,40	89,43	,8959	66			54,53	150,54	3,99	66,43	,6655
	,85891		14,04	112,57	1,47	88,83	,8899	67	1 2	1	55,35	151,32	4,03	66,08	,6620
	,86046		14,87	113,33	1,54	88,24	,8839	68			56,18	152,11	4,07	65,74	,6586
		-	15,69	114,09	1,60	87,65	,8780	69			57,01	152,90	4,11	65,40	,6552
100 + 20	,86348		16,52	114,85	1,67	87,07	,8722	100 + 70			57,83	153,68	4,15	65,07	,6518
21	,86496 ,86640		17,35	115,61	1,74	86,50	,8665 ,8608	71			58,66	154,47	4,19	64,74 64,4 1	,6485
23	,86782		19,00	117,13	1,87	85,93 85,37	,8552	73	,91553 ,91620		59,49 60,31	155,26	4,23	64,08	6419
24	1		19,83	117,89	1,94	84,82	,8497	74	1 / / /		61,14	156,84	4,30	63,76	,6387
100 + 25	,87057		20,66	118,66	2,00	84,27	,8442	100 + 75		-	61,96	157,63	4,33	63,44	,6355
26	,87191		21,48	119,42	2,06	83,73	,8388	76	,91815		62,79	158,42	4,37	63,13	,6323
27	,87323		22,31	120,19	2,12	83,20	,8334	77	,91877		63,61	159,21	4,40	62,81	,6292
28	,87452		23,14	120,96	2,18	82,67	,8281 ,8229	78			64,44	160,00	4,44	62,50	,6261
			23,96	121,73	2,23	82,15	,8177	79		-	65,27	160,79	4,48	61,89	,6199
100 + 30	,87705 ,87829	*******	24,79 25,61	122,50	2,29	81,64	,8177	100 + 80			66,92	161,58 162,38	4,51	61,59	,6169
32	,87949		26,44	124,03	2,41	80,63	,8076	82			67,75	163,17	4,58	61,29	,6139
33	,88070		27,27	124,80	2,47	80,13	,8026	83	,92237	3	68,57	163,96	4,61	60,99	,6110
1	,88187		28,09	125,57	2,52	79,64	•7977	. 84	-		69,40	164,75	4,65	60,70	,6081
100 + 35	,88304	-	28,92	126,35	2,57	79,15	,7928	100 + 85			70,23	165,55	4,68	60,41	,6051
36	,88417	_	29,74	127,11	2,63	78,67	,7880	86	,92408		71,00	166,34 167,14	4,72		,6022
37 38		_	30,57 31,40	127,88 128,66	2,69 2,74	78,19 77,72	,7833 ,7786	88	,92463 ,92517		71,88 72,71	167,14	4,74 4,78	59,83	,5993 ,5965
	,88748		32,22	129,43	2,79	77,26	,7739		,92571		73,53	168,73	4,80	59,27	,5937
100 + 40	,88855		33,05	130,21	2,84	76,80	,7693	100 + 90			74,36	169,52	4,84	58,99	,5909
41	,88960		33,87	130,98	2,89	76,34	,7648	91	,92676	-	75,18	170,31	4,87	58,71	,5881
• •			34,70	131,76	2 ,94	75,89	,7603	92	,92728	1 -	76,01	171,11	4,90	58,44	,5854
1	80168		35,52	132,53	2,99	75,45	•7559	93	,92780		76,83	171,91	4,92	58,17	,5827
			36,35	133,31	3,04	75,01	,7515		,92830		77,66	172,70	4,96	57,90	,5800
100 + 45	,89367 ,89465		37,18 38,00	134,09 134,80	3,09 3,14	74,58	,747 I ,7428	100 + 95			78,49 79,31	173,50	4,99 5,02	57,63 57,38	5774
40 47	,89563	_	38,83	135,64	3,14	74,15 73,72	,7385		,92930 ,92979		80,13	175,09	5,04	57,12	,5748
			39,66	136,42	3,24	73,30	7343		,93028		80,96	175,88	5,08		
49			40,48	137,20	3,28	72,88	,7301	99	,93077	-	81,79			56,60	

HEAT 57°.

	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·				, ,	,	1				,	1	
I.	II.	III.	IV.	v.	VΙ.	VII.	VIII.	1.	II.	ш.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
W. + Sp.				·				W. + Sp.			,				
100+100	,93125	100	82.62	177,48	5,14	56,34	,5644	100 + 50	,95900	100	165,24	258,52	6,72	38,68	,3875
	,93174		83,46 84,31	178 ,2 9	5,17 5,19	56,08 55,83	,5618 ,5592	49 48	,95963		168,61		6,72	38,18 37,68	,3825
9º 97	1	_	85,17	179,97	5,20	55,57	,5566	47	,96088	—	175,78	268,99	6,79	37,17	,3724
	,93321		86,07	180,82	5,25	55,31	,5540	-	,96150		179,61	272,80 276,78	$\frac{6,81}{6,83}$	36,65	,3672
100 - 95		_	87,89	182,59	5,28 5,30	55,04 54,77	,5514 ,5486	44	,96212		187,77	280,92	6,85	35,60	,3566
	,93468		88,83	183,50	5,33	54,50	5459ء	43	,96335	-	192,13		6,85	35,05	,3511
92 91	1	_	90,79	184,43 185,39	5,36	54, 22 53,94	,5432	42 41	,96397		196,71	289,84 294,63	6,88	34,50	,3456
100 + 90			91,79	186,37	5,42	53,65	5375ء	100 + 40		-	206,55	299,68	6,87	33,37	,3343
89	,93665		92,83	187,37	5,46	53,37	,5346	39	,96581		211,84	304,98	6,86	32,79	,3285
88 87	1.701	_	93,89 94,97	188,39 189,44	5,50	53,08 52,78	,5317 ,5288	38 37			217,42	310,55 316,45	6,87	32,20	,3225
	,93817		96,07	190,51	5,56	52,48	,5258	36			229,50	322,66	6,84	30,99	,3104
100 + 85			97,20	191,62	5,58	52,18	,5228	100 + 35	1 ' / ~ ~ '		236,06	329,21	6,85	30,38	,3043
1	,93921	•	98,35	192,74	5,61 5,65	51,89 51,58	,5198 ,5167	34 33	1 /		243,01 250,36	336,15 343,54	6,86	29,75	,2980
83	,94026	1	99,54	195,08	5,68	51,27	,5135	32	1 .	_	258,19	351,39	6,80	28,46	,2851
81	1		102,00	196,29	5,71	50,95	,5103	31	,97076		266,52	359,74	6,78	27,80	,2785
100 + 80	1		103,27	197,53	5,74	50,62	,5071	100 + 30			275,40 284,90	368,66 378,18	6,74	27,12	,2717
79 78	1	1	104,58	198,80	5,78	50,30	,5006	29 28	1		295,07	1	6,67	25,75	,2579
77	,94299		107,30	201,45	5,85	49.63	,4973	27	،97331	-	306,01	399,37	6,64	25,04	,2508
-	94354و		108,71	202,83	5,88	49,30	,4939	26	7737		317,77	411,19	6,58		
100 + 75 74	1	_	110,16	204,25 205,70	5,91 5,94	48,96 48,61	,4904 ,4870	100 + 25	1		330,48	423,96 437,79	6,52	23,59	,2363
73			113,17	207,20	5,97	48,26	,4835	23	,9760	· -	359,22	452,82	6,40	22,08	,2212
•	,94579		114,75	208,74	6,01	47,90	34799 14762	22	1	1	375,54	469,21	6,33		,2135
$\frac{71}{100 + 70}$	-		116,36	210,33	6,03	47,55	,4763	100 + 20		~	393,43	506,92	6,18	19.72	,1976
69	,	I	119,74	213,62	6,12	46,81	,4689	19	1 7		434,85	528,75	6,10	18,91	,1895
68	1.71		121,50	215,35	6,15	46,43	,4652	18	17/2		459,01	552,99 580,09	6,02 5,92	18,08	,1812
66	1.71	1	123,31	217,14	6,17	46,05	,4614		,98048 ,98130		516,38	610,56	5,82	17,24	
100 + 65			127,10	220,86	6,24	45,28		100 + 15			550,81	645,10	5,71	15,50	
64	95044		129,09	222,81	6,28	44,88	,4496		,98300		590,16	684,57			
	,95105 ,95165		131,13	224,8 2 226,90	6,31	44,47	,4456 ,4415		,98390 ,98480		635,55	730,09 783,19	5,33	13,69	
	,95225		135,45	229,06	6,39	43,66	,4373	1	,9858	2 —	751,11	845,92	5,19	11,82	,1184
100 + 60	,95287	_	137-70	231,29	6,41	43,24	,4331	100 + 10	1 0 0		826,22	921,16			
	95348		140,03	233,58	6,45	42,81	,4289	9	98789 98900		918,02	1013,14	4,72	9,87 8,86	
	,9541c		144,94	238,42	6,52	41,94	,4202	7	1,9901	7 —	1180,31	1275,78	4,53	7,84	,0785
56	95533		147,54	240.97	6,57	41,49	,4157) [,99140	o —	1377,04	1472,66		_	-
100 + 55	95595	—	150,21	243,62 246,37	6,59	40.58	,4112	100 +	9926		1652,45	1748,27 2161,56			
54	,95656 ,95717		152,98	249,24	6,62	40,12	,4019	11	9954	8	2754;04	2850,24	3,80	3,51	
52	95778		158,86	252,20	6,66	39,64	,3972		2 ,9969	8	4131,07	4227,44	3,63	2,37	,0237
51	,95840		162:00	255,31	6,69	39,16	,3924	1	1,9985	7	8262,16	8358,71	13:45	1,20	,0120

TABLE 1.

HEAT 58°.

				······································				l .			in the relation of the section of the				
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific		Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and		Spirit	Water	Bulk of	Dimi-	Quan- tity of	Decimal multi-
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of Spirit	multi- pliers.	Water by weight.	gravity.	by mea-	by measure.	mixture.	on of	Spirit	pliers.
		sure.				per cent.			-	sure.			bulk.	per cent.	
Sp. + W.								Sp. + W.							
100 + 0	1			100,00		100,00	1,0011	100 + 50	,89797	100	41,29	137,97	3,32	72,48	,7256
I	,82825		0,83	100,72	0,11	99,29	,9941	51			42,11	138,75	3,36	72,07	,7215
3	,83051 ,83271	_	1,65 2,48	101,44 102,16	0,21	98,58 97,88	,9871 ,9801	52 53	1	ı	42,94 43,76	139,53	3,41	71,67 71,27	,7176 ,7136
4	0 - 0		3,31	102,89	0,42	97,19	9731	54	1 - 0		44,59	141,09	3,50	70,88	,7096
100 + 5	,83693		4,13	103,63	0,51	96,50	,9662	100 + 55	,90234		45,42	141,88	3,54	70,48	,7056
6	,83896	_	4,96	104,36	0,60	95,82	,9595	56	,90317	-	46,24	142,66	3,58	70,10	,7018
7			5,78	105,10	0,68	95,16	,9528	57	,90398		47,06 47,89	143,44	3,62 3,66	69,71 69,33	,6979
0	,84 2 89 ,84477	_	6,61 7,43	106,58	0,77	94,49 93,83	,9461 ,9395	58 59	1	1	48,71	144,23	3,70	68,96	,6904
100 + 10	-	_	8,26	107,32	0,94	93,18		100 + 60	-		49,54	145,80	3,74	68,59	,6866
11	,84842		9,09	108,06	1,03	92,54	,9265	61	,90714	-	50,37	146,58	3,79	68,22	,6830
12	,85017		9,91	108,81	1,10	91,90	,9201	62			51,20	147,37	3,83	67,85	,6794
13		_	10,73	109,56	1,17	91,27	,9138 ,9076	63 64	,90866 ,90940		52,02 52,85	148,15 148,94	3,87	67,50	,6758 ,6721
14			11,56	111,06	1,25	90,03	,9014	100 + 65			53,67	149,73	3,94	66,79	,6686
100 + 15	,85524 ,85685	_	12,39	111,82	1,33	89,43	,8954	66			54,50	150,52	3,98	66,44	,6652
17	,85844		14,04	112,57	1,47	88,83	,8894	67			55,32	151,30	4,02	66,09	,6617
18	,85999		14,87	113,33	1,54	88,24	,8835	68			56,15	152,09	4,06	65,75	,6583
	,86152		15,68	114,09	1,59	87,65	,8776	69			56,98	152,88	4,10	65,41	,6549
100 + 20	,86302		16,51	114,85 115,61	1,66	87,07 86,50	,8717 ,8660	100 + 70		_	57,80 58,63	153,67 154,45	4,13 4,18	65,08 64,75	,6515 ,6482
2 I. 2 2	,86449 ,86593	_	17,34	116,37	1,73 1,80	85,93	,8604	7 I 7 2			59,46	155,24	4,22	64,42	,6449
23	,86735	_	18,99	117,13	1,86	85,37	,8548	73			60,28	156,03	4,25	64,09	,6416
21	,86874		19,82	117,89	1,93	84,82	,8493		,91643		61,11	155,82	4,29	63.77	-6384
100 + 25	,87011	-	20,64	118,65	1,99	84,27	,8438	100 + 75	,91708		61,93 62,76	157,61 158,40	4,32	62.13	6230
26 27	,87145 ,87276		21,47	119,42	2,05	83,73 83,20	,8384 ,8330	70 77	,91772 ,91834	_	63,58	150,40	4,36 4,39	62,82	,6320 ,628g
28	,87406		23,13	120,95	2,18	82,67	,8277		,91897		64,41	159,99	4,42	62,51	,6258
29	,87534	_	23.94	121,73	2,2 I	82,15	,8225	79			65,23	160,77	4,46	62.20	,6 2 27
100 + 30	,87659	-	24,78	122,49	2,29	81,64	,8173	100 + 80			66,06		4,50	61,90	,6196
- 1	,87784		25,60 26,42	123,26	2,34	81,13	,8122 ,8072	81 82	,92078 ,92137		66,88 67,71	162,36 163,15	4,52 4,56	61,59	,6167 ,6136
32 33	,87904 ,88025		27,25	124,03	2,39 2,45	80,13	,8022	83		_	68,53	163,94	4,59	60,99	,6107
34	,88143		28,08	125,57	2,51	79,64	•7973	84	,92252		69,36	164,74	4,62	60,71	,6078
100 + 35	,88259		28,91	126,34	2,57	79,15	,7924	100 + 85	,92309		70,19	165,53	4,66	60,41	,6048
36	,88373		29,73	127,10	2,63	78,67	,7876	86	,92366		71,02		4,70	60,12	,6019
37	,88485 ,88595		30,55	127,88 128,66	2,67 2,72	78,20 77,73	,7829 ,7782	88	,92421 ,92475		71,84 72,67		4,72 4,76	59,84 59,56	,5990 ,5962
38 39	,88703		32,20	129,42	2,78	77,26	,7735	89	,92529	_	73,49	168,71	4,78	59,27	,5935
	,88810	_	33,03	130,21	2,82	76,80	,7689	100 + 90	,92583		74,32	169,50	4,82	58,99	,5906
41	,88915		33,86	130,97	2,89	76,35	,7644	` 91	,92635	-	75,14		4,85	58,72	,5878
	,89020		34,69	131,75	2,94	75,90	7599		,92687	_	75,97	171,09. 171,88	4,88	58,45 58,18	,5851 ,5825
	,89123 ,89224		35,51 36,34	132,52	2,99 3,03	75,45 75,01	,7555 ,7511	93 94	,92739 ,92789	=	76,79 77,62		4,91 4,94	57.91	5798
	,89322		37,16	134,08	3,08	74,58	,7467	$\frac{97}{100 + 95}$			78,45		4,98	57,04	,5771
46	,89420	_	37,98	134,85	3,13	74,15	,7424	96	,92889	_	79,27	174,27	5,00	57,38	,5745
47	,89518	-	38,81	135,63	3,18	73,73	,7382	97	,92938	-	80,09		5,02	57,12	,5719
	,89613	_	39,64	136,41	3,23	73,31	,7340	98	,92987	_	80,92 81,75		5,06 5,09	56,86 56,61	,5693 ,5667
49	,89706		40,46	137,19	3,27	72,89	,7297	991	,93036	, —	U 19/5 }	1/0,00	13,09	70,01	,,,,,,,

HEAT 58°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and Spirit by	Specific gravity.	Spirit by	Water by	Bulk of	Diminu- tion of	Quan- tity of		Water and			Water by	Bulk of mixture.	Dimi.	Quan- tity of	Decima multi-
weight.	gravity.	mea-	measure.	mixture.	bulk.	spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	measure.	inixture,	on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.								W. + Sp.							
100 + 100	,93084	100	82,58	177,45	5,13	56,35	,5641	100 + 50	,95868	100	165,16	258,46	6,70	38,69	,3873
99	,93133		83,42	178,26	5,16	56,09	,5616	49	,95931		168,53	261,82	6,71	38,19	,3824
	,93183	_	84,27	179,09	5,18	55,84	,5590		,95994		172,03	265,28 268,92	6,75	37,69	>3774
	,93231 ,93280		85,12 86,02	179,94 180,79	5,18 5,23	55,57 55,31	,5564 ,5538	47 46	,96057 ,96120		175,69	272,73	6,79	36,66	,3723
100 + 95			86,92	181,66	5,26	55,05	,5512	100 + 45			183,52	276,71	6,81	36,14	,3618
94	,93378	_	87,84	182,56	5,28	54,78	,5484	44	,96244	_	187,68	280,85	6,83	35,61	,3565
	393427		88,79	183,47	5,32	54,50	,5457	43	(()		192,04		6,84 6,85	35,06	,3510
	,93476 ,93525		89,75 90,74	184,40 185,36	5,35 5,38	54,22 53,95	,5429 ,5401	42 41	,96368 ,96431		196,61	289,76 294,54		34,51	,3455 ,3399
	-		91,75	186,34	5,41	53,66	,5373	100 + 40			206,45	299,59	6,86	33,38	,3342
89	,93625		92,78	187,34	5,44	53,38	,5344	39	,96554	_	211,74	304,89	6,85	32,80	,3284
	,93676		93,84	188,36	5,48	53,09	,5315	38	1	_	217,31		6,85	32,21	,3225
	,93726 ,93777	_	94,92	189,41 190,48	5,51 5,54	52,79 52,49	,5286 ,5256	37 36	,96678 ,96740		223,19 229,39	316,35 322,56	6,84 6,83	31,61 31,00	,3165
	,93829	_	97,15	191,59	5,56	52,19	,5226	100 + 35	,96802		235,94		6,84	30,39	,3042
	,93881		98,30	192,71	5,59	51,89	,5196	34	,96865		242,89	336,04	6,85	29,76	,2979
	,93934	-	99,49	193,86	5,63	51,59	,5165	33			250,24		6,81	29,12	,2915
- 1	,93987 ,94042		100,71	195,05	5,66 5,69	51,28	,5133	32	,96990 ,97054		258,06 266,39	351,27 359,62	6,79 6,77	28,47 27,81	,2850
		-	103,22	197,50	5,72	50,63	,5069	-	,97116		275,26		6,72	27,13	,2716
79	,94151		104,53	198,77	5,76	50,31	,5036	29			284,76		6,71	26,45	,2648
78	,94205		105,87	200,07	5,80	49,98	,5004		,97246	-	294,93	388,26	6,67	25,76	,2578
	,94261		107,24	201,42	5,82 5,86	49,64	4971		,97312 ,97378	_	305,86 317,62		6,63 6,58	25,05	,2508 ,2436
	,94372		110,10	204,22	5,88	49,31	,4937 ,4902	100 + 25			330,32	-	6,52	23,60	,2362
74	,94428		111,59	205,67	5,92	48,62	,4868		3975I4	-	344,09		6,47	22,85	,2287
	,94484		113,11	207,17	5,94	48,27	,4833	23	,97584		359,04	452,65	6,39	22,09	,2212
	,94541 ,94597		114,69 116,30	208,71	5,98 6,00	47,91	,4797 4767	22	1		375,36	469,0 2 486,97	6,34 6,27	21,32	,2134
	,94653		117,97	211,92	6,05	47,56	,4761 ,4724	100 + 20	,97728 ,97801		<u>393,24</u> 412,90		6,19	19,73	,2056
			119,68	213,59	6,09	46,81	,4687		,97877	_	434,63	528,53	6,10	18,92	,1894
	94771		121,44	215,31	6,13	46,44	,4650	18	,97955	_	458,78	552,75	6,03	18,09	,1811
	,94828		123,25	217,10	6,15	46,07	,4612		,98034 ,98117		485,77		5,93	17,25	,1726 ,1640
	,94948		127,04	220,82		45,67	,4573 ,4534	100 + 15			516,12	610,29		16,39	,1553
64	,95008	_	129,02	222,77	6,25	44,89	,4494	14	,98288	_	589,87	684,26	5,61		,1463
63	,95069		131,07	224,78	6,29	44,48	,4454	13	,98379		635,22	729,76	5,46	13,70	,1372
	,95129		133,18	226,86	6,32	44,08	,4413	12	,98474		688,18	782,83	5,35	12,77	,1279
100 + 60			135,38	229,02	6,36	43,66	,4371 ,4320	100 + 10	,98572 08674		750,74 825,81	920,73		11,83	,1184
	,95313		139,96	231,24	6,42	43,25 42,82	,4330 ,4287	100 10	,98780	_	917,57	1012,66	4,0I	9,87	,0989
58	,95376		142,37	235,91	6,46	42,39	,4244	8	,98891		1032,27	1127,52	4,75	8,87	,0888
	95437		144,87	238,38	6,49	41,95	,4200		,99008	-1	1179,73	1275,16		7,84	,0785
100 + 55	,95499 ,05561	-	147,46	240,92	6,54	41,50	,4155		,99132		1376,36	1471,94		6,79	,0680
54	,95622		150,14	243,57 246,32	6,57	40,59	,4110 ,4064		,99260 ,99396	_	2064,51	1747,41 2160,49		5,72 4,63	,0573 ,0463
53	,95684		155,79	249,19	6,60	40,13			,99540		2752,68	2848,83	3,85	3,51	,0351
52	,95745		158,79	252,15	6,64	39,65	,3970	2	,99691		4129,03	4225,35	3,68	2,37	,0237
5,11	,950071		101,921	255,25	6,67	39,17	,3922	1	,99850		8258,07	8354,57	3,50	1,20	,0120

MDCCXCIV.

HEAT 59°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	\mathbf{V}_{v}	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	by	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
Sp. +W.								Sp. + W.				:			
I 2	,82547 ,82778 ,83004 ,83124 ,83438		0,83 1,65 2,48 3,30	100,00 100,72 101,44 102,16 102,89	0,11 0,21 0,32 0,41	100,00 99,29 98,58 97,88 97,19	1,0006 ,9935 ,9865 ,9795 ,9725	100 + 50 51 52 53 54	,89843 ,89931 ,90018		41,27 42,09 42,92 43,74 44,57	137,96 138,74 139,52 140,30 141,08	3,31 3,35 3,40 3,44 3,49	72,49 72,08 71,67 71,27 70,88	,7253 ,7212 ,7172 ,7132 ,7093
100 + 5 6 7 8	,83646 ,83849 ,84048 ,84242		4,12 4,95 5,78 6,61 7,43	103,62 104,35 105,10 105,83 106,57	0,50 0,60 0,68 0,78 0,86	96,50 95,82 95,16 94,49 93,83	,9656 ,9589 ,9522 ,9456 ,9390	100 + 55 56 57 58 59	,90272 ,90354 ,90435		45,40 46,22 47,04 47,87 48,69	141,87 142,65 143,43 144,22 145,00	3,53 3,57 3,61 3,65 3,69	70,49 70,10 69,71 69,33 68,96	,7053 ,7014 ,6976 ,6938 ,6901
100 + 10 11 12 13	,84615 ,84795 ,84970 ,85143		8,26 9,08 9,90 10,73 11,55	107,31 108,06 108,80 109,55	0,95 1,02 1,10 1,18 1,24	93,19 92,55 91,91 91,27 90,66	,9324 ,9260 ,9196 ,9133 ,9071	100 + 60 61 62 63 64	,90670 ,90747 ,90822		49,52 50,34 51,17 51,99 52,82	145,79 146,57 147,36 148,14 148,93	3,73 3,77 3,81 3,85 3,89	68,60 68,23 67,86 67,50 67,14	,6863 ,6827 ,6791 ,6755 ,6718
100 + 15 16 17 18	,85477 ,85639 ,85797		12,38 13,21 14,03 14,86 15,68	111,06 111,81 112,57 113,32 114,08	1,32 1,40 1,46 1,54 1,60	90,04 89,44 88,84 88,24 87,65	,8830	100 + 65 66 67 68 69	,91044 ,91117 ,91180	-	53,64 54,47 55,29 56,12 56,95	149,72 150,51 151,29 152,08 152,86	3,92 3,96 4,00 4,04 4,09	65,79 66,44 65,09 65,75 65,41	,6683 ,6649 ,6614 ,6580 ,6546
100 + 20 21 22 23	,86402 ,86547 ,86688		16,51 17,33 18,16 18,98 19,81	114,85 115,61 116,36 117,12 117,88	1,66 1,72 1,80 1,86 1,93	87,07 86,50 85,94 85,38 84,83	,8656	100 + 70 71 72 73	,91399 ,91467 ,91534		57,77 58,60 59.43 60.25 61,08	153,65 154,44 155,22 156,02 156,80	4,12 4,16 4,21 4,23 4,28	05,08 64,75 64,42 64,09 53,77	,6512 ,6479 ,6446 ,6413 ,6381
100 + 25 26 27 28	,87098		20,63 21,46 22,28 23,12 23,93	118,65 119,41 120,18 120,95 121,72	1,98 2,05 2,10 2,17 2,21	84,28 83,74 83,21 82,68 82,16	,8379 ,8326 ,8273	100 + 75 76 77 78 79	,91729 ,91791 ,91854	- - - - - -	61,90 62,73 63,55 64,38 65,20	157,59 158,38 159,18 159,97 160,75	4,31 4,35 4,37 4,41 4,45	63,45 63,14 62,82 62,51 62,20	,6349 ,6317 ,6286 ,6255 ,6224
31 32 33 34	,87738 ,87859 ,87986		24,76 25,58 26,41 27,24 28,06	122,49 123,25 124,02 124,79 125,56	2,27 2,33 2,39 2,45 2,50	81,65 81,14 80,64 80,14 79,64	8118, 8068, 8018,	100 + 80 81 82 83	,92036 ,92099 3 ,92152	5 -	66,03 66,85 67,68 68,50 69,33	161,54 162,34 163,13 163,92 164,72	4,49 4,51 4,55 4,58 4,61	61,90 61,60 61,30 61,00 60,71	,6194 ,6164 ,6134 ,6104 ,6075
37	,88212 ,88328 ,88440 3,88550 ,88658		28,89 29,71 30,54 31,37 32,19	126,33 127,10 127,87 128,65 129,42	2,56 2,61 2,67 2,72 2,77	79,16 78,68 78,20 77,73 77,27	,7872 ,7825 ,7778	87	,9232	4 — 9 — 3 —	70,15 70,98 71,81 72,63 73,45	165,51 166,30 167,10 167,89 168,69	4,71 4,74 4,76	59,84 59,56 59,28	,5988
100 + 40		5 -	33,02 33,84 34,67 35,49 36,32	130,20 130,97 131,75 132,52 133,30	2,82 2,87 2,92 2,97 3,02	76,81 76,35 75,90 75,46 75,02	,7685 ,7640 ,7595	100 + 90 9 9: 9:	,9254 1,9259 2,9264 3,9269	4 — 6 — 8 —	74.28 75,10 75,93 76,75 77,58	169,48 170,27 171,07 171,86 172,66	4,80 4,83 4,86 4,89 4,92	58,72 58,45 58,18 57,91	,5849 ,5822 ,5795
100 + 4 4 4		7 - 3 - 3 - 3	37,14 37,96 38,79 39,62 49,44	134,07 134,85 135,62 136,40	3,07 3,11 3,17 3,22 3,26	74,59 74,16 73,73 73,31	,7463 ,7420 ,7378	100 + 9 9 9 9		9 — 8 — 7 —	78,41 79,23 80,05 80,88 81,71	173,45 174,25 175,05 175,84 176,64	4,96 4,98 5,00 5,04 5,07	57,39 57,13 56,87	,574 2 '5716 ,5691

HEAT 59°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	и.	III.	IV.	V.	VI.	VII.	VIII.
Water and spirit by weight.	gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
w. + Sp.								$\overline{W. + Sp.}$							
100+100 99 98 97 96	,93092 ,93142 ,93190	_	82,54 83,38 84,23 85,07 85,98	177,43 178,24 179,07 179,91 180,77	5,11 5,14 5,16 5,16 5,21	56,35 56,10 55,84 55,58 55,32	,5639 ,5613 ,5587 ,5562 ,5535	49		=	165,08 168,45 171,95 175,61 179,43	261,75 265,22	6,73 6,75	38,70 38,20 37,70 37,19 36,67	,3872 ,3823 ,3773 ,3722 ,3670
94 93 92 91	,93288 ,93337 ,93386 ,93435	_	86,88 87,80 88,75 89,71 90,70	181,64 182,53 183,44 184,37 185,34	5,24 5,27 5,31 5,34 5,36	55,05 54,78 54,51 54,23 53,95	,5509 ,5481 ,5454 ,5427 ,5398	100 + 45 44 43 42 41	,96152 ,96215 ,96277 ,96340	-	183,43 187,59 191,95 196,52 201,31	276,64	6,79 6,82 6,83 6,84	36,15 35,62 35,07 34,52	,3617 ,3564 ,3509 ,3454 ,3398
100 + 90 89 88 87 86	93534 93585 93636 93686		91,71 92,74 93,79 94,87 95,97	186,32 187,31 188,34 189,38 190,45	5,39 5,43 5,45 5,49 5,52	53,67 53,39 53,10 52,80 52,50	,537° ,5342 ,5313 ,5284 ,5254	100 + 40 39 38 37	,96465 ,96527 ,96590	-	206,35 211,64 217,20 223,08 229,28	299,51 304,80 310,37 316,25	6,84	33,39 32,81 32,22	,3341 ,3283 ,3224 ,3164 ,3103
83	,93789 ,93842 ,93895 ,93948 ,94003	_	97,10 98,25 99,44 100,66 101,90	191,56 192,68 193,83 195,02 196,23	5,54 5,57 5,61 5,64 5,67	52,20 51,90 51,60 51,29 50,96	,5223 ,5193 ,5163 ,5131	100 + 35 34 33 32	,96777 ,96841 ,96904		235,82 242,77 250,12 257,93 266,26	329,00 335,94 343,32 351,15	6,82 6,83 6,80 6,78 6,76	30,40 29,77 29,13 28,48 27,82	,3041 ,2978 ,2914 ,2850 ,2784
78 77	,94057 ,94112 ,94167 ,94223 ,94278	-	103,17 104,48 105,82 107,19 108,60	197,47 198,74 200,04 201,39 202,76	5,70 5,74 5,78 5,80 5,84	50,64 50,32 49,99 49,65 49,32	,5067 ,5034 ,5002 ,4969 ,4935	100 + 30 29 28 27 26	,97160 ,97226 ,97293	 - -	275,13 284,62 294,79 305,71 317,47	368,41 377,92 388,12 399,09	6,72 6,70 6,67 6,62 6,58	27,14 26,46 25,77 25,06 24,34	,2716 ,2648 ,2578 ,2507 ,2435
74 73 72	,94334 ,94390 ,94446 ,94503 ,94560	_	110,05 111,53 113,05 114,64 116,25	204,19 205,64 207,13 208,68 210,26	5,86 5,89 5,92 5,96 5,99	48,98 48,63 48,28 47,92 47,56	,4900 ,4866 ,4831 ,4795 ,4760	23	,97428 ,97497 ,97567	-	330,16 343,92 358,87 375,18 393,05	423,64 437,45 452,48 468,83	6,52 6,47 6,39 6,35 6,28	23,61 22,86 22,10 21,33 20,54	,2362 ,2287 ,2211 ,2134 ,2055
100 + 70 69 68 67	,94616 ,94674 ,94734 ,94791 ,94853	- - -	117,91 119,62 121,38 123,19	211,88 213,55 215,27 217,06 218,89	6,03 6,07 6,11 6,13 6,17	47,19 46,82 46,45 46,08 45,68	,4722 ,4685 ,4648 ,4610 ,4571	100 + 20 19 18 17	,977863 ,97863 ,97941 ,98020	 - -	412,70 434,42 458,55 485,53 515,87	506,50 528,31 552,52 579,59	6,20 6,11 6,03 5,94 5,85	19,74 18,93 18,10 17,26 16,40	,1975 ,1894 ,1811 ,1726
100 + 65 64 63 62	,94912 ,94971 ,95°33 ,95°94 ,95155	=	126,98 128,96 131,01 133,12 135,31	220,78 222,73 224,74 226,82 228,97	6,20 6,23 6,27 6,30 6,34	45,30 44,90 44,49 44,09 43,67	,4532	100 + 15 14 13	-	=	550,27 589,58 634,91 687,84 750,37	644,53 683,96 729,43 782,47 845,13	5,74 5,62 5,48 5,37	15,52	,1552
100 + 60 59 58 57	,95216 ,95278 ,95341 ,95403 ,95465	=	137,56 139,89 142,30 144,80	231,19 233,49 235,86 238,33 240,87	6,37 6,40 6,44 6,47 6,52	43,26 42,83 42,40 41,96 41,51	-	100 + 10 9 8	,98664 ,98771 ,98882 ,99000	=	825,40 917,12 1031,76 1179,15 1375,68	920,30 1012,18 1126,98 1274,54 1471,23	5,10 4,94 4,78 4,61	10,86 9,88 8,87 7,84 6,80	,1087 ,0988 ,0888 ,0785
100 + 55 54 53 52			150,07 152,84 155,72 158,72 161,84	243,52 246,27 249,13 252,10 255,19	6,55 6,57 6,59 6,62 6,65	41,06 40,60 40,14 39,66 39,18	,4109 ,4063 ,4017	100 + 5 4 3 2	,99252 ,99388 ,99532	_ _ _	1650,81 2063,50 2751,34 4127,00 8254,02	1746,55 2159,43 2847,43 4223,27	4,26 4,07 3,91 3,73	5,72 4,63 3,51 2,37	,0573 ,0463 ,0351 ,0237 ,0120

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HEAT 60°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	• v .	VI.	VII.	VIII.
Spirit and		Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific			Bulk of	Dimi-	Quan- tity of	Decimal multi-
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	measure.	mixture.	on of	spirit	pliers.
		sure.	14			per cent.				sure.			bulk.	per cent.	
Sp. + W.								Sp. + W.							
													 		
100 + 0			0,83	100,00	~-	100,00	1,0000	100 + 50			41,25 42,07	137,95	3,30	72,49	,7249 ,7208
	,82957	_	1,65	100,72	0,11	99,29 98,58	,9929 ,9858				42,90	139,51	3,39	71,68	,7168
3	,83177		2,47	102,16	0,31	97,88	,9789		1 0	_	43,72	140,29	3,43	71,28	,7128
	,83391		3,30	102,89	0,41	97,19	19719	54			44,55	141,07	3,48	70,89	,7089
100 + 5	,83599 ,83802	_	4,12 4,95	103,62	0,50	96,51 95,83	,9651 ,9583	100 + 55	,90144		45,38 46,20	141,86	3,52 3,56	70,49	,7049 ,7011
7	,84001		5,77	105,09	0,68	95,16	,9516	57	•		47,02	143,42	3,60	69,72	,6972
8	,84.195	-	6,60	105,83	0,77	94,50	,9450	58		1	47,85	144,21	3,64	69,34	,6934
	84384		7,42	106,57	0,85	93,84	<u>,9384</u>	59	-	-	48,67	144,99	3,68	68,97 68,60	,6897 ,6860
100 + 10	,84748	_	8,25 9,07	107,31	0,94	93,19	,9319 ,9255	100 + 60	1		49,50 50,32	145,78	3,72 3,76	68,23	,6823
12	,84924	_	9,90	108,80	1,10	91,91	,9191		,90703		51,15	147,35	3,80	67,87	,6787
	,85096	-	10,72	109,55	1,17	91,28	,9128	, , ,	,90778	1	51,97	148,13	3,84		,6751
torren la	,85265	_	11,55	110,30	1,25	90,66	,9066	100 + 65	,90853		52,80 53,62	148,92	3,88	66,80	,6715
16	,85592	_	12,37	111,05	1,32	90,04	8944		,91001	_	54,45	150,50	3,95	66,45	,6645
17	,85750	_	14,02	112,56	1,46	88,84	,8884	67	,91074		55,27	151,28	3.99	66,10	,6610
	,85906	-	14,85	113,32	1,53	88,25	,8825		,91146		56,10 56,92	152,07	4,03	65,76	,6576 ,6542
-	,86058 ,86208	_	15,67	114,08	1,59	87,66	,8766 8708	100 + 70	,91217 ,91287		57,75	153,64	4,11	65,09	,6509
	,86355	_	17,32	115,60	1,72	86,51	,8651		,91356	_	58,57	154,42	4,15	64,76	,6476
22	,86500		18,15	116,36	1,79	85,94	8594	72	,91424		59,40	155,21	4,19	64,43	,6443
23	,86642 ,86781	_	18,97	117,12	1,85	85,38 84,83	,8538	73 74	,91491 ,91557	-	60,22 61,05	156,00	4,22	64,10	,6410 ,6378
-	,86918		20,62	118,64	1,98	84,28	8428	100 + 75	,91622		61,87	157,58	4,29	63,46	,6346
26	,87052	_	21,45	119,41	2,04	83,74	,8374	76	!		62,70	158,37	4,33	63,14	,6314
	,87183	-	22,27	120,18	2,09	83,21	,8321	77			63,52	159,16	4,30	62,83	,6283 ,6252
28 29	,87314 ,87442	_	23,10	120,94	2,16	82,68 82,16	,8268 ,8216	78 79	1 - ~		64,35 65,17	159,95	4,40	62,21	,6221
	,87569	_	24,75	122,48	2,27	81,65	,8165	100 + 80	,91933	_	66,00	161,53	4,47	61,91	,6191
31	,87692	-	25,57	123,24	2,33	81,14	,8114	81	,91993	-	66,82	162,32	4,50	61,61	,6161
	87814	_	26,40	124,01	2,39	80,64 80,14	,8064 ,8014	82 83	,92052		67,65 68,47	163,11 163,90	4,54	61,31	,6131 ,6101
33 34	,87935		27,22	124,78	2,44	79,65	,7965	84			69,30	164,70	4,60	60,72	,6072
100 + 35	,88169		28,87	126,32	2,55	79,16	,7916	100 + 85	,92225		70,12	165,49	4,63		,6043
36	,88283		29,70	127,09	2,61	78,68	,7868	86	,92281	—	70,95	165,29 167,08	4,66	60,14	,6014
37	,88395 ,88505	_	30,52	127,86	2,66 2,71	78,21	,7821 ,7774	88 88	,92336 ,92391	_	71,77 72,60	167,87	4,73	59,85	,5985 ,5957
	,88613	_	32,17	129,41	2,76	77,27	,7727	89	,92445		73,42	168,66	4,76		,5929
100 + 40	,88720		33,00	130,19	2,81	76,81	,7681	100 + 90	,92499		74,25	169,46	4,79	59,01	,5901
41	,88825		33,82	130,96	2,86	76,36	,7636	91	,92552 ,92604	<u> </u>	75,07 75,90	170,25	4,82		,5873 ,5846
42	,88929 ,89032	_	34,65 35,47	131,74	2,91 2,96	75,91 75,47	7591 7547	01	,92656	_	76,72	171,84	4,88		,5819
44	,89133	_	36,30	133,29	3,01	75,03	,7503		,92707		77.55	172,64	4,91	57,92	,5792
100 + 45	,89232	_	37,12	134,06	3,06	74,59		100 + 95	,92758		78,37	173,43	4,94	57,66	,5766
46	,89330	-	37,95	134,84	3,11	74,16	,7416		,92807 ,92856	_	79,20 80,02	174,23	4,97		,5740
47	,89427 ,89522	_	38,77 39,60	135,61	3,16	73,74	•7374 •7332		,92905	_	80,85	175,82		56,88	,5688
49	,89615			137,17	3,25	72,90			,92954					56,62	

HEAT 60°.

Ī		1	}]	1	1	1	1	11		}	1	1	Ī	1	1
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	V!	VII.	VIII.
	ater an pirit by		1 *		Bulk of	Diminu-			Water an				Bulk of mixture.	Dimi-	Quan-	Decimal multi-
	weight.		by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.		mea-	by measure.	inixture.	on of	spirit	pliers.
			sure.				per cent.				sure.			bulk.	per cent	
W	. + S	y.							W. + Sp	o.						
1.0	0 1 10	02002	100	82,50		5.00	56,36	7606	100 + 5		100	161.00	258,34	6,66	38,71	,3871
1.0	-	0 ,93002 9 ,93051	100	83,34	177,41	5,09	56,11	,5611		.9586	100	165,00	261,68	6,69	38,21	,3821
	9	8 .93100		84,19	179,05	5,14	55,85	,5585	4	.8 ,9593	-	171,87	265,16	6,71	37,71	,3771
1	-	7 ,9 31 49 6 ,93198	1	85,02 85,94	179,89 180,74	5,13	55,59	,5559		9599, 6,9605		175,53	268,80	6,73	37,20	,3720
10	0 + 9			86,84	181,61	5,23	55,06	,5506	[]	.5 ,9612:	_	183,34	276,56	6,78	36,10	,3616
	· 9	4 93296	_	87,76	182,50	5,26	54,79	,5479	4	4 ,9618	5 -	187,50	280,70	6,80	35,63	,3563
	9		_	88,71 89,67	183,42 184,35	5,29	54,52	,5452	1	.3 ,9624 .2 ,9631		191,86	285,05	6,81	35,08	,3508
	9	(-	_ '	90,66	185,31	5,32 5,35	54,24 53,96	,5424 ,5396		.1 ,9637.		201,21		6,83	33,97	3397
10	0+9	93493	_	91,67	186,29	5,38	53,68	,5368	100 + 4	.0 ,9643	7 —	206,25	299,42	6,83	33,40	,3340
	8	21		92,70	187,29	5,41	53,39	,5339	3	9,9650	-	211,54	304,71	6,83	32,82	,3282
1	. 8	1-24273		93,75	188,31 189,35	5,44 5,48	53,10	,5310	3	7,9662	3 -	217,10	310,28	6,82	32,23	,3223
		6 ,93697		95,93	190,42	5,51	52,51	,5251	3	6 ,9668	-	229,17		6,81	31,02	,3102
10		93749		97,06	191,53	5,53	52,21	,5221		5 ,9675		235,71	328,90	6,81	30,40	,3040
	8. 8			98,21	192,65 193,80	5,56	51,91 51,60	,5191 ,5160		4 ,96816 3 ,96886		242,65		6,81	29,78	,2978
1	8	2 ,93909		100,61	194,99	5,62	51,29	,5129	1	2 ,9694		257,81	351,04	6,77	28,49	,2849
_		,93963		101,85	196,20	5,65	50,97	,5097		1 ,97000		266,13	359,38	6,75	27,83	,2783
10	0 + 80 71			103,12	197,44	5,68 5,72	50,65 50,32	,5065	100 + 3		٠.۱	275,00 284,48	368,28	6,72 6,69	27,15 26,47	,2715
1	7	A : 61		105,77	200,01	5,76	50,00	,5000	2	9 ,97139 8 ,97206	-1	294,64		6,65	25,77	,2577
	7			107,14	201,35	5,79	49,66	,4966	2	· · · · ·	· ·	305,56	398,95	6,61	25,07	,2507
100		,94240		108,55	202,73	5,82 5,85	49,33	,4933 ,4898	2		-	317,31		6,57	24,35	,2435
1	o 十 7: 74		1	110,00	204,15 205,60	5,88	48,64	,4864	100 + 2	5 ,97410 4 ,97479		330,00	423,48	6,46	23,61 22,87	,2361
	7			113,01	207,10	5,91	48,29	,4829	2	97550	I	358,70	452,31	6,39	22,11	,2211
	72	1 1		114,58	208,64	5,94 5,98	47,93	,4793	2:	1		375,00 392,86	468,64		21,34	,2134
100	·	,94579		117,86	211,84	6,02	47,57	,4757 ,4720	100 + 20	-		412,50	506,20	-	19,75	,1975
	69	,94637	-	119,56	213,51	6,05	46,83	,4683	. 19	97848	-	434,21	528,08	6,13	18,94	,1894
	68 65	1777	1	121,32	215,24	6,08	46,46	,4646		97926		458,33	552,29		18,11	,1811,
		,94816		123,13	217,02	6,15	46,08	,4608 ,4569	17			485,29 515,62	579,34 609,76	5,95 5,86	17,26	,1726 ,1640
100	+ 69	,94876	_	126,92	220,74	6,18	45,30		100 + 1	,98176		550,00	644,25	5,75	15,52	,1552
		94936		128,90	222,69	6,21	44,91	,4491	12	,98264	_	589,29	683,66	5,63	14,63	,1463
	62			133,06	224,70	6,28	44,50	,4450 ,4410	13	,98356 2 ,98452		634,61 687,50	729,10 782,11	5,30	13,72	,1372
_		,95119		135,25	228,93	6,32	43,68	,4368	I	,98551		750,00	844,74	5,26	11,84	,1184
100		,95181	-	137,50	231,14	6,36	43,26	,4326	100 + 10			825,00	919,87	5,13	10,87	,1087
1		,95243 ,95305		139,82	233,44	6,38' 6,41		,4284 ,4241	, c	,98761 ,98873	_	916,67	1011,70	4,97	9,88 8,88	,0988
	57	,95368	-	144,73	238,28	6,45	41,97	,4197	7	,98991		1178,57	1273,92	4,65	7,85	,0785
100		,95430		47,32	240,82	6,50		,4152		,99115		1375,00	1470,52	4,48	6,80	,0680
100		,95493		150,00	243,47			,4107 ,4061	100 + 5	,99244 ,99380	-	1650,00		4,30	5,73 4,63	,0573
1	53	,95617	-	155,65	249,08	6,57		,4015		99524		2750,00	2846,04	4,13	3,51	,0463
	52	,95679		158,65	252,05	6,60	39,67	,3967	2	99675		4125,00	4221,21	3,79	2,37	,0237
1	51	,95741	[]	61,77	255,14	6,63	39,19	,3919		1,99834		8250,00	8346,38	3,62	1,20	,0120

HEAT 61°.

				· · · · · · · · · · · · · · · · · · ·			1 1	······································	1	1			-		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v. V.	VI.	VII.	VIII.
Spirit and	Specific			Bulk of	Diminu-	Quan-		Spirit and	Specific		Water	Bulk of	Dimi-	Quan-	Decimal multi-
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit.	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	pliers.
		sure.			Dank.	per cent.		Weight		sure.				per cent.	
So I W								C . 337							
Sp. + W.								Sp. + W.							
100 + 0	,82453	100		100,00		100,00	,9994	100 + 50	,89662	100	41,23	137,94	3,29	72,50	,7245
I	,82684	l —	0,82	- 100,72	0,10	99,29	,9924	51	89752	-	42,05	138,72	3,33	72,09	,7205
2	17.7		1,65	101,44	.0,21	98,58	,9853		,89841	-	42,88	139,50	3,38	71,69	,7165
3	,83130		2,47	102,16	0,31	97,88	,9784	53			43,70	140,28	3,42	71,28	,7125 ,7086
4	383344		3,30	102,89	0,41	97,19	,9714	54		-	44,52	141,06	3,46	70,50	,7046
100 + 5	,83552 ,83755	_	4,12 4,95	103,62 104,35	0,50	96,51 95,83	,9645 ,9578	100 + 55	,90100		45,35 46,17	141,85 142,62	3,50	70,12	,7007
7	,83954	_	5,77	105,09	0,68	95,16	,9511	57			46,99	143,40	3,59	69,73	,6968
8		_	6,60	105,83	0,77	94,50	,9445		,90347	1	47,82	144,19	3,63	69,35	,6931
9	1 0		7,42	106,57	0,85	93,84	,9379	59			48,64	144,97	3,67	68,97	,6893
100 + 10	,84520		8,25	107,31	0,94	93,19	,9314	100 + 60	,90504	_	49,47	145,76	3,71	68,60	,6856
11	,84701	<u></u>	9,07	108,05	1,02	92,55	,9250	61	,90582		50,29	146,54	3,75	68,24	,6820
	,84877	-	9,90	108,80	1,10	91,91	,9186		,90659		51,12	147,33	3,79	67,88	,6783
13	1 - 1 1 1 7		10,72	109,55	1,17	91,28	,9123		,90734		51,94	148,11	3,83	67,52	,6748
14			11,54	110,30	1,24	90,66	,9061	64		_	52,77	148,90		66,80	,6712
100 + 15	1 0	-	12,36	111,05	1,31	90,04		100 + 69	,90883		53,59	149,69 150,48	3,90	66,45	,6642
17		_	13,19	111,81	1,38	89,44 88,84	,8939 ,8879		,9093/		54,42	151,26	3,98	66,11	,6607
18			14,84	112,30	1,52	88,25	,8820		,91102		56,07	152,05	4,02	65,76	,6573
19	1 ~~		15,66	114,08	1,58	87,66	,8762		,91173		56,89	152,83	4,06	65,42	,6539
100 + 20	,86162		16,49	114,84	1,65	87,08	,8703	100 + 70		-	57,72	153,62	4,10	65,09	,6506
21	,86309		17,31	115,60	1,71	86,51	,8646		91312		58,54	154,41	4,13	64,76	,6473
22		-	18,14	116,35	1,79	85,94	,8589	7:	2,91380	-	59,37	155,19	4,18	64,43	,6440
2		-	18,96	117,11	1,85	85,38	,8534	7.	3 ,91447		60,19	155,98	4,21	62.78	,6407
2.4			19,79	117,87	1,92	84,83	,8479		4 ,91513	_	61,02	156,77	4,25	63,78	,6375
100 + 20			20,61	118,64	1,97	84,28		100 + 7			61,84 62,67	157,56	4,28	63,47	,6343
26	1 ~'		21,44	119,40	2,04	83,74 83,21	,8370	7	,91642 ,9170		63,49	158,35	4,32	62,84	,6280
	87268		23,09	120,17	2,09	82,68	,8264	. 7			64,32	159,93	4,39	62,52	,6249
20	1 2 .		23,91	121,71	2,20	82,16		7			65,14	160,72	4,42	62,21	,6218
100 + 30	-		24,74	122,48	2,26	81,65	,8161	100 + 8		0 -	65,96	161,51	4,45	61,91	,6188
3		5	25,56	123,23	2,33	81,15	,8110	. 8			66,78	162,30	4,48	61,61	,6158
3	,87768	3 -	26,39	124,00	2,39	80,64	,8060	8			67,61	163,09	4,52	61,31	,6128
3:	1 00		27,21	124,78	2,43	80,14	,8010	8		- 1	68,43	163,88	4,55	61,01	,6098
34			28,04	125,55	2,49	79,65		8	-		69,26	164,68	4,58	-	_
100 + 3	88123	3 -	28,86	126,32	2,54	79,16		100 + 8	,9218		70,08	165,48	4,60	60,43	
30	,88237 ,88349		29,69	127,09	2,60	78,68			6,9223 7,9229	8 –	70,91	166,27	4,66	59,86	
3	8 ,8845		30,51	127,85	2,66	78,21	1 .		8,9234	3 -	72,56	167,86	4,70		
	,8856		32,16	129,40	2,76	77,28		8	9,9240	2 _	73,38	168,64	4,74		
	,8867		32,98	130,18	2,80	76,82		100 + 9			74,21	169,44	4,77	_	,5898
4	1 ,88786	0	33,80	130,95	2,85	76,36	,7632	9	1,9250		75,03	170,24	4,79	58,74	,5871
4	2 ,8888.	4 -	34,63	131,73	2,90	75,91		9	2,9256	2 -	75,86	171,03	4,83	58:47	,5844
4	3 ,8898	7 -	35,45	132,50	2,95	75,47	7544		3 ,9261	4 -	76,68	171,82	4,86		
	4 ,8908		36,28	133,28	3,00	75,03			4 ,9266		77,51	172,62	4,89		
100 + 4	5,8918	6 -	37,10	134,05	3,05	74,60		100 + 9			78,33	173,41	4,92	57,66	,5763
	6 ,8928		37,93		3,10	74,17			6,9276		79,16	174,20	4,90	57,40	,5738
4	8 ,8938, 8 ,8947	2 -	38,75	135,60	3,15	73,74			9281, 8,9286		79,98	175,80	5.01	56,88	,5686
1	9 ,8957	7 -	39,58	136,38	3,20	73,32	,7329		9,9291		81,64	176,59	5,0	56,6	,5660
7	フトマンソング	74 —	70,40	1 -3/,10	1 3,24	1 /2/91	1 // 200	11 5	ノいタープ			1-137	1,7,7,7	× 1 - 2 - 7 - 6	

HEAT 61°.

f	1		, , , , ,			***************************************	,	1					,		
. I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI,	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of nixture.	Diminu- tion of	Quan-	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.		bulk.	spirit	pliers.	weight.	0 /	mea- sure.	measure.		on of	spirit per cent.	pliers.
						per cent.				sure.				per cent.	
W. + Sp.								W. + Sp.							
100+100		100	82,46	177,38	5,08	56,37	,5634	100 + 50			164.92		6,64	38,71	,3869
99	,93010		83,29	178,19	5,10	56,11 55,86	,5609 ,5583	49	,95834 ,95898	_	168,29 171,78	261,62 265,10	6,67	38,22 37,72	,3820
97	,93108		84,98	179,86	5,12	55,60	,5557	47	1 2		175,44	268,73	6,71	37,21	,3719
96			85,89	180,71	5,18	55,33	,5531	46			179,26		6,74	36,69	,3667
100 + 95		ŧ .	86,79 87,72	181,59 18 2 ,47	5,20	55,07 54,80	,5504	100 + 45			183,25 187,41	276,49 280,63	6,76 6,78	36,16 35,63	,3615 ,3562
94 93		1	88,66	183,40	5,25 5,26	54,53	,5477 ,5450	44 43			191,76	284,97	6,79	35,08	,3502
92	,93353	-	89,62	184,32	5,30	54,25	,5422	42	,96281	 —	196,33	289,52	6,81	34,53	,3452
91		-	90,61	185,29	5,32	53,97	,5394	41			201,11		6,81	33,97	,3396
100 + 90	1 .		91,62	186,26 187,26	5,36 5,39	53,69 53,40	,5366 ,5337	100 + 40 39			206,15	299,34 304,62	6,81 6,81	33,40	,3339 ,3281
88	,93554	_	93,70	188,28	5,42	53,11	,5308	38	,96535	<u> </u>	21,6,99	310,19	6,80	32,24	,3222
87	,93605 ,93657		94,78 95,88	189,33	5,45	52,81 52,52	,5279	37 36	,96598 ,96662		222,86	1	6,80 6,81	31,64	,3162
100 + 85		-	97,01	191,50	5,48	52,22	,5249	100 + 35			229,06	$\frac{322,25}{328,79}$	6,80	31,03	,3101
84	,93762		98,16	192,63	5,53	51,91	,5189	34			242,53	335,73	6,80	29,78	,2977
83	,93815	-	99,34	193,78	5,56	51,61	,5158		,96855	-	249,88	343,10	6 78	29,14	,2913
82 81	1 -		100,56	194,96	5,60	51,30	,5127 ,5095	32 31	(- <u>-</u>		257,68 266,00	350,93 359,26		28,49 27,83	,2848
100 + 80		-	103,07	197,41	5,66	50,66	,5063		,97051	-	274,86	368,16	-	27,16	,2715
79	,94034		104,38	198,68	5,70	50,33	,5030	29	,97117		284,34	377,65	6,69	26,48	,2647
78		1	105,71	199,97	5,74	50,00 49,67	,4998	28	1 71 3		294,50		6,65	25,78	,2577
77	,94201	1	108,49	201,32	5,77	49,33	,4964 ,4931	27 26			305,41	398,80	6,61	25,08 24,36	,2507
100 + 75	,94257		109,94	204,11	5,83	48,99	,4897	100 + 25			329,84		6,52	23,62	,2361
74	1 6 -		111,42	205,56	5,86	48,65	,4862	2.4	97460	-	343,58	437,12	6.46	22,87	,2287
73	1		112,95	207,06	5,89	48,30	,4827 ,4791	23	1		358,52		6,39	22,12	,2211
71	1		116,13	210.18	5,95	47,58	,4756	21	1		392,67		6,29	20,56	,2055
100 + 70	1	1	117,80	211.80	6,00	47,21	,4719	100 + 20	1 7 . 1 . 2 . 2		412,30	506,08	6,22	19,76	,1975
68	,94599 ,946 5 9		119,50	213,48	6,02	46,84 46,47	,4682 ,4645		,97832		434,00 458,11	527,86	6,14	18,95	,1894
67	94719	-	123,07	216.98	6,09	46,09	,4607		,97992		485,06	552,05 579,09	l.	17,27	,1726
66			124,94	218 81	6,13	45,70	,4568	16	.98076		515,37	609,50	5,87	16,41	,1640
100 + 65	,94839 ,948 9 9		126.86		6,16 6,18	45,31	,4529	100 + 15	,98162	-	549,73	643,97	5,76	15,53	,1552
	,94951		130,88		6,22	44,91	,4449		,98251		589,00	683,36 728,77	5,53	14,63	,1463
	,95022		132,99	226,74	6,25	44,10	,4409	. 12	,98440		687,17	781,76	5,41	12,79	,1279
100 + 60	,95083		135,18	2,28,88	6,30	43,69	,4367		,98539	-	749,64	844,36		11,84	-
59			137,43	231.10	6,33	43,27	,4325	100 + 10	98042 98750		824,60 916,23	919,45	5,15	10,87	,1087
58	,95270		142,16	235.77	6,39	42,41	,4240	8	,98862		1030,75	1125,91	4,84	8,88	,0888
	95333		144.66	238,23	6,43	41,97	,4196	7			1178,00	1273,32		7,85	,0785
100 + 55	,95395		147,25	240,77	6,50	41,53	,4151	100 - 5	-		1374-34	1469,82		6,80	,0680
	,95521		152,69		6,53	40,62	,4060		,99234 ,9937 1	1	2061,51	2157,33		5,73 4,63	,0573
53	95583	-	155,57	249,02	6.55	40,15	,4014	3	,99515		2748.67	2844,66	4,01	3,51	,0351
	,95645 .95707		158,57	252,00	6,61	39,68	,3966	2	,99666		4123,01 8246.02	4219,16	3,85	2,37	,0237
,,,	1,22/2/	1	(. 4)] 3.40	(0,01	, 29,20	: 13710	11 1	199025	1	0240.02	8342,33	13,09	1,20	,0120

HEAT 62°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.			Bulk of mixture.	Diminu- tion of	Quan- tity of	1 1	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	gravity.	mea- sure.	measure.	mixture.	bulk.	spirit per cent.	pliers.	weight.	B	mea- sure.	measure.		on of bulk.	spirit	pliers.
$\overline{Sp. + W.}$								Sp. + W.			erentation tric Autography and per				
100 + 0		100		100,00		100,00		100 + 50		100	41,21	137,93	3,28	72,50	,7242
I	,82637 ,82863		0,82	100,72	0,10	99,29 98,58	,9918 ,9848	5 I 5 2	10'	_	42,03 42,86	138,71	3,32	72,09	,7201 ,7161
2 3	,83083		2,47	102,16	0,21	97,88	,9778	53	1 0 0 0		43,68	140,27	3,41	71,29	,7121
4	,83297		3,30	102,89	0,41	97,19	,9709	54	10 /		44,50	141,05	3,45	70,90	,7082
100 + 5	,83504		4,12	103,62	0,50	96,51	,9640	100 + 55	,90055		45,33	141,83	3,50	70,51	,7042
	,83708 ,83907	_	4,95	104,35	0,60	95,83° 95,16	,9573 ,9506	56 57			46,15 46,97	142,61	3,54 3,58	70,12 69,73	,7004 ,6965
8			5,77 6,59	105,83	0,76	94,50	,9440	58	1 -	1	47,80	144,18	3,62	69,35	,6928
9			7,42	106,57	0,85	93,84	•9 3 74	59			48,62	144,96	3,66	68,98	,6890
100 + 10		_	8,24	107,31	0,93	93,19	,9309	100 + 60			49,45	145,75	3,70	68,61	,6853
11	,84654	_	9,06	108,05 108,80	1,01	92,55	,9245 ,9181		,90538		50,27 51,10	146,53	3,74 3,78	68 ,2 4	,6816 ,6780
12 13	,84830 ,85002		9,89	100,00	1,09	91,91 91,28	,9118	63			51,92	148,10	3,82	67,52	,6745
- J I4	,85171	_	11,54	110,30	1,24	90,66	,9056	64			52,75	148,89	3,86	67,16	,6709
100 + 15	,85335		12,36	111,05	1,31	90,04	,8995	100 + 65			53,56	149,68	3,88	66,81	,6673
16	,85498	_	13,18	111,80	1,38	89,44	,8934	66		-	54,40	150,47	3,93	66,46	,6639 ,6604
	,85656	_	14,01	112,56	I,45	88,84 88,25	,8874 ,8815	6 ₇	1		55,21 56,05	151,25	3,96 4,01	66,11	,6570
	,85813 ,85965	_	14,83	113,31	1,52 1,58	87,66	,8757	69	1		56,87	152,82	4,05	65,43	,6536
100 + 20	-		16,48	114,83	1,65	87,08		100 + 70			57,69	153,61	4,08	65,10	,6503
21	,86263	_	17,30	115,59	1,71	86,51	,8641	71	,91268	1	58,51	154,39	4,12	64,77	,6470
22	,86407	-	18,13	116,35	1,78	85,95	,8585	72	1		59,34	155,18	4,16	64,44	,6437
23 24	1 0175		18,95	117,11	1,84	85,39 84,84	,8529 ,8474	73 74			60,16 60,99	155,97	4,19 4,23	63,79	,6372
100 + 25			20,60	118,63	1,97	84,29	,8419	£			61,81	157,55	4,26	63,47	,6340
26	1 ~	_	21,43	119,40	2,03	83,75	,8365	76	,91598	-	62,64	158,34	4,30	63,16	,6308
27	,87091		22,25	120,17	2,08	83,22	,8312				63,46	159,13	4,33	62,84	,6277 ,6246
28		i	23,08	120,93	2,15	82,69	,8259 ,8208		,91723	_	64,29	159,92 160,71	4,37	62,53 $62,22$,6215
29			23,90	121,70	2,20	82,17	,8156	79 100 + 80			65,93	161,50	4,40	61,92	,6185
100 + 30 31	,87476 ,87600		24,73	122,47	2,26	81,15	,8150	81			66,75	162,29	4,46	61,62	,6155
32	1 ~'		26,38	124,00	2,38	80,65	,8055	82	,91966	_	67,58	163,07	4,51	61,32	,6125
33	,87843	-	27,19	124,77	2,42	80,15	,8006	83			68,40	163,87	4,53	61,02	,6095
34			28,02	125,54	2,48	79,65	• 7957	84			69,23	164,67	4,56	60,73	,6037
100 + 35	,88076	-	28,85	126,31	2,54	79,17 78,69		100 + 85	,92139		70,05 70,88	166,25	4,59	60,15	,6008
30	,88191 ,88303		29,67	127,08	2,59 2,64	78,22	,7813		,92250		71,70	167,05	4,65	59,87	,5980
3/ 38	,88413		31,32	128,62	2,70	77,75	,7766	88	,92305	-	72,52	167,84	4,68	59,58	
3 9	,88521	_	32,14	129,39	2,75	77,28	,7719	89	,92359		73,35	168,63	4,72	59,30	,5924
100 + 40	,88628		32,97	130,17	2,80	76,82	,7674	100 + 90			74,18	169,43	4,75	59,02 58,74	,5896 ,5868
41	,88734	1 -	33,79	130,94	2,85	76,37	,7628 ,7584		,92466 92519		75,00	170,22	4,78 4,82	58,47	,5841
4.2 4.3	,88839 ,88942		34,62	131,72	2,90	75,92 75,48			92571	í _	76,65	171,81	4,84		,5814
44	,89043		36,26	133,27	2,99	75,04		94	,92623	3	77,47	172,60	4,87	57,93	,5787
100 + 45	,89141	_	37,09	134,04	3,05	74,60	,7452	100 + 9	,92674	-	78,29	173,39	4,90	57,67	,5761
46	,89240	—	37,91	134,82	3,09	74,17	,7409	96	92723	3 -	79,12	174,18	4,94		,5735
47	,89337		38,73	135,59	3,14	73,75		58	,92772	2 -	79,94 80,76	174,98	4,96 4,99		,5709
48	,8943: ,8952		39,56	136,37	3,19	73,33	,7325		92871		81,59		5,02	56,64	,5657

HEAT 62°.

1	1	1			i		1	1	1	1		***************************************	1		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I. ·	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and		Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
spirit by weight.	gravity	mea-	measure.	mixture.	bulk.	spirit	pliers.	weight.	gravity.	mea-	measure.	mixture,	on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
W. + Sp.			·					W. + Sp.							
100 + 100	.02020	100	82,42	177,36	5,06	56,38	,5631	100 + 50	,95737	100	164,84	258,23	6,61	38,72	,3868
99	,92969		83,25	178,17	5,08	56,12	,5606	49	,95800		168,21	261,56	6,65	38,23	,3819
98			84,10	179,00	5,10	55,87	,5580	48			171,70		6,66	37,73	,3769
97	,93066 ,93116		84,94 85,85	179,84 180,69	5,10 5,16	55,60 55,34	,5554 ,5528		,959 2 9 ,95993		175,35	268,67 272,46	6,68	37,22	,3718
100 + 95	,93164		86,75	181,56	5,19	55,08	,5501	100 + 45	,96058		183,16		6,74	36,17	,3613
	,93213	-	87,68	182,45	5,23	54,81	,5474	44	,96122		187,32	280,56	6,76	35,64	,3561
93	,	_	88,62	183,37	5,25	54,54	•5447	43			191,67	284,90	6,77	35,09	,3506
92 91	1	_	89,58 90,57	184,30 185,26	5,28 5,31	54,26 53,98	,5419	42 41	,96250 ,96313	_	196,23		6,78 6,78	34,54 33,98	,34 51 ,3395
100 + 90	-		91,58	186,24	5,34	53,70	,5363		,96378		206,05	299,26	6,79	33,41	,3338
89	,93461		92,61	187,24	5,37	53,41	,5335	39	,96442	-	211,33	304,53	6,80	32,84	,3280
88	1733	-	93,66	188,26	5,40	53,12	,5306				216,89		6,79	32,25	,3221
8 ₇ 86	1-733		94,74 95,84	189,30	5,44 5,47	52,82 52,52	,5277 ,5247	37 36	,96570 ,96635		222,75 228,95		6,79 6,80	31,65	,3161
100 + 85			96,97	191,47	5,50	52,22	,5217		-		235,48		6,79	30,42	,3039
84	,93721	-	98,12	192,60	5,52	51,92	,5187	34	,96765		242,41	335,62	6,79	29,79	,2977
83	1 / / / /	-	99,30	193,75	5,55	51,62	,5156	33	,96830	 	249,76	343,00	6,76	29,15	,2913
82 81	1733		100,51	194,93	5,58 5,62	51,31 50,99	,5125 ,5093	32 31	1		257,56 265,87	350,82 359,15	6,74 6,72	28,50 27,84	,2847 ,2781
100 + 80	1,73	·	103,02	197,37	5,65	50,67	,5061	100 + 30			274,73	368,03	6,70	27,17	,2714
79			104,33	198,64	5,69	50,34	,5028		,97095	1	284,20		6.68	26,49	,2646
78	() (105,66	199,94	5,72	50,01	,4996	28	177 3	1 .	294,36		6,66	25,79	,2576
77	,94105		107,03	201,29	5,74 5,78	49,68	,4962 ,4929	27 26	, ,		305,26	398,65 410,42	6,61	25,09	,2506 ,2434
100 + 75	-		109,89	204,08	5,81	49,00	,4894	100 + 25	,97 3 69		329,68		6,52	23,63	,2360
	,94274	_	111,37	205,53	5,84	48,66	,4860		,97440		343,41	436,95	6,46	22,88	,2286
73		-	112,89	207,03	5,86	48,30	,4825	23	,97513		358,35	451,95	6,40	22,13	,2210
72 71	,94388 ,94445	_	114,46	208,57 210,14	5,89 5,93	47,95 47,59	,4789 ,4754	22	,97586 ,97662		374,64	468,26 486,18	6.38	21,35	,2133
100 + 70			117,74	211,77	5,97	47,22	,4717	100 + 20			392,48	505,87	6,23	19,77	,2054
69	,94561		119,44	213,44	6,00	46,85	,4680	19	,97816		433,79	527,64	6,15	18,95	,1893
68		_	121,20	215,16	6,04	46,47	,4643	18	,97895		457,89	551,82	6,07	18,12	,1810
6 ₇	1-71	_	123,01 124,88	216,94 218,77	6,07	46,10	,4605 ,4566	17 16	1 / 1 / 1 / 1	_	484,83	578,84 609,24	5,99 5,88	17,28 16,42	,1726 ,1640
100 + 65	[プリオー]		126,80	220,65	6,15	45,32	,45 2 7	l			549,47	643,69	-	15,54	,1552
64	,94862		128,77	222,60	6,17	44,92	,4488	14	,98237		588,72	683,06			,1463
63	,94924	_	130,81	224,61	6,20	44,52	>4447	13	,98330		634,00	728,44	5,56	13,73	,1371
	,94985 ,95046		132,92	226,70 228,84	6,22 6,27	44,11 43,70	,4407 ,4 3 65	12	,98427 ,98526		686,84	781,41		12,80	,1278
100 + 60		_	137,37	231,05	6,32	43,28		100 + 10			749,28	919,03		11,85	,1184
59	,95171		139,69	233,35	6,34	42,86	,4281	9	,98738		915,79	1010,76	5,03	9,89	,0987
	,95234	-	142,09	235,72	6,37	42,42	,4238	8	,98851		1030,26	1125,38	4,88	8,88	,0888
	,95297 ,95360		144,59	238,18	6,41 6,46	41,98 41,54	,4194 ,4140	7 7	,98970		1177,44	1272,72		7,86	,0785
$\frac{36}{100 + 55}$	-	_	149,85	243,37	6,48	41,09	,4I49 ,4I04		,99094 ,99224	-	1373,68		4,56	6,81	,0680
54	,95486		152,61	246,10	6,51	40,63	,4058		,99224		2060,52	1744,03 2156,29	4,39	5,73 4,64	,0573 ,0463
53	,95548		155,49	248,96	6,53	40,16	,4012	3	,99505		2747,35	2843,29	4,06	3,52	,0351
	,95610 ,956731		158,48	251,94	6,54	39,69	,3965	2	,99656		4121,03	4217,12	3,91	2,37	,0237
1	1950/31		101,00	255,02	6,58	39,21	,3917	l I	,99815		8242,06	8338,30	3,76	1,20	,0120

HEAT 63°.

	1	1.	1	1	1	~~~~		1					1 1		1
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal,	Spirit and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by	gravity.	by	by	mixture.	tion of bulk.	tity of spirit	multi-	water by	gravity.	by	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
weight.		mea- sure.	measure.		Duik.	per cent.	pliers.	weight.	,	mea- sure.	mcasurc.			per cent.	Parezer
						-									
Sp. + W.					-			Sp. + W.			- TOTAL				
100 + 0	1 2 2 1			100,00		100,00	,9983	100 + 50		100	41,19	137,92	3,27	72,51	,7238
I	1 ~ ~ ~		0,82	100,72	0,10	99,29	,9912	51	,89661	-	42,01	138,70	3,31	72,10 71,69	,7198 ,7158
2	,83035		1,65 2,47	101,44	0,21	98,58 97,88	,9842 ,9772	52	,89750 ,89838		42, 84 43,6 6	139,48 140,26	3,35	71,29	1 -
) 4	,83250		3,30	102,80	0,41	97,19	,9703		,89924		44,48	141,04	3,44	70,90	,7078
100 + 5	,83457		4,12	103,62	0,50	96,51	,9634	100 + 55	,90010	-	45,31	141,82	3,49	70,51	,7039
6			4,94	104,35	0,59	95,83	,9567	56			46,13	142,60	3,53	70,13	,7001
7	,83860		5,77	105,09	0,68	95,16	,9501	57	,90177		46,95	143,38	3,57	69,74	,6962
8		_	6,59	105,83	0,76	94,50	,9435	58	,90258		47,78	144,17	3,61	69,36	,6924
THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE OW	,84243		7,42	106,57	0,85	93,84	,9369	59			48,60	144,95	3,65	68,99	6886
100 + 10			8,24	107,31	0,93	93,19	,9304	100 + 60	,90416		49,42	145,73	3,69	68,62	,6850
	1 - 1 /	1	9,06	108,05	1,01	92,55	,9240	61	,90494		50,24	146,52	3,72 3,76	67,89	,6777
12	1 11 2		9,89	108,80	1,09	91,91	,9176 ,9113	62	,90571 ,90646		51,07 51,89	147,31 148,09	3.80	67,53	,6741
13	,84955 ,85124		11,53	109,55	1,23	90,66	,9051	64		1	52,72	148,87	3,85	67,17	,6705
100 + 15	-	-	12,35	111,05	1,30	90,05	,8990	100 + 65			53,54	149,66	3,88	66,82	,6670
160 - 15	1 ~ -		13,18	111,80	1,38	89,44	,8929		,90869		54,37	150,45	3,92	66,47	,6636
17			14,00	112,56	1,44	88,85	,8869	67			55,19	151,23	3,96		,6601
18	1 ~		14,82	113,31	1,51	88,25	,8810	68			56,02	152,02	4,00	65,78	,6567
19	,85919		15,65	114,07	1,58	87,66	,8752	69	,91085	-	56,84	152,80	4,04	65,44	,6533
100 + 20	,86069	_	16,47	114,83	1,64	87,08	,8694	100 + 70	,91154	_	57,66	153,59	4,07	65,11	,6500
21		-	17,29	115,58	1,71	86,51	,8637	71	,91224		58,48	154,38	4,10	64,78	,6467
22			18,12	116,34	1,78	85,95	,8580	72			59,31	155,17	4,14	64,45	,6434
23	,86503	_	18,95	117,10	1,85	85,39	,8525		,91358	_	60,13	155,95	4,18	64,12	,6401
24			19,77	117,87	1,90	84,84	,8470	74	-		61,78	-		03,48	,6337
100 + 25			20,60	118,63	1,97	84,29	,8415 ,8361	100 + 75			62,61	157,53	4,25	63,16	,6305
26 27	1 ~ '		21,42	119,39	2,08	83,75	,8307		,91554 ,91616		63,43	159,11	4,32	62,85	,6274
28			23,07	120,10	2,15	82,69	,8255	78	1 - ,		64,26	159,90	4,36		
29	1 0'		23,89	121,69	2,20	82,17	,8203	79			65,08	160,69	4,39	62,23	,6212
100 + 30			24,71	122,46	2,25	81,66	,8152				65,90	161,48	4,42	61,93	,6182
31		_	25,53	123,22	2,31	81,15	,8102	81	,91863	—	66,72	162,27	4,45	61,63	,6152
32			26,36	123,99	2,37	80,65	,8051	82	1		67,55	163,06	4,49	61,33	,6122
33			27,18	124,76	2,42	80,15	,8002	83			68,37	163,85	4,52	61,03	,6092
34	-	-	28,01	125,53	2,48	79,66	, 7953	84	-	_	69,19	164,65	4,54		,6034
100 + 35	,88030		28,83	126,30	2,53	79,17	,79°4	100 + 85	,92090		70,02	165,44 166,23	4,58 4,61	60,45	,6005
	,88145	-	29,66	127,07	2,59	78,69	,7856	0.	,92152		71,67	167,03	4,64		
37	,88257 ,88367		30,48	127,84	2,64	78,22 77,75			,92262		72,49	167,82	4,67	59,59	
20	88475		32,13	129,39	2,74	77,29	,7715		,92316		73,32	168,61	4,71	59,31	,5921
100 + 40			32,95	130,17	2,78	76,83	,7669	100 + 90		_	74,14	169,41	4,73	59,03	,5893
41 41	,88688		33,77	130,94	2,83	76,37	,7624	91	,92423	3 -	74,96	170,20	4,76	58,75	,5866
4.2	88793	-	34,60	131,71	2,89	75,92	,7580	92	,92476	—	75,79	170,99	4,80	58,48	,5838
43	,88896	-	35,42	132,48	2,94	75,48	,7536	93	,92528	3 -	76,61	171,79	4,82		,5811
44	,88998		36,25	133,26	2,99	75,04	,7492	94	,92580		77,43	172,58	4:85	57,94	
100 + 45	,89096		37,07	134,03	3,04	74,61	,7448	100 + 95	,92632	2 -	78,25	173,37	4,88	57,68	
46	,89195	 	37,89	134,81	3,08	74,18	,7405	06	,92681	[79,08	174,15	4,93	57,42	
	,89292	-	38,71	135,58	3,13	73,75	,7363	97	,92730		79,90	174,95	4,95	1	
48			39,54	136,36	3,18	73,33		90	,92780		81,55	176,55	5,00		
49	1,89479	1 —	1 40,30	137,14	3,22	72,92	,7279	יו 95	1.994040	11	(~*,))	1 ~1 ~,))	ال الرا	1 2 32 1	, - , ,

HEAT 636.

								1 _	Ī	11					
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decima multi-
weight.	5	méa-	measure.		bulk.	spirit	pliers.	weight.		mea-	measure.		on of	spirit	pliers.
		sure.				per cent.				sure.		-	bulk.	per cent.	
W. + Sp.								W. + Sp.							
100 + 100	,92878	100	82,38	177,34	5,04	56,38	,5629	100 + 50	,95703	100	164,76	258,17	6,59	38,73	,3867
99	,92928		83,21	178,15	5,06	56,13	,5604	49	,95767		168,13	261,50		38,24	,3818
98			84,06	178,97	5,09	55,87	,5578	48	,95832	_	171,62	264,98 268,61		37,74	,3768
	,93025 ,93074	_	84,90 85,81	179,81 180,66	5,09 5,15	55,61 55,35	,5552	47	,95896 ,95961		175,27	272,40		37,23 36,71	,3717 ,3665
100 + 95	,93122		86,71	181,54	5,17	55,08	,5499	100 + 45	-		183,07	276,36		36,18	,3612
94			87,64	182,42	5,22	54,81	,5472	44	1 .		187,23	280,49	6,74	35,65	,3560
93	,93220		88,58	183,34	5,24	54,54	,5445	43	,96155	-	191,58	284,83	6,75	35,11	,3505
	,93269		89,54	184,27	5,27	54,26	,5417	42	,96219		196,14	289,38	6,70	34,55	,3450
	,93318		90,52	185,24	5,28	53,99	,5389		,96283		200,92	294,15		33,99	·3394
100 + 90	,93309 ,93419		91,53	186,21 187,21	5,32	53,70 53,41	,5361	100 + 40	,96413		205,95	299,18 304,45		33,42	,3337
	,93471		93,61	188,23	5,38	53,12	,5304		,96477		216,79	310,01		32,26	,3220
	,93523		94,69	189,27	5,42	52,83	,5275	37	,96542		222,64	315,87		31,66	,3161
-	70717		95,79	190,35	5,44	52,53	,5245	36			228,84	322,05		31,05	,3100
100 + 85	,93628		96,92	191,45	5,47	52,23	,5215	100 + 35	,96672		235,37	328,59		30,43	,3038
	1 7 5		98,07	192,57	5,50	51,93 51,62	,5185	34	1 (0		242,30	335,52 342,90		29,80	,2976
83 82	,93735 ,93790		99,25	193,72	5,53 5,56	51,31	,5154	33	(0)		249,64 257,44	350,72	6,72	28,51	,2847
	1.7017		101.70	196,10	5,60	50,99	,5091	31	1		265,74	359,03		27,85	,2781
100 + 80			102,97	197,34	5,63	50,67	,5059	100 + 30	,97005	_	274,60	367,90	6,70	27,18	,2714
			104,28	198,61	5,67	50,35	,5026	2 9	,97073	-	284,06	377,39		26,50	,2645
78	,94011	_	105,61	199,91	5,70	50,02	,4994	28	1 - 1	1	294,22	387,56		25,80	,2575
77 76	,94066 ,94123	_	106,98	201,26 202,63	5,72 5,76	49,69	,4960	27 26			305,11	398,50 410, 2 7		25,10	,2505
	,94178		109,83	204,05	5,78	49,01	,4892	100 + 25			329,52	423,00	-	23,64	,2360
100 + 75	,94235		111,31	205,50	5,81	48,66	,4858		97421		343,25	436,78		22,89	,2286
73	,94291	-	112,83	206,99	5,84	48,31	,4823		97494		358,18	451,77	6,41	22,13	,2210
	1		114,41	208,54	5,87	47,95	,4787		,97568		374,46	468,08		21,36	,2133
	,94406		116,01	210:11	5,90	47,60	,4752		,97645	-	392,29	485,98	-	20,58	,2054
100 + 70		_	117,68	211,73	5,95	46,86	,4715 ,4678	100 + 20	97723 97800,		411,90	505,66 527,42		19,77	,1974
	,94523	_	119,38	213,40	5,98	46,48	,4641		,97879		433,58 457,67	551,59			,1810
67	,94643		122,95	216,90	6,05	46,10	,4603		,97962		484,60	578,59	6,01	17,29	,1725
6 6	,94703		124,82	218,73	6,09	45,72	,4564	16	,98047	7 —	514,88	608,98	5,90	16,43	,1639
100 + 65			126,74	220,61	6,13	45,33	,4525	100 + 15			549,21	643,41			,1552
	,94825		128,71	222,56	6,15	44,93	,4486	14	,9822	3 -	588,44	682,76			,1463
	,94887 ,94948		130,75	224,57	6,18	44,53	,4445 ,4405		,98317		633,70	728,12 781,06			,1371
	,95010		135,05	228,79	6,26	43,71	,4363		1,98514		748,92	843,60	5,32	11,85	,1183
100 + 60			137,30	231,00	6,30	43,29	,4321	100 + 10			823,81	918,61			,1087
59	,95135		139,62		6,32	42,87	,4279	9	,98726	5 -	915,35	1010,29	5,06	9,90	,0988
58	,95198		142,02	235,67	6,35	42,43	,4236	8	,98840	—	1029,77	1124,86		8,89	,0888
	,95261	-	144,52	238,13	6,39	41,99	,4192	7	,9896		1176,88	1272,12	4,76	7,86	,0785
	,95325		147,11	240,67	6,44	41,55	,4148	100 1		_	1373,02	1468,42			
100 + 55 54	,95388		149,78	243,32 246,05	6,46	41,09	,4103	100 + 5	1		2059,53	1743,20		5,73	,0573 ,0463
	,95513		155,41		6,51	40,17	,4011			-	2746,03	2841,93			,0351
52	,95576		158,40	251,88	6,52	39,70	,3964	2	,99646	5	4119,06	4215,10	3,96	2,37	,0237
5 1	,95639	_	161,52	254,96	6,56	39,22	,3916	1	,9980	5 -	8238,12	8334,30	13,82	1,20	,0120

HEAT 64°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	II.	III.	IV.	v.	VI.	VII.	VIII.
	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	5.41.17	méa-	measure.	imature.	bulk.	spirit	pliers.	weight.	gravity.	mea-	measure.	mintaic.	on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
Sp. + W.								Sp. + W.							
100 + 10	,82310	100		100,00		100,00	,9977		,89525	100	41,17	137,91	3,26	72,51	,7235
1	,82541		0,82	100,72	0,10	99,29	,9906		,89616		41,99	138,69	3,30	72,10	,7194
3	,82767 ,82987		1,65 2,47	101,44 102,16	0,21	98,58 97,88	,9836 ,9766	52 53	1 ~	_	42,82 43,64	139,47 140,25	3,35	71,70	,7154 ,7114
4	,83202		3,29	102,89	Q,40	97,19	,9698		,89879		44,46	141,03	3,43	70,91	,7075
100 + 5	,83409		4,11	103,62	0,49	96,51	,9629	100 + 55	,89965		45,29	141,81	3,48	70,51	,7035
			4,94	104,35	0,59	95,83	,9562	56	,90049	-	46,11	142,59	3,52	70,13	,6997
7 8	,83813	_	5,77	105,09	0,68	95,17	,9495	57	,90132		46,93	143,37	3,56 3,60	69,74 69,36	,6958
	,84007 ,84196		6,59 7,41	106,56	0,77	94,50	,9429 ,9363	58	,90214 ,90293		47,76 48,58	144,16 ' 144,94	3,64	68,99	,6883
	,84379		8,24	107,30	0,94	93,20	,9298	100 + 60			49,40	145,72	3,68	68,63	,6846
11	,84560		9,06	108,05	1,01	92,56	,9234	61	,90450	1 :	50,22	146,51	3,71	68,26	,6809
I 2	,84736		9.88	108,79	1,09	91,92	,9171	62	,90527	_	51,05	147,29	3,76	67,89	,6773
	,84908		10,70	109,55	1,15	91,29	,9108	63			51,87	148,08	3,79	67,54	,6738
	,85076		11,52	110,29	1,23	90,67	,9046	64			52,69	148,86	3,83	67,18	,6702
100 + 15	,85241 ,85403		12,35	111,05	1,30	90,05 89,45	,8985 ,8924	100 + 65 66	,90751 ,90825		53,52 54,34	149,65 150,43	3,87	66,82 66,47	,666 ₇
17	,85562	_	13,17	112,56	1,37 1,44	88,85	,8864	67	,90897		55,16	151,22	3,94	66,12	,6598
	,85719	1	14,82	113,31	1,51	88,26	,8805	68			55,99	152,00	3,99	65,78	,6564
19	,85872		15,64	114,07	1,57	87,67	,8747	69	,91041		56,81	152,79	4,02	65,45	,6530
100 + 20	,85022	_	16,46	114,82	1,64	87,09	,8689	100 + 70	,91110		57,63	153,58	4,05	65,11	,6496
2 I	,86170		17,29	115,58	1,71	86,52	,8632	71	,91180	1	58,45	154,36	4,09	64,78	,6464
22 23	,86314 ,86456	_	18,11 18,94	116,34	1,77	8 5 ,95	,8576 ,8521	72	,91247 ,91314		59,28	155,15	4,13	64,45	,6431
24	06.6		19.76	117,86	1,90	84,84	,8465	73			60,93	156,73	4,20	63,80	,6366
100 + 25	,86732		20,59	118,63	1,96	84,29	,8410	100 + 75	-		61,75	157,51	4,24	63,48	,6334
26	,86868		21,41	119,39	2,02	83,76	,8356	76	,91510	-	62,58	158,31	4,27	63,17	,6302
27	,86939	-	22,23	120,16	2,07	83,23	,8303		,91572		63,40	159,09	4,31	62,85	,6271
	,87130		23,05	120,92	2,14	82,70	,8250 ,8198	78	,91635 ,91698		64,23	159,88	4,35	62,54 62,23	,6240
29		<u> </u>	23,88	121,69	2,19	82,17		100 + 80		-	65,87	161,46	4,37	61,93	,6179
100 + 30 31	,87384 ,87507	_	24,70	122,46	2,24	81,16	,8097	81			66,69	162,25	4,44	61,63	,6149
32	,87630		26,35	123,99	2,36	80,66	,8047		,91879		67,52	163,04	4,48	61,33	,6119
33	,87751	_	27,17	124,76	2,41	80,16	,7998	83			68,34	163,84	4,50	61,03	,6089
34	,87869	<u> </u>	27,99	125,53	2,46	79,66		84			69,16	164,63	4,53	60,74	
100 + 35	,87984		28,82	126,30	2,52	79,17	,7900	100 + 85	,92053		69,99	165,42	4,57	60,45	,6031
30	,00099		29,64	127,07	2,57	78,69 78,22	,7852 ,7805		,92109		71,64	167,01	4,60		
37 38	1 ~~		30,46	127,53	2,68	77,75	,7758		,92219		72,46	167,80	4,66	59,60	5946
39			32,11	129,38	2,73	77,29	,7711	89	,92273	3	73,28	168,60	4,68	59,31	,5918
100 + 40	,88536	_	32,93	130,16	2,77	76,83	,7666	100 + 90	,92326	5 -	74,11	169,39	4,72	59,03	,5890
41	,8864.2	—	33,76	130,93	2,83	76,37	,7620	91	,92380		74,93	170,18	4,75	58,76	
	,88747		34,59	131,70	2,89	75,92	,7576		,92433 ,92485		75,76	170,97	4,79	58,49 58,22	
43			35,41	132,47	2,94 2,98	75,49 75,04		9:	,92537		77,39	172,56	4,83	57,95	,5782
100 1 45			37,06	134,02	3,04	74,61	7444				78,21	173,35	4,86	57,68	
100 + 45 46	,89150		37,87	134,80	3,07	74,18	,7401	90	,92639) —	79,04	174,13	4,91	57,42	,5730
47			38,69	135,57	3,12	73,76	7359	97	,92688	3 —	79,86	174,93	4,93		,5704
48	,89340	—	39,52	136,35	3,17	73,34	,7317		,92738		80,68	175,72	4,96		
49	,89433	-	40,34	137,13	3,21	72,92	,7275	11 99	92787	7 -	81,51	176,52	4,99	56,65	1 35052

HEAT 64°.

ī.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	II.	ш.	IV.	V.	VI.	VII.	VIII.
Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.		Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	I	ł	Spirit by mea- sure,	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	Quan- tity of spirit per cent.	Decimal multi- pliers.
W. + Sp.	ŕ					Per cent.		$W_{\cdot} + S_{p}$.		5410,					
100 + 100 99 98 97	,92886 ,92935		82,34 83,17 84,02 84,87	177,32 178,13 178,95 179,79	5,02 5,04 5,07 5,08	56,39 56,13 55,88 55,62	,5626 ,5601 ,5576 ,5549	100 + 50 49 48 47	,95734 ,95799	_	164,68 168,05 171,54 175,19	261,44 264,92	6,57 6,61 6,62 6,64	38,74 38,25 37,75 37,24	,3865 ,3816 ,3767 ,3716
96 100 + 95 94 93	,93081	 —	85,77 86,67 87,60 88,54 89,50	180,64 181,51 182,40 183,32 184,25	5,13 5,16 5,20 5,22	55,35 55,09 54,82 54,55 54,27	,5523 ,5497 ,5469 ,5442	46 100 + 45 44 43	,95929 ,95994 ,96059 ,96124		179,00 182,98 187,14 191,49 196,15	276,29 280,42	6,67 6,69 6,72 6,73 6,74	36,72 36,19 35,66 35,11 34,56	,3664 ,3611 ,3558 ,3504 ,3449
91 100 + 90 89 88	,93277 ,93327 ,93378 ,93430		90,48 91,49 92,51 93,56	185,21 186,19 187,19 188,20	5,25 5,27 5,30 5,32 5,36	53,99 53,71 53,42 53,13	,5414 ,5386 ,5358 ,5331 ,5302	42 41 100 + 40 39 38	,96253 ,96318 ,96384		200,83 205,85 211,13 216,69	294,08 299,10 304,37	6,75 6,75 6,76 6,77	34,00 33,43 32,86 32,27	,3393 ,3336 ,3278 ,3219
86 100 + 85	,93534 ,93587 ,93641		94,64 95,75 96,87 98,03 99,21	189,25 190,32 191,42 192,54	5,39 5,43 5,45 5,49	52,84 52,54 52,24 51,94	,5273 ,5243 ,5212 ,5182	37 36 100 + 35 34	,96514 ,96581 ,96646 ,96713		222,54 228,73 235,26 242,18	315,77 321,95 328,49 335,42	6,77 6,78 6,77 6,76 6,72	31,67 31,06 30,44 29,81	,3160 ,3099 ,3037 ,2975
82 81 100 + 80 79	,93750 ,93806 ,93861		100,41 101,65 102,92 104,23	193,69 194,87 196,07 197,31 198,58	5,52 5,54 5,58 5,61 5,65	51,63 51,32 51,00 50,68 50,36	,5152 ,5121 ,5089 ,5056 ,5024	100 + 30	,96847 ,96914	_	249,52 257,32 265,61 274,47 283,93	350,61 358,92 367,78	6,71 6,69 6,69 6,67	29,17 28,52 27,86 27,19 26,51	,2911 ,2846 ,2780 ,2713
78 77	,93972		105,56 106,93 108,34 109,78	199,88 201,23 202,60 204,01	5,68 5,70 5,74 5,77	50,03 49,69 49,35 49,01	,4992 ,4958 ,4925	28 27 26 100 + 25	,97119 ,97189 ,97258		294,08 304,97 316,70 329,36	387,42 398,36 410,12 422,84	6,66 6,61 6,58 6,52	25,81 25,11 24,39 23,65	,2575 ,2505 ,243 ,2360
74 73 72 71	,94196 ,94252 ,94310 ,94368	_	111,26 112,78 114,35 115,96	205,47 206,95 208,50 210,08	5,79 5,83 5,85 5,88	48,67 48,32 47,96 47,61	,4856 ,4821 ,4785 ,4750	24 23 22	,97402 ,97475		343,09 358,01 374,28 392,10	436,61 451,59 467,90	6,48 6,42 6,38 6,31	22,90 21,14 21,37 20,58	,2286 ,2216 ,2132 ,2052
100 + 70 69 68 67 66	,94545 ,94605	_	117,62 119,32 121,08 122,89 124,76	211,70 213,36 215,08 216,86 218,69	5,92 5,96 6,00 6,03 6,07	47,24 46,87 46,49 46,11	,4713 ,4676 ,4639 ,4601	19 18 17	,97706 ,97784 ,97864 ,97947	_	411,71 433,37 457,45 484,37	505,45 527,20 551,36 578,35 608,72	6,26 6,17 6,09 6,02	19,78 18,97 18,14 17,29	,1974 ,1892 ,1800
100 + 65 64 63 62	,94725 ,94788 ,94850 ,94912	_	126,68 128,65 130,69 132,80	220,57 222,51 224,52 226,61	6,11 6,14 6,17 6,19	45,73 45,34 44,94 44,54 44,13	,4562 ,4523 ,4484 ,4444 ,4403	100 + 15 14 13	-	_	514,64 548,95 588,16 633,40 686,18		5,70 5,60	16,43 15,55 14,65 13,74 12,81	,1639 ,1551 ,1462 ,1371
100 + 60 59 58	,94974 ,95037 ,95099 ,95162 ,95226	_	134,98 137,23 139,55 141,95 144,45	228,74 230,96 233,25 235,62 238,08	6,24 6,27 6,30 6,33 6,37	43,72 43,30 42,87 42,44 42,00	,4362	1100 + 10	,98502	=	748,56 823,42 914,91 1029,28 1176,32	843,22 918,19 1009,83 1124,34	5,34 5,23 5,08 4,94	11,86 10,89 9,90 8,89 7,86	,1183 ,1087 ,0988
56 100 + 55 54	,95290	_	147,04 149,71 152,45 155,33	240,62 243,27 246,00 248,85	6,42 6,44 6,45 6,48	41,56 41,10 40,65 40,18	,4146 ,4101 ,4055 ,4010	6 100 + 5 4	,99074 ,99204	=	1372,37 1646,84 2058,55 2744,72	1271,52 1467,73 1742,37 2154,24 2840,58	4,64 4,47 4,31	5,74 4,64 3,52	,068c ,0573 ,0463
52	,95542	-	158,32	251,82	6,50 6,54	39,71 39,23	,3963	2	/ /		4117,09		4,00	2,37	,0237

TABLE I.

HEAT 65°.

			·					1		1 1			1		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
Sp. + W.								Sp. + W.		***************************************		-			
100 + 0 1 2 3 4	,82493 ,82719 ,82939	_	0,82 1,65 2,47 3,29	100,00 100,72 101,44 102,16 102,89	0,10 0,21 0,31 0,40	100,00 99,29 98,58 97,88 97,19	,9971 ,9900 ,9830 ,9760 ,9691	53	,89570 ,89659	_	41,15 41,97 42,80 43,62 44,44	137,90 138,68 139,46 140,24 141,02	3,25 3,29 3,34 3,38 3,42	72,52 72,11 71,70 71,30 70,91	,7231 ,7190 ,7150 ,7110 ,7071
100 + 5 6 7 8	,83566 ,83765 ,83960 ,84150		4,11 4,94 5,76 6,58 7,41	103,62 104,35 105,08 105,82 106,56	0,49 0,59 0,68 0,76 0,85	96,51 95,84 95,17 94,50 93,85	,9623 ,9556 ,9489 ,9423 ,9358	57 58 59	,90004 ,90087 ,90168 ,90248		45,27 46,09 46,91 47,74 48,56	141,80 142,58 143,36 144,15 144,93	3,47 3,51 3,55 3,59 3,63	70,52 70,13 69,75 69,37 69,00	,7032 ,6993 ,6955 ,6917 ,6880
100 + 10 11 12 13	,84513 ,84689 ,84861 ,85029	_ _ _	8,23 9,05 9,88 10,70 11,52	107,30 108,04 108,79 109,54	0,93 1,01 1,09 1,16 1,23	93,20 92,56 91,92 91,29 90,67	,9293 ,9229 ,9166 ,9103 ,9041	62 63 64	,90406 ,90483 ,90558 ,90633	_	49,38 50,20 51,03 51,85 52,67	145,71 146,50 147,28 148,07 148,85	3,67 3,70 3,75 3,78 3,82	68,63 68,26 67,90 67,54 67,18	,6843 ,6806 ,6770 ,6734 ,6698
100 + 15 16 17 18	,85355 ,85515 ,85672	<u>-</u>	12,34 13,17 13,99 14,81 15,64	111,04 111,79 112,55 113,30 114,06	1,30 1,38 1,44 1,51 1,58	90,05 89,45 88,85 88,26 87,67	,8919 ,8859 ,8800 ,8742	100 + 65 66 67 68 69	,90781 ,90853 ,90925		53,50 54,32 55,14 55,97 56,79	149,64 150,42 151,21 151,99 152,78	3,86 3,90 3,93 3,98 4,01	66,83 66,48 66,13 65,79 65,45	,6663 ,6628 ,6594 ,6560 ,6526
100 + 20 21 22 23 24	,86123 ,86268 ,86410		16,46 17,28 18,10 18,93 19,75	114,82 115,57 116,33 117,09 117,86	1,64 1,71 1,77 1,84 1,89	87,09 86,52 85,96 85,40 84,85	,8684 ,8627 ,8571 ,8515 ,8460	100 + 70 71 72 73 74	,91135 ,91202	_	57,61 58,43 59,26 60,08 60,90	153,56 154,35 155,14 155,93 156,72	4,05 4,08 4,12 4,15 4,18	65,12 64,79 64,46 64,13 63,81	,6493 ,6460 ,6427 ,6305 ,6363
100 + 25 26 27 28 29	,86821 ,86953 ,87083	 - -	20,58 21,40 22,22 23,05 23,87	118,62 119,38 120,15 120,91 121,68	1,96 2,02 2,07 2,14 2,19	84,30 83,76 83,23 82,70 82,18	,8406 ,8352 ,8299 ,8246 ,8194	77 78	,91465	_	61,73 62,55 63,37 64,20 65,02	157,50 158,29 159,08 159,87 160,66	4,23 4,26 4,29 4,33 4,36	63,49 63,17 62,86 62,55 62,24	,6331 ,6299 ,6268 ,6237 ,6206
100 + 30 31 32 33 34	,87461 ,87583 ,87704	=	24,69 25,51 26,34 27,16 27,98	122,45 123,21 123,98 124,75 125,52	2,24 2,30 2,36 2,41 2,46	81,67 81,16 80,66 80,16 79,67	,8143 ,8092 ,8042 ,7993	- 81	1	_	65,84 66,66 67,49 68,31 69,13	161,45 162,24 163,03 163,82 164,61	4,39 4,42 4,46 4,49 4,52	61,94 61,64 61,34 61,04 60,75	,6176 ,6146 ,6116 ,6086 ,6057
100 + 35 36 37 38	,87938	_	28,81 29,63 30,45 31,27 32,10	126,29 127,06 127,83 128,60 129,37	2,52 2,57 2,62 2,67 2,73	79,18 78,70 78,23 77,76 77,30	,7896 ,7848 ,7800	87 88	,92010 ,92066 ,92121 ,92176		69,96 70,78 71,61 72,43 73,25	165,40 166,19 166,99 167,78 168,58	4,56 4,59 4,62 4,65 4,67	59,89	,6028 ,5999 ,5971 ,5943 ,5915
100 + 40 41 42 43			32,92 33,74 34,57 35,39 36,21	130,15 130,92 131,69 132,46 133,24	2,77 2,82 2,88 2,93 2,97	76,84 76,38 75,93 75,49 75,05		100 + 90 91 92 93 94	,92337 ,92390 ,92442 ,92494	- -	74,07 74,90 75,72 76,54 77,36	169,37 170,16 170,95 171,75 172,54	4,70 4,74 4,77 4,79 4,82	59,04 58,77 58,50 58,23 57,96	,5987 ,5860 ,5833 ,5806 ,5779
100 + 45 46 47 48	,89006 ,89104 ,8920	-	37,04 37,86 38,68 39,50 40,33	134,01 134,79 135,57 136,34	3,03 3,07 3,11 3,16 3,21	74,62 74,19 73,76 73,34 72,93	,7313	96 97 98	,92546 ,92596 ,92646 ,92696	=	78,18 79,00 79,82 80,64 81,47	173,33 174,11 174,90 175,70 176,50	4,85 4,89 4,92 4,94 4,97		,5753 ,5727 ,5701 ,5675 ,5649

HEAT 65°.

ſ.	ı		1				1	1	1	1					
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v. ,	VI.	VII.	VIII.
Water and	Specific		Water	Bulk of	Diminu-	Quan-	Decimal		Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal multi-
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	pliers.
		sure.				per cent.	•	Ů		sure.			bulk.	per cent.	
$\overline{W_{\cdot} + Sp_{\cdot}}$								W. + Sp.							
			0								-6.6-	258 05	6 = 6	-0	,3864
100 + 100	1 .	100	82,30	177,30 178,11	5,00 5,01	56.40 56,14	,5624 ,5599	100 + 50	,95035	100	164,61 167,97		6,56	38,75 38,26	,3815
99			83,98	178,93	5,05	55,89	,5574	48	,95765		171,46	264,86	6,60	37,76	,3765
97	1	•	84,84	179,77	5,07	55.63	,5547	47	,95830	l — !	175,11	268,49	6,62	37,25	,3714
	,92991	-	85,72	180,62	5,10	55,36	,5521		,95896		178,92	272,27	6,65	36,73	,3662
100 + 95	1 00		86,63 87,56	181,49 182,38	5,14	55,10	,5494 ,5467	100 + 45			182,90 187,05	276,22 280,35	6,68 6,70	36,20 35,67	,3610
94 93	1		88,50	183,29	5,21	54,56	,5440	44 43	1		191,40	284,69	6,71	35,12	,3502
92	1		89,46	184,23	5,23	54,28	,5412	42	,96157		195,96	289,24	6,72	34,57	,3447
91			90,44	185,19	5,25	54,00	,5384	41		. 1	200,74	294,01	5,73	34.01	,3392
100 + 90		·	91,45	186,16	5,29	53,72	,5356	100 + 40			205,76	299,02 304,29	6,74	33,44	,3335
89	1 - 0 0 0		92,47 93,52	188,18	5,31	53,43	,5328	39 38			211,03	304,29	6,76	32,28	3218
87			94,60	189,23	5,37	52,84	,5270	37	1 ' ' ' ^ '		222,44	315,68	6,76	31,68	,3159
	,93493		95,70	190,30	5,40	52,55	,5240	36	,96553		228,62	321,85	6,77	31,07	,3098
	,93546		96,83	191,39	5,44	52.25	,5210	100 + 35			235,15	328,39	6,76	30,45	,3036
84			97,98 99,16	192,51	5,47	51,63	,5180	34			242,07 249,40	335,32	6,75	29,82 29,18	,2974
82		1	100,37	194,84	5,53	51,32	,5118	33	1 / / / -		257,20	350,51	6,69	28,53	,2845
81	,93766		101,61	196,04	5,57	51,01	,5086	31	1		265.49	358,81	6,68	27,87	,2779
100 + 80			102,88	197,28	5,60	50,00	,5054	100 + 30			274,34	367,65	6,69	27,20	,2712
79		1	104,18	198,55	5,63	50,37	,5022	29			283,80	377,13 387,28	6,66	26,52 25,82	,2644
78	0		105,51	199,85	5,65	50,04 49,70	,4989 ,4956	28 27	1		293,94 304,83	398,22	6,61	25,02	,2504
	,94043		108,29	202.57	5,72	49,36	,4922	26			316,55	409,97	6,58	24,39	,2432
100 + 75	,94099		109,73	203,98	5,75	49,02	,4888	100 + 25			329,21	422,68	6,53	23,66	,2359
1	,94156	1	111,21	205,43	5,78	48,68	,4854	24			342,93	430,45	6,48	22,91	,2285
73			112,73	206,92 208,46	5,81	48,33	,4819	23			357,84 374,10	451,41	6,43	22,15	,2209
71	1	1	115,91	210,04	5,87	47,61	,4747	21			391,92	485,60	6,32	20,59	,2053
100 + 70	_	-	117,57	211,66	5,91	47,25	,4711	100 + 20	,97688	_	411,52	505,25	6,27	19,79	,1973
69	7 1 1 1 7		119,27	213,32	5,95	46,88	,4674	19	,97767	 —	433,17	526,99	6,17	18,97	,1892
68	1/2/12/27		121,02	215,04	5,98	46,50	,4637	18	, , ,		457,24	551,13	6,03	18,14	,1809
66			124,70	218,65	6,05	45,74	,4599 .4560	17			514,40	608,46	5,94	16,44	,1639
100 + 65	_		126,62	220,53	6,09	45,35	,4521	100 + 15			548,69	642,85	5,84	15,56	,1551
64	,94751	-	128,59	222,47	6,12	44,95	,4482	14	,98196	—	587,88	682,16	5,72	14,66	,1462
	,94813	3 -	130,63		6,15	44,55	,4442		,98290		633,10	727,48	5,62	13,75	,1371
	94875 94937		I 32,74 I 34,92	226,56	6,18	44,14	,4401 ,4360		,98388 98489		685,86	780,36 842,84	5,27	12,81	
100 + 60			137,17	230,91	6,26	43,31		100 + 10	-		823,03	917,77	-	10,89	,1086
59	,95063		139.49	233,20	6,29	42,88	,4276	9	,98703		914,48	1009,37	5,11	9,91	,0988
58	95126	-	141,89	235,57	6,32	42,45	,4233	8	,98818		1028,79	1123,82	4,97	8,90	,0887
	95190		144,38	238,03	6,35	42,01	,4189	7	,98939		1175,76	1270,93		7,87 6,82	,0785
	95254		146,97	240,58	6,39	41,57	,4145		1-22	-	1371,72	1467,04	•		
100 + 55	,95381		149,64	243,22	6,42	40,66	,4054	100 + 5	1		2057,58	1741,54		5,74 4,64	,057 2 ,0463
	95444		155,25	248,80	6,45	40,19	,4008	3	99475		2743,44	2839,24	4,20	3,52	,0351
52	,95507	-	158,24	251,77	6,47	39,72	,3961	2	,99626		4115,15	4211,11	4,04	2,37	
51	11,95571	1 -	161,36	254,85	6,51	1 39,24	,3913	[] 1	1,99784		8230,31	8326,40	13,91	1,20	,0120

HEAT 66°.

T .	, _T							i _				**		7757	
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and Water by		Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	,	mea-	measure.		bulk.	Spirit	pliers.	weight.	8	mea-	measure.		on of	Spirit	pliers.
		sure.				per cent.				sure.			buik.	per cent.	
3p. + W.								Sp. + W.							
100 + 0	,82214	100		100,00	-	100,00	,9965	100 + 50	,89433	100	41,13	137,89	3,24	72,52	,7227
1	,82446		0,82	100,72	0,10	99,29	,9895	51	,89525	_	41,95	138,67	3,28	72,12	,7187
2	1 - 1		1,65	101,44	0,21	98,58	,9825	52	0,	_	42,78	139,45	3,33	71,71	7147
3	,82892 ,83107		2,47 3,29	102,16 102,89	0,31	97,88 97,19	,9755 ,9686	53 54			43,60 44,42	140,22	3,38	71,31	,7107 ,7068
100 + 5	,83315		4,11	103,62	0,49	96,51	,9618	100 + 55			45,24	141,78	3,46	70,53	,7028
6	,83519		4,94	104,35	0,59	95,84	,9551	56	,89959	-	46,06	142,56	3,50	70,14	,6990
7		_	5,76	105,08	0,68	95,17	,9484	57			46,88	143,35	3,53	69,76	,6952
8	17,33		6,58	105,8 2 106,56	0,76	94,50	,9418	5.8		ì	47,71 48,53	144,13 144,91	3,58	69,38	,6914
100 + 10			7,41 8,23	107,30	0,93	93,85	,9353	59 100 + 60			49,35	145,70	3,65	68,64	,6840
11			9,05	108,04	1,01	92,56	,9200	61			50,17	146,48	3,69	68,27	,6803
12	,84641	 —	9,87	108,79	1,08	91,92	,9160	62	,90439		51,00	147,26	3,74	67,90	,6767
13		—	10,69	109,54	1,15	91,29	,9098	63			51,82	148,05	3,77	67,54	,6731
14	1		11,51	110,29	1,22	90,67	,9036	64		-	52,64	148,83	3,81	66,84	,6695
100 + 15	1		12,34	111,04	1,30	90,05 89,45	,8975 ,8914	100 + 65	,90663 ,90737		53,47 54,29	149,62 150,40	3,89	66,49	,6625
17			13,98	112,55	1,43	88,85	,8854	67			55,11	151,19	3,92	66,14	,6591
. 18			14,80	113,30	1,50	88,26	,8795	68	,90881	-	55,94	151,97	3,97	65,79	,6557
. 19	1		15,63	114,06	1,57	87,67	,8737		,90952		56,76	152,76	4,00	65,46	,6523
100 + 20			16,45	114,82	1,63	87,09	,8679	100 + 70	,91023		57,58	153,55	4,03	65,13 64,80	,6490
21	111		17,27	115,57	1,70	86,52 85,96	,8622	71 72	1		58,40 59,23	154,33	4,07 4,11	64,46	,6457
23			18,92	117,09	1,83	85,40	,8511	73			60,05	155,91	4,14	64,13	,6392
2.4	,86502		19,74	117,85	1,89	84,85	,8456	74	1		60,87	156,70	4,17	63,82	
100 + 25	,86639	_	20,57	118,62	1,95	84,30	,8401	100 + 75			61,70	157,48	4,22	63,50	,6328
26			21,39	119,38	2,01	83,76	,8348	76	1		62,52 63,34	158,27	4,25	$\begin{vmatrix} 63,18 \\ 62,87 \end{vmatrix}$	
27 28	/ /		22,21	120,14	2,07	83,23	,8295 ,8242	77			64,16	159,85	4,31	62,56	
29			23,86	121,68	2,18	82,18	,8190	79			64,99	160,64	4,35	62,25	,6203
100 + 30		-	24,68	122,44	2,24	81,67	,8139	100 + 80			65,81	161,43	4,38	61,95	,6173
31		-	25,50	123,20	2,30	81,17	,8088	81	1 / / /		66,63	162,22	4,41	61,64	
32			26,33	123,97	2,36	80,66 80,16	,8038 ,7989	82	,91791 ,91851		67,45 68,27	163,01	4,44 4,47	61,34	
33	10'-		27,15	124,74	2,41 2,45	79,67	,7940	82			69,09	164,59	4,50	60,76	
100 + 35	-		28,80	126,28	2,52	79,18	,78gI	100 + 80	,9196		69,92	165,39	4,53	60,46	,6026
36	,88006		29,61	127,05	2,56	78,70	,7844	86	,92023	-	70,74	166,18	4,56	60,18	,5997
37	,88117	 	30,44	127,82	2,62	78,23	,7796	87	,92078	3	71,57	166,97 167,76	4,60	59,89 59,61	
38	,88227 ,88336		31,26	128,59	2,67 2,72	77,76 77,30			,92133		72,39 73,21	168,56	4,65	59,33	1 .
100 + 40			32,90	129,36	2,76	76,84		100 + 90		-	74,03	169,35	4,68		
41			33,72	130,14	2,81	76,38	,7612	9	,9229		74,86	170,14	4,72	58,77	,5858
42	,88654	-	34,55	131,68	2,87	75,93	,7568	9:	92347	/ —	75,68	170,93	4,75	58,50	
43	1 0000		35,37	132,45	2,92	75,50	77524		92400		76,50	171,72	4,78		
44	-		36,19	133,23	2,96	75,06			,92452	-	77,32	173,31	4,83		
100 + 45	,88959 ,89058		37,02 37,84	134,00	3,02	74,62 74,19		100 + 99	$\frac{5}{5},92502$		78,96	174,09	4,87		1
	,89154		38,66	135,56	3,10	73,77	,7352		,92602	-	79,78	174,88	4,90	57,18	
4.8	,89249	-	39,48	136,33	3,15	73,35	,7310	98	,92652	H —	80,60	175,67	4,93	56,92	
	89342		40,31	137,11	3,20	72,93	,7268	99	92703, ار	1) —	81,43	176,47	14,96	50,00	,5647

HEAT 66°.

Ι.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Water and Spirit by weight.	Specific gravity.		Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture,	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decima multi- pliers
W. + Sp.								W. + Sp.				THE REAL PROPERTY AND THE			
100 + 100 99 98 97 96	,92801 ,92851 ,92900	_	82,26 83,09 83,94 84,80 85,68	177,27 178,08 178,90 179,74 '180,59	4,99 5,01 5,04 5,06	56,41 56,15 55,89 55,63	,5596 ,5571 ,5544	48 47	,95667 ,95732 ,95798		164,53 167,89 171,38 175,02	261,31 264,79 268,42	6,54 6,58 6,59 6,60 6,63	38,76 38,27 37,77 37,26	,3863 ,3814 ,3764 ,3713 ,3661
100 + 95 94 93	,92998 ,93046 ,93095 ,93144		86,59 87,51 88,45 89,41 90,39	181,46 182,35 183,26 184,20 185,16	5,09 5,13 5,16 5,19 5,21	55,37 55,11 54,83 54,56 54,28	,5518 ,5492 ,5465 ,5438 ,5410	100 + 45 44 43 42	,96061 ,96127		178,83 182,81 186,96 191,31 195,86	276,16 280,28 284,61 289,16	6,65 6,68 6,70 6,70	36,73 36,21 35,67 35,13 34,58	,3609 ,3556 ,3501 ,3446
100 + 90 89 88	,93242 ,93295 ,93347 ,93399		91,40 92,42 93,47 94,55	186,13 187,13 188,16 189,20	5,23 5,27 5,29 5,31 5,35	54,00 53,72 53,43 53,14 52,85	,5382 ,5354 ,5326 ,5297 ,5268	100 + 40 39 38 37	,96325 ,96392 ,96459		200,64 205,66 210,93 216,48 222,33	298,94 304,20 309,74 315,59	6,71 6,72 6,73 6,74 6,74	34,02 33,45 32,87 32,28 31,68	,3391 ,3334 ,3276 ,3217 ,3158
100 + 85 84 83 82	12313		95,65 96,78 97,93 99,11 100,32 101,56	190,27 191,36 192,49 193,64 194,82 196,02	5,38 5,42 5,44 5,47 5,50	52,56 52,25 51,95 51,64 51,33	,5238 ,5207 ,5178 ,5147 ,5116 ,5084	100 + 35 34 33 32	,96728 ,96797		228,51 235,04 241,95 249,28 257,07 265,36	335,21 342,59	6,75 6,74 6,69 6,67	31,07 30,46 29,83 29,19 28,54 27,88	,3097 ,3035 ,2973 ,2909 ,2844
100 + 80 79 78	,93781 ,93836 ,93892 ,93947		102,83 104,13 105,46 106,83 108,24	197,25 198,52 199,82 201,16	5,54 5,58 5,61 5,64 5,67	51,02 50,70 50,37 50,04 49,71	,5052 ,5020 ,4987 ,4954		,96935 ,97004 ,97074 ,97145		274,21 283,66 293,80 304,68	367,53 377,00 387,15 398,09	6,68 6,66 6,65 6,59	27,21 26,52 25,83 25,12	,2778 ,2711 ,2643 ,2574 ,2504
74 73 72	,94058 ,94116 ,94174 ,94232		109,68 111,15 112,67 114,24	202,54 203,95 205,40 206,88 208,43	5,70 5,73 5,75 5,79 5,81	49,37 49,03 48,69 48,34 47,98	,4920 ,4886 ,4852 ,4817 ,4782	100 + 25 24 23 22	,97362 ,97436 ,97513		316,40 329,05 342,76 357,67 373,92	422,52 436,28 451,24 467,54	6,43 6,38	24,40 23,67 22,92 22,16 21,39	,2432 ,2359 ,2285 ,2209 ,2132
100 + 70 69 68 67	,94409 ,94469		115,85 117,51 119,21 120,96 122,77	210,00 211,62 213,28 215,00 216,78	5,85 5,89 5,93 5,96 5,99	47,62 47,26 46,89 46,51 46,13	,4746 ,4709 ,4672 ,4635 ,4597	100 + 20 19 18 17	,97750 ,97831 ,97916	_	391,73 411,32 432,96 457,02 483,91	505,05 526,78 550,90 577,87	6,32 6,27 6,18 6,12 6,04	20,60 19,80 18,98 18,15 17,31	,2053 ,1973 ,1892 ,1809
100 + 65 64 63 62	,94714 ,94776 ,94838		124,64 126,56 128,53 130,56 132,67	218,61 220,49 222,43 224,44 226,51	6,03 6,07 6,10 6,12 6,16	45,75 45,35 44,95 44,56 44,15	,4480 ,4441 ,4400	13 12	,98091 ,98181 ,98276 ,98374		514,15 548,43 587,60 632,80 685,53	608,20 642,57 681,86 727,16 780,01	5,86 5,74 5,64 5,52	14,67 13,75 12,82	,1639 ,1551 ,1462 ,1371 ,1278
100 + 60 59 58 57	,94900 ,94963 ,95026 ,95090 ,95154 ,95218		134,85 137,10 139,42 141,82 144,31 146,90	228,65 230,86 233,16 235,53 237,98	6,24 6,26 6,29 6,33 6,27	43,74 43,32 42,89 42,46 42,01	,4359 ,4317 ,4275 ,4232 ,4188	100 + 10 9 8 7	,98690 ,98806 ,98927		747,85. 822,64 914,05 1028,30 1175,20	842,46 917,36 1008,91 1123,31 1270,35	5,28 5,14 4,99 4,85	11,87 10,90 9,91 8,90 7,87	,1183 ,1086 ,0988 ,0887 ,0784
100 + 55 54 53 52	,95283 ,95346 ,95410 ,95473		149,57 152,30 155,17 158,16	240,53 243,17 245,89 248,74 251,72 254,79	6,37 6,40 6,41 6,43 6,44 6,49	41,57 41,12 40,67 40,20 39,73 39,24		4 3 2	,99051 ,99182 ,99320 ,99464 ,99615		1371,07 1645,28 2056,61 2742,15 4113,21 8226,42		4,55 4,40 4,24 4,08	5,74 4,65 3,52 2,38 1,20	,0680 ,0572 ,0463 ,0351 ,0237

MDCCXCIV.

HEAT 67°.

	1	,	· · · · · · · · · · · · · · · · · · ·										-		the same of the sa
I.	II.	Ш.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	٧Į.	VII.	VIII.
Spirit and S	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water by	Bulk of	Dimi-	Quan-	Decimal
water by	gravity.	by	by	mixture.	tion of	tity of	multi-	water by	gravity.	by	measure.	mixture.	nuti-	tity of	multi-
weight.			measure		bulk.	spirit	pliers.	weight.		mea-			on of		pliers.
		sure.				per cent.				sure.			bulk.	per cent.	
$\mathrm{Sp.}+\mathrm{W.}$				-				Sp. + W.							
100 + 0	,82167	100		100,00		100,00	,9959	100 + 50	,80387	100	41,11	137,88	3,23	72,53	,7223
	,82399		0,82	100,72	0,10	99,29	,9889		89480		41,93	138,66	3,27	72,12	7183
	,82625		1,65	101,44	0,21	98,58	,9819	52			42,76	139,44	3,32	71,71	,7143
3 :	,82845		2,47	102,16	0,31	97,88	39750	53	2		43,58	140,21	3,37	71,31	,7103
4 :	,83059	-	3,29	102,89	0,40	97,20	,9681	54		_	44,40	140,99	3,41	70,92	,7064
	,83268	_	4,11	103,62	0,49	96,51	,9612	100 + 55	,89830		45,22	141,77	3,45	70,53	,7025
6,	,834.71	_	4,94	104,35	0,59	95,84	,9546	56			46,04	142,55	3.49	70,14	,6987
	,83669	_	5,76	105,08	0,68	95,17	,9479	57	,89997	· . —	46,86	143,34	3,52	69,76	,6949
	,83864	_	6,58	105,82	0,76	94,50	,9413	58	,90079		47,69	144,12	3,57	69,38	,6911
9	,84054		7,40	106,56	0,84	93,85	•9347	59	,90160		48,51	144,90	3,61	69,01	, 6874
100 + 10	,84237		8,22	107,30	0,92	93,20	,9282	100 + 60			49,33	145,68	3,65	68,64	,6836
11	,84417	-	9,04	108,04	1,00	92,56	,9219	61	,90317	-	50,15	146,47	3,68	68,27	,6800
12,	,84593		9,87	108,79	1,08	91,92	,9155	62			50,98	147,25	3,73	67,91	,6763
13,	,84765		10,69	109,54	1,15	91,29	,9093	63			51,80	148,04	3,76	67,55	,6727
	,84932		11,50	110,29	1,21	`90,67	,9031	, 64			52,62	148,82	3,80		,6692
100 + 15	,85096		12,33	111,04	1,29	90,06	,8970	100 + 65	,90619		53,45	149,61	3,84	66,84	,0657
16,	,85259		13,16	111,79	1,37	89,45	,8909	66	1-0 10		54,27	150,39	3,88	66,49	,6622
17	,85419		13,98	112,55	1,43	88,85	,8849	67	.,, ,		55,09	151,18	3,91	66,14	,6588
	,85576	,	14,80	113,30	1,50	88,26	,8790	- 68	1.7 31		55,91	151,96	3,95	65,80	,6554
	,85730		15,62	114,05	1,57	87,67	,8732	69			56,73	152,75	3,98	65,46	,6520
100 + 20,		-	16,44	114,81	1,63	87,10	,8674	100 + 70		1	57,55	153,53	4,02	65,13	,6487
	,86028	-	17,26	115,57	1,69	86,53	,8617	71			58,37	154,31	4,06		,6454
	,86174		18,09	116,32	1,77	85,96	,8562	72		-	59,20	155,11	4,09	64,47	,6421
	86316		18,91	117,08	1,83	85,40	,8506	73			60,02 60,84	155,90	4,12	63,82	,6389
	,86455		19,73	117,85	1,88	84,85	,8451	74				156,69	4,15		,6357
100 + 25	,86592		20,56	118,61	1,95	84,30	,8397	100 + 75	,91312		61,67	157,47	4,20		,6325
	,86727	_	21,38	119,37	2,01	83,77	,8343	76			62,49	158,26	4,23	62,87	,6293
	,86860 ,869 91		22,20	120,14	2,06	83,24	,8290	77	,91440		63,31 64,13	159,05	4,26	62,56	,6231
	,87119	- /	23,03	120,90	2,13	82,71 82,19	,8238 ,8186	78			64,96	160,63	4,33	62,25	,6200
				121,67	2,18			79				161,42	-	61,95	,6170
	,87 2 45	_	24,67	122,44	2,23	81,68 81,17	,8135 ,8083	100 + 80			65,78 66,60	162,21	4,30	61,65	,6140
	,87369 ,87490		25,49 26,31	123,20	2,29	80,67	,8033	82			67,42	162,99	4,43	61,35	,6110
	,87612	_	27,14	123,97 124,74	2,34 2,40	80,17	,7985	83		_	68,24	163,78	4,46	61,06	,6080
	,87729	_	27,96	125,51	2,45	79,68	,7936	84	,91866		69,06	164.58	4,48	60,76	,6051
100 + 35			28,78	126,27	2,51	79,19		100 + 85			69.89	165,37	4,52	60,47	,6023
26	,87959		29,59	120,27	2,55	78,71	,7840		,91924		70,71	166,16	4,55	60,18	5994
37	,88070	_	30,42	127,82	2,60	78,24	,7792		,92035		71,53	166,95	4,58		,5966
38,	,88180		31,24	128,59	2,65	77,77	77745		,92090	_	72,36	167.74	4,62	59,62	,5938
	,88289		32,07	129,36	2,71 .	77,31	,7699	89	,92144		73,18	168.54	4,64		,5910
	,88395		32,89	130,13	2,76	76,84		100 + 90			74,00	169,33	4,67	59,06	,5982
41,	,88502		33,71	130,90	2,81	76,39	,7608		,92252		74,83	170,12	4,71	58,78	,5855
42	,88607	_	34,54	131,67	2,87	75,94	,7564	92	,92304		75,65	170,91	4,74	58,51	,5828
43,	,88711	-	35,36	132,45	2,91	75,50	,7520	93	,92358	-	76,47	171,70	4,77	58,24	,5801
44	.88813		36.18	133,22	2,96	75,06	,7476		,92410		77,29	172,50	4,79	57,97	•5774
100 + 45	,88912		37:00	133,99	3,01	74.63	,7433	100 + 95	,92462	_	78,10	173,29	4,81	57,71	,5747
46	89012		37,82	134:77	3,05	74,20	,7390	96	,92512		78,92	1.74,07	4,85	57,45	,5722
47	891cE		38,64	135,55	3,09	73,77	,7348	97	,92562	_	79,74	174,86	4,88	57,19	,5696
	89203		39,46	136,32	3,14	73,35	,7306	98	,92611 ,92660		80,56 81,39	175,65	4.91		,5670
401						72,94						176,45	14,94	1 56,67	,5644

HEAT 67°.

	,		_	The same of the sa									,		,
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	п.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decima multi- pliers.
W. + Sp.								$\overline{W. + Sp.}$					·		
100 + 100 99 98 97 96	,92758 ,92808 ,92857	_	82,22 83,05 83,90 84,77 85,64	177,25 178,06 178,88 179,72 180,57	4,97 4,99 5,02 5,05 5,07	56,42 56,16 55,90 55,64 55,38	,5619 ,5594 ,5568 ,5542 ,5516	100 + 50 49 48 47 46	,95634 ,95699 ,95765	_	164,45 167,81 171,30 174,94 178,74	261,25 264,72	6,58 6,59	38,77 38,28 37,77 37,26 36,74	,3861 ,3812 ,3762 ,3711 ,3660
95 94 93 92 91	,92956 ,93004 ,93053 ,93102 ,93152		86,55 87,47 88,41 89,37 90,35	181,44 182,33 183,24 184,18 185,14	5,11 5,14 5,17 5,19 5,21	55,12 54,84 54,57 54,29 54,01	,5489 ,5462 ,5435 ,5407 ,5379	100 + 45 44 43 42 41	,95898 ,95964 ,96031 ,96097		182,72 186,87 191,22 195,77 200,55	276,09 280,21 284,54 289,09 293,85	6,63 6,66 6,68 6,68	36,22 35,68 35,14 34,59 34,03	,3608 ,3555 ,3500 ,3445 ,3390
100 + 90 89 88 87	,93200		91,36 92,38 93,43 94,51 95,61	186,10 187,11 188,13 189,18	5,26 5,27 5,30 5,33 5,36	53,73 53,44 53,15 52,86 52,56	,5351 ,5323 ,5294 ,5265 ,5235	100 + 40 39 38 37	,96230 ,96297 ,96364	_	205,56 210,83 216,38 222,23 228,40	298,85 304,11 309,65 315,50	6,71 6,72 6,73 6,73 6,73	33,46 32,88 32,29 31,69 31,08	,3333 ,3275 ,3216 ,3157 ,3096
100 + 85 84 83 82 81	,93463 ,93517 ,93572 ,93627 ,93683	-	96,74 97,89 99,06 100,27 101,51	191,34 192,46 193,61 194,79 195,99	5,40 5,43 5,45 5,48 5,52	52,26 51,96 51,65 51,34 51,02	,5205 ,5175 ,5144 ,5113 ,5082	30 100 + 35 34 33 32 31	,96566 ,96634 ,96702 ,96771		234,93 241,84 249,16 256,95 265,23	328,19 335,11 342,48	6,74 6,73 6,68 6,67	30,47 29,84 29,20 28,55 27,89	,3035 ,2972 ,2908 ,2843
79 78 77	,93740 ,93795 ,93851 ,93906 ,93962	_	102,78 104,08 105,41 106,78 108,19	197,22 198,49 199,79 201,13 202,51	5,56 5,59 5,62 5,65 5,68	50,70 50,38 50,05 49,72 49,38	,5050 ,5018 ,4985 ,4952 ,4918	100 + 30 29 28 27	,96911 ,96980		274,08 283,53 293,66 304,54 316,25		6,67 6,66 6,63 6,58	27,22 26,53 25,84 25,13 24,41	,2711 ,2643 ,2573 ,2503 ,2431
74 73 72	,94018 ,94076 ,94134 ,94192 ,94251	_	109,63 111,10 112,62 114,19 115,80	203,92 205,37 206,85 208,39 209,97	5,71 5,73 5,77 5,80 5,83	49,04 48,70 48,34 47,99 47,63	,4884 ,4850 ,4815 ,4780	100 + 25 24 23 22 21	,97266 ,97341 ,97416 ,97493	_	328,89 342,60 357,50 373,74 391,55	422,37 436,12 451,07 467,36	6,52 6,48	23,68 22,93 22,17 21,39 20,61	,2358 ,2284 ,2208 ,2131 ,2052
69 68 67	,94310 ,94370 ,94430 ,94491 ,94552	_	117,46 119,15 120,90 122,71 124,58	211,59 213,25 214,97 216,75 218,57	5,87 5,90 5,93 5,96 6,01	47,27 46,89 46,51 46,14 45,76	,4707 ,4670 ,4633 ,4595 ,4557	100 + 20 19 18 17	,97652 ,97732		411,12 432,76 456,80 483,68 513,91	504,85 526,57	6,27 6,19 6,13 6,05	19,80 18,99 18,16 17,31 16,45	,1973 ,1892 ,1808 ,1724 ,1638
63 62 61	,94676 ,94738 ,94800 ,94862	_	126,50 128,47 130,50 132,61 134,78	220,45 222,39 224,40 226,47 228,61	6,05 6,08 6,10 6,14 6,17	45,37 44,97 44,56 44,15 43,75		100 + 15 14 13 12		-	548,17 587,32 632,50 685,21 747,50	642,30	5,87 5,75 5,64 5,54	15,57 14,67 13,76 12,82 11,87	,1551 ,1462 ,1370 ,1277 ,1183
58 57 . 56	,94,925 ,94,989 ,95,053 ,95117		137,03 139,36 141,75 144,24 146,83	230,82 233,11 235,48 237,93 240,48	6,21 6,25 6,27 6,31 6,35	43,33 42,90 42,46 42,02 41,58		100 + 10 9 8	,98566 ,98677 ,98793 ,98914	_	822,25 913,62 1027,81 1174,65 1370,42	-	5,30 5,16 5,01 4,88	10,90 9,91 8,91 7,88 6,82	,1086 ,0988 ,0887 ,0784 ,0679
54 53 52	,95247 ,95311 ,95375 ,95439 ,95504		149,50 152,23 155,09 158,09 161,21	243,12 245,84 248,68 251,66 254,73	6,38 6,39 6,41 6,43 6,48	41,13 40,67 40,21 39,73		4 3 2	,99170 ,99308 ,99453		1644,51 2055,63 2740,85 4111,27 8221,55	1739,93 2151,21 2836,58 4207,16 8318,57	4,58 4,42 4,27 4,11	5,74 4,65 3,53 2,38 1,20	,0572 ,0463 ,0351 ,0237 ,0120

HEAT 68°.

I.	II.	111.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
Sp. + W.				,				Sp. + W.							
100 + 0				100,00		100,00		100 + 50	,89342	100	41,09	137,87	3,22 3,26	72,53	,7220 ,7180
1 2	,82351 ,82577	_	0,82	100,72	0,10	99,29	,9883 ,9813	51 52		_	41,91 42,74	138,65 139,43	3,31	72,13	,7140
3	,82797		2,47	102,16	0,31	97,88	,9744	53	,89612	-	43,56	140,20 140,98	3,36	71,32	,7099 ,7060
100 + 5	,83011		3,29 4,11	102,89	0,40	97,20	,9676 ,9607	$\frac{54}{100 + 55}$,89699 ,89785	The minutes of the latest	44,38	141,76	3,40	70,54	,7021
6		—	4,94	104,35	0,59	95,84	,9540	56	,89869	- '	46,02	142,54	3,48	70,15	,6983
7 8	,83621 ,83816		5,76 6,58	105,08	0,68	95,17	,9474 ,9408	57 58	,89952 ,90034		46,84 47,66	143,33	3,51	69,77	,6945
9	0 /		7,40	106,56	0,84	93,85	,9343	59	,90115		48 48	144,89	3,59	69,02	,6871
100 + 10		_	8,22	107,30	0,92	93,20	,9277	100 + 60	,90194		49,31	145,67	3,64 3,67	68,65	,6833 ,6796
11	1 2 7	_	9,04 9,86	108,64. 108,79	I,00 I,07	92,56	,9214	61 62	,90272 ,90349		50,13 50,95	146,46 147,24	3,71	67.91	,6760
13	,84716	<u> </u>	10,68	109,54	1,14	91,29	,9088	63	,90425	-	51,77	148,02	3,75	67,55	,6724
-	,84884		11,50	110,29	1,21	90,67	,9026	6 ₄			52,59	148,81	$\frac{3,78}{3,83}$	66,85	,6689
100 + 15	1		12,33	111,04	1,29	90,06	,8904	100 + 65		3	53,42 54,24	150,37	3,87	66,50	,6619
17		-	13,97	112,55	1,42	88,86	,8844	67	,90721		55,06	151,16	3,90	66,15	,6585, ,6551
18	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		14,79	113,30	1,49	88,26 87,68	,8785 ,8727	68	1 1 1 1 2 2		55,88 56,70	151,94	3,94 3,97	65,47	,6517
100 20			16,43	114,81	1,62	87,10	,8670	100 + 70		-	57,53	153,52	4,01	65,14	,6484
21	,85980	-	17,25	115,57	1,68	86,53	,8613	71			58,35	154,30	4,05	64,48	,6451 ,6418
22 23	1000		18,08	116,32	1,76	85,97 85,41	,8557	73	,91072 ,91138	3 -	59,17 59,99	155,09	4,11	64,15	,6386
24	,86408	3 -	19,72	117,84	1,88	84,85	,8446	74	,91204	<u> </u>	60,81	156,67	4,14	63,83	,6354
100 - 25			20,55	118,61	1,94 2,00	84,31	,8392 ,8338	100 + 75	,91268 ,91332		61,64	157,45	4,19	63,51	,6322
27	,8681	3 -	21,37	119,37	2,06	83,24	,8285	77	1 .		63,28	159,03	4,25	62,88	,6259
28		-	23,02	120,90	2,12	82,71 82,19	,8234 ,8182		1	1	64,10	159,82	4,28 4,32	62,57	,6228
100 + 30			23,84	121,66	2,13	81,68		100 + 80			65,75	161,40	4,35	61,96	,6167
31	,87323	3 -	25,47	123,19	2,28	81,17	,8079	81	,91643	3 -	66,57	162,19	4,38	61,66	,6137
32	1 ~		26,30	123,95	2,34	80,67	,8029 ,7981	82 83			67,39 68,21	162,97	4,42 4,44		,6107
33	0 60		27,94	124,73	2,39 2,44	79,68	,7932	84	,91822	ź <u>. —</u>	69,03	164,56	4,47	60,77	,6048
100 + 35	,87799) —	28,77	126,27	2,50	79,19	,7883	100 + 85			69,85	165,35	4,50		,6020
36	,8791	2 -	29,58	127,04	2,54	78,71		87	,9193	2	70,67	166,93	4,53		1
3.8	,8813	3 -	31,23	128,58	2,65	77,77	,7741	88	,9204	7 -	72,32	167,72	4,60	59.62	,5935
	,88242		32,05	129,35	2,70	77,31	,7695		,9210		73,14	168,52	4,62		
100 + 40	,88348		32,87 33,69	130,13	2,74	76,85		100 + 90	,9220		74,79	170,10	4,69	58,79	25 352
4.2	,88560	_	34,52	131,67	2,85	75,94	,7560	92	,9226	2 -	75,61	170,89	4,72	1	
43	,8866. ,88766	1 -	35,34 36,16	132,44	2,90	75,50		KB -	,9231		76,43 77,25	171,08	4,75	1	
100 + 45			36,99	133,99	3,00	74,63	,7429	100 + 99	,9241	9 —	78,07	173,27	4,80	57,71	•5745
4.6	,88966)	37,80	134,76	3,04	74,20	,7386	96	,9246	9 —	78,88	174,05	4,83	57,45	
47	,8906; 8915;	2 -	38,62	135,54	3,08	73,78		98	,9251	8 —	80,52	175,63	4,89	56,93	15007
49	,8925		40,27		3,18	72,94			,9261	7 -	81,35	176,43	4,92	56,67	1.564.8

HEAT 68°.

1			1		1		1	1	1	,	1			· · · · · · · · · · · · · · · · · · ·	
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	gravity.	mea-	measure.	mixture.	bulk.	spirit	pliers.	weight.	Bravity.	mea-	measure.		on of	spirit	pliers.
		sure.				per cent.				sure.			bulk.	per cent.	***************************************
W. + Sp.								W. ⊹ Sp.			-				
100+100	,92666	100	82,18	177,23	4,95	56,42	,5616	100 + 50	,95535	100	164,37	257,87		38,78	,3860
99			83,01	178,04	4,97	56,17	,5591		,95601	_	167,73	261,19 264,66	6,54	38,29 37,78	,3811
98 97	,92765	_	83,86	178,86 179,69	5,00	55,64	,5566		,95667 ,95733	-	171,22 174,86		6,58	37,27	,3761
95	,92864		85,60	180,54	5,06	55,38	,5513		,95799		178,66	272,06		36,75	,3659
100 + 95	,92913		86,51	181,41	5,10	55,12	,5487	100 + 45	1	1	182,64	276,02	6,62	36,23	,3606
94 93		_	87,43	182,30 183,22	5,13	54,85 54,58	,5460 ,5433	44	,95933 ,96000		186,78	280,14 284,47	6,66	35,69 35,15	,3553 ,3499
93	,93060	_	89,33	184,15	5,18	54,30	,5405	42	,96067	-	195,68	289,01	6,67	34,60	,3444
91	.93110		90,31	185,11	5,20	54,02	,5377		,96133		200,46		6,69	34,04	,3389
100 + 90			91,31	186,08	5,23	53,74	,5349	100 + 40	,96201	-	205,46	298,77	6,69	33,47 32,89	,3332
89 88	1	_	92,33	187,09 188,11	5,24 5,28	53:45 53,16	,5321		,96268 ,96336		210,73	304,03 309,56	6,70	32,30	,3274
87	,93315		94,46	189,15	5,31	52,87	,5263	37	,96403	-	222,12	315,41	6,71	31,70	,3156
86	,93368		95,56	190,22	5,34	52,57	,5233	36	-		228,29		6,71	31,09	,3095
100 + 85	,93421	_	96,69	191,31	5,38	52,27	,5203	100 + 35		-	234,82	328,09		30,48	,3034
84 83	93475 93530		97,84 99,01	192,43	5,41 5,43	51,97 51,66	,5173	34 33			241,72 249,04	335,01 342,37	6,71 6,67	29,85 29,21	,2971 ,2908
			100,22	194,76	5,46	51,34	,5111	32	1 "		256,83	350,17	6,66	28,56	,2843
-81	,93642		101,46	195,96	5,50	51,03	,5080	31	-		265,11	358,46		27,90	,2777
100 + 80			102,73	197,19	5,54	50,71	,5048	100 + 30			273,95	367,29	6,66	27,23	,2710
79 78	,93754 ,93810		104,03	198,46 199,76	5,57 5,60	50,39	,5016 ,4983	29 28	1	_	283,40 293,52	376,75 386,91	6,65 6,61	26,54 25,85	,2642
70	,93865		105,73	201,10	5,63	49,72	,4950	27	,97099	•	304,39	397,83	6,56	25,14	,2502
	,93922		108,14	202,48	5,66	49,38	,4916	26	,97172		316,10	409,56	6,54	24,42	,2430
100 + 75	,93978	-	109,58	203,89	5,69	49,04	,4882	100 + 25		-	328,74		6,52	23,69	,2357
74	,94036 ,94094	<u></u>	111,05	205,34 206,82	5,71 5,75	48,70 48,35	,4848 ,4813	24 23	,97320 ,97396		342,44 357,33		6,48 6,43	22,94	,2283
73 72	1		114,14	208,36	5,78	47,99	,4778	22			373,57	467,18		21,40	,2131
71	,94212		115,75	209,94	5,81	47.64	,4742	21			391,36	485,03	6,33	20,61	,2052
100 + 70			117,40	211,55	5,85	47,27	,4705	100 + 20	, , , ,	1	410,93	504,65	6,28	19,81	,1972
	,94331 ,94392		119,10 120,84	213,21 214,93	5,89 5,91	46,90 46,52	,4668 ,4631		,97714 ,97797		432,56 456,59	526,36 550,45		19,00 18,17	,1891,
67	94453		122,65	216,71	5,94	46,15	,4593	17			483,45	577,39	6,06	17,32	,1724
66	,94514		124,52	218,53	5,99	45,76	,4555	16	,97970		513,67		5,98	16,46	,1638
100 + 65			126,44	220,41	6,03	45,37		100 + 15			547,91	642,03		15,58	,1550
	,94638 ,94700		128,41	222,35 224,35	6,06	44,97 44,57	•4477 •4437	14	,98151 ,98246	_	587,04 632,20	681,28 726,53		14,08	,1461
62	,94762		132,54	226,43	6,11	44,16	,4396	12	,98346		684,89	779,33		12,83	,1277
61	,94825		134,72	228,56	6,16	43,75	,4355	11	,984.48		747,15	841,71	5,44	11,88	,1183
100 + 60			136,97	230,77	6,20	43,34		100 + 10			821,86	916,54		10,91	1086
	,94952 ,95016		139,29	233,07 235,44	6,22	42,47	,4271	9			913,19	1008,01		9 ₂ 92. 8,91	,0987
57		_	144,17	237,88	6,29	42,03	,4184		,98901	-	1174,10	1269,19	4,91	7,88	,0784
	,95146		146,76	240,43	6,33	41,59	,4140	6			1369,78	1465,02	4,76	6,83	,0679
100 + 55			149-43	243,07	6,36	41,14	,4095	100 + 5	,99158		1643,74	1739,13		5,75	,0572
	395276		152,16	245,79 248,63	6,37	40,68 40,21	,4049	4			2054,67	2150,23 2835,26	4.44	4,65	,0463
53	,95340 , 9 5405		158,01	251,60	6,41	39,74	,3956	3 2			4109,34			2,38	,0237
	.95470		161,13		6,46	39,26		I	,99751			8314,68			,0120

Mr. GILPIN'S Tables

TABLE I.

HEAT 69°.

Ι.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	.11	III.	IV.	v.	VI.	VII.	VIII.
Spirit and		Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by	gravity.	by	by	mixture.	tion of	tity of	multi-	water by	gravity.	by	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
weight.	i	mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	incasure.		bulk.		P.A.C.I G.
Sp. +W.								Sp. + W.							
100 + 0				100,00		100,00	,9948	100 + 50	,89297	100	41,07	137,86	3,21	72,54	,7216
I			0,82	100,72	0,10	99,29	,9877 ,9807	51	,89389	<u> </u>	41,89	138,64	3,25	72,L3 71,72	,7176 ,7136
3	1 2 7 7		1,64 2,46	101,44	0,20	98,58	,9738	52	,89478 ,89567		42,72 43,54	139,42 140,19	3,30	71,32	,7096
4	100		3,28	102,88	0,40	97,20	,9670	54	1 0 2 .		44,36	140,97	3,39	70,93	,7057
100 + 5	,83173	_	4,11	103,62	0,49	96,51	,9601	100 + 55			45,18	141,75	3,43	70,54	,7018
6		 	4,93	104,34	0,59	95,84	,9534	56	1 0		46,00	142,53	3,47	70,15	,6980
7 8			5,75 6,58	105,08	0,67	95,17	,9468 ,9402	57 58			46,82 47,64	143,32	3,50	69,77	,6942
9			7,40	105,52	0,85	94,51	,9337	59			48,46	144,88	3,58	69,02	,6867
100 + 10			8,22	107,29	0,93	93,20	,9272	100 + 60			49,29	145,66	3,63	68,66	,6829
11	,84320		9,03	108,04	0,99	92,56	,9208	61	,90227	t	50,11	146,45	3,66	68,29	,6793
	,84499		9,86	108,79	1,07	91,93	,9145		,90304		50,93	147,23	3,70	67,92 67,56	,6756
13	1 0 0		10,68	109,54	I,14 I,21	91,30	,9083	63			51,75	148,80	3,74	67,20	,6685
100 + 15			12,32	111,04	1,28	90,06	,8960	100 + 65		-	53,39	149,58	3,81	66,85	,6650
16			13,15	111,79	1,36	89,46	8899	66			54,21	150,36	3,85	66,50	,6616
17	,85323	3	13,96	112,54	1,42	88,86	,8839	67	, , , ,		55,03	151,15	3,88	66,15	,6582
18			14,78	113,29	1,49	88,27 87,68	,8780	68	1 - 1		55,85 56,67	151,93	3,92	65,81	,6548
10			15,61	114,05	1,56	-	,8722	69		_		153,51	-	65,14	,6481
100 + 20	1 0		16,42	114,81	1,61	87,10 86,53		100 + 70	1 .7		57,50 58,32	154,28	3,99 4,04	64,81	,6448
22		3	18,07	116,31	1,76	85,97	,8552	72	1	- 1	59,14	155,07	4,07	64,48	,6415
23	,8622		18,89	117,07	1,82	85,41	,8497	7.3	1 /		59,96	155,86	4,10	64,15	,6383
24	1		19,71	117,84	1,87	84,86		74	_	_	60,78	156,66	4,12	63,83	,6351
100 + 20	doce		20,54	118,60	1,94	84,31 83,78	,8388	100 + 75	,9122		61,61 62,43	157,44	4,17	63,51	,6319
20	1000		22,18	119,36	2,00	83,25	,8281	70	1		63,25	159,01	4,24	62,88	,6256
28	,8689	7	23,00	120,89	2,11	82,72	,8229	78	,9141	5 —	64,07	159,80	4,27	62,57	,6225
20			23,83	121,66	2,17	82,20	,8177		,9147	7	64,90	160,59	4,31	62,26	,6194
100 + 30			24,64	122,42	2,22	81,69	,8126	100 + 80			65,72	161,38	1	61,96	,6164
31	10.		25,46	123,19	2,27	81,18	1 ' 1 '	8	,9159	9 —	66,54	162,95	4.41	61,36	,6104
33	10	3 -	27,11	124,73	2,38	80,18	,7976	12		-)	68,18	163,75	4.43	61,07	,6074
34	,87636	5	27,93	125,50	2,43	79,68	,7927	82	,9177	***************************************	69,00	164,54	4,46		,6045
100 + 3	,8775	2 —	28,75	126,26	2,49	79,19	,7879	100 + 8	,9183	7 -	69,82	165,33	4:49	60,48	,6017
30	8786	5	29,57	127,03	2,54	78,71	,7832	80	,9189	* (70,64	166,12	4,52		
3	,8797 8,8808		30,39	127,80	2,59	78,24			,9194 ,9 2 00	4 –	72,29	167,70	4,59		
3	,8819	5 -	32,04	129,35	2,69	77,31	,7691		,9205		73,11	168,50	4,61		,5904
100 + 4	,8830	ī —	32,86	130,12	2,74	76,85	.7646	100 + 9	,9211	2 _	73,93	169,29	4,64	59,07	
4	1 ,8840	8 —	33,68	130,89	2,79	76,39	,7600	9	1,9216	6 -	74,75	170,08	4,67		,5849
4	2 ,8851	3 —	34,51	131,66	2,85	75,95		9	2 ,9221 3 ,9227	9 -	75,57	170,87	4,70		
4 4	3 ,8861 4 ,8871		35,33	132,43	2,90	75,07		9	4,9232		77,22	172,46	4,76		5769
100 + 4	,8881	8 -	36,97	133,98	2,99	74,64	,7425	100 + 9			78,03	173,25	4,78	57,72	,5742
4	6,8891	9 —	37,78	134,76	3,02	74,21	,7382	9	9242	6 —	78,84	174,03	4,81	57,46	,5716
4	7,8901	6	38,60	135,53	3,07	73,78			,9247		79,66	174,82	4,84		
4	8 ,8911 9 ,8920		39,42	136,30	3,12	73,36			9252		80,48	175,61	4,87		,5639
1 4	9,0920) .	140,25	, 15/,00	1 3,1/	1 / ~, 45	1 3/23/	ון אי	7117-211	Τ/	,, ,,-	J -/ "/T".	11790	1 3 -7 - 0	1-2-23

HEAT 69°.

1	·				1	1		· · · · · ·	11	1		1		1	1	1
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
	Water and spirit by	Specific gravity.	Spirit by	by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
1	weight.	,	mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
	W. + Sp.								W. + Sp.					 		
	99	1 - /	100	82,14 82,97	177,21	4,93	56,43 56,17	,5613	100 + 50	,95502 ,95568	100	164,29 167,65	257,81		38,79 38,30	,3859
	9,8	,92722		83,82	178,84	4,98	55,91	,5563		,95634		171,14	264,60	6,54	37,79	,3760
-	97 06	,92772	_	84,69 85,57	179,67	5,02	55,65	,5537		,95701 ,95767	_	174,78		6,57 6,59	37,28 36,76	,3709 ,3658
1	100 + 95			86,47	181,39	5,08	55,39 55,13	,5484	100 + 45	,95834		182,56	275,95	6,61	36,24	,3605
	94	,92920		87,39	182,28	5,11	54,86	,5457	44	,95902		186,69	280,07	6,62	35,70	,3552
ı	93 92	,92969 ,93018		88,33 89,29	183,20 184,13	5,13	54,58 54,31	,5430	43 42	,95969 ,96037	_	191,04		6,64 6,65	35,16 34,61	,3498 ,3443
	91			90,27	185,08	5,19	54,03	,5374	41			200,36	293,69		34,05	,3387
	100 + 90	,93116 ,93169	_	91,27	186,06 187,06	5,21	53,74	,5346	100 + 40			205,36	298,69	6,67	33,48	,3330
1		,93221	_	92,29	188,09	5,23	53,46	,5318	39 38	,96308	_	210,63 216,18	303,94	6,69 6,70	32,90 32,31	,3273
I		,93273		94,42	189,12	5,30	52,87	,5260	37	,95375		222,02	315,32	6,70	31,71	,3155
1	86 100 + 85	755	=	95,51	190,19	5,32	52,58	,5230	$\frac{30}{100 + 35}$,9 ⁶ 443	=	228,18		6,69 6,72	30,49	,3094
		·933/9		97,79	192,40	5,39	51,98	,5170	34	,96580	_	241,61	334,91	6,70	29,86	,2970
1			-	98,96	193,55	5,41	51,67	,5140		,96650		248,93	342,26		29,22	,2907
1		,93545 ,93601	_	100,17	194,73	5,44 5,48	51,35 51,04	,5109 ,5078		,96790		256,71 264,99		6,66 6,6 ₄	28,57	,2842
		,93657		102,68	197,16	5,52	50,72	,5046	100 + 30	,96861	_	273,82	367,17	6,65	27,24	,2709
l	79 78	,93713	1	103,98	198,43	5,55 5,58	50,39 50,06	,5013 ,4981		,96932		283,27	376,63 386,79	6,64	26,55	,2641
1	77	,93825		106,68	201,07	5,61	49,73	,4948	27	,97077		293,38 304,25	397,70		25,15	,2572
1.		,93882		108,09	202,45	5,64	49,39	·4914		,97150	_	315,95		6,52	24,43	,2430
1	100 + 75 74	,93938 ,93996		109,53	203,86 205,31	5,67 5,69	49,05 48,71	,4880 ,4846		,97224		328,59 342,28	42 2, 07 435,80		23,70	,2357
1	73	,94055		112,52	206,79	5,73	48,36	,4811	23	,97376		357,16	450,73	6,43	22,19	,2207
		•94114 •94173		114,09	208,32	5,77 5,80	48,00 47,64	,4776 ,4740		,97455 ,97534		373,40 391,18	467,00 484,84			,2130
	100 + 70	-	-	117,35	211,51	5,84	47,28	,4703	100 + 20	-		410,74	504,45			,1972
1	69	,94293	-	119,04	213,17	5,87	46,91	,4666	19	,97696	-	432,36	526,15	6,21	19,01	,1890
		,94354 ,94415		120,79	214,90 216,67	5,89	46,53	,4629 ,4591		,97780		456,38 483,22	550,23 577,15			,1807
1.	66	,94476	_	124,46	218,49		45.77	,4553	16	97954	-	513,43	607,44			,1637
1	100 + 65		_	126,38	220,37	6,01	45,38		100 + 15	,98044	_	547,65	641,76	5,89		,1550
7	63	,94600 ,94662		128,35	222,31	6,04 6,07	44,98 44,58	,4475 ,4435	14	,98136 ,98232		586,77	680,99 726,22	5,78 5,68		,1461
	62	,94725	-	132,48	226,38	6,10	44,17	,4394	I 2	,98332		684,57	778,99	5,58	12,84	,1277
1;	00 + 60	,94788 ,04851		134,66	228,52	6,14	43,76	,4353		,98434		746,80	841,34			,1182
ľ	59	,94915		139,22	233,02	- 1	42,91	,4311 ,4269	100 + 10	,98651		912,76	916,13	5,20	9,92	,1086
	58	,94979	-	141,62	235,39	6.23	42,48	,4226	8	,98767		1026,85	1121,78	5,07	8,91	,0887
		,95043		144,11	237,84		42,04	,4183	7	,98889		1173,55	1268,61 1464,35	4,70		,0784
i	00 + 55			149,36	243,02	6,34	41,15	,4093		,99146		1642,97	1738,33	4,64		,0572
	54	,95241	-	152,09	245.74	6,35		,4048	4	,99284		2053,70	2149,23	4,47	4,65	,0463
-	- 1	,95305		54,95	248,58	6,37	40,22 39,75	,4002		,99429		2738,28	2833,95			,0351
1		95437	1		254,61			,3907		,99740			8310,80		1	,0120

Mr. GILPIN'S Tables

TABLE I.

HEAT 70°.

1 "	1	1			ī	1	1	k	1		·	 	,	·	,
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	1.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
weight.	gravity.	mea-	measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi-
		sure				per cent.	T	Weight.		sure.	III Casure.	2	bulk.	per cent.	pliers.
Sp. + W.								777					 	ļ,	
								Sp. + W.	÷		_				
100 + 0		100	· —	100,00		100,00	,9942	100 + 50	,89252	100	41,05	137,85	3,20	72,54	,7212
I	82255	1	0,82	100,72	0,10	99,29	,9871	51	,89343		41,88	138,63	3,25	72,14	,7172
3	,82481 ,82701	=	1,64	101,44	0,20	98,58	,9801		,89433	-	42,70	139,41	3,29	71,73	,7 I 32°
. 4	1 0		2,46 3,28	102,16 102,88	0,30	97,89	,9732 ,9664		0 (43,52	140,18	3,34	71,33	,7092
100 + 5	,83124		4,10	103,61	0,49	96,52		54	,89695	1.	44,34	140 96	3,38	70,94	• 7053
6			4,93	104,34	0,59	95,84	9596 9529	100 + 55 56			45,16 45,98	141.74 142,52	3,42	70,55	57014
7	,83525		5,75	105,08	0,67	95,17	,9462	57	,89862		46,80	142,32	3,46	69,78	,6976 ,6938
8	,83719		6,57	105,81	0,76	94,51	,9396	58	,89944		47,62	144,09	3.53	69.40	,6900
9			7,39	106,55	0,84	93,85	,9331	59	,90025		48,41	144.87	3,57	69,03	,6863
100 + 10			8,21	107,29	0,92	93,20	,9266	100 + 60	,90104		49,27	145,65	3,62	68,66	,6826
I I I 2		_	9,03	108,04	0,99	92,56	,9202	61 62	,90182	-	50,09	146,44	3,65	68,29	,6789
	,84618		10,67	109,54	1,13	91,93	,9139 ,9077	62 62	,90259 ,90335	_	50,91	147,22	3,69	67,92	,6753
14	,84786		11,49	110,28	1,21	90,68	,9015	64	,90410		51,73 52,55	148,00	3,73	67,56 67,21	,6717
100 + 15	,84951		12,32	111,04	1,28	90,06	,8954	100 + 65	,90484		53,37	149,57	3,80	65,86	,6647
16	,85114		13,14	111,79	1,35	89,46	,8894		,90558		54,19	150,35	3,84	66,51	,6612
	,85274	-	13,96	112,54	1,42	88,86	,8834		,90632		55,01	151,14	3,87	66,16	,6578
10	,85431 ,85585	-	14,78	113,29	1,49	88,27	,8775		,907.05		55,83	151,92	3.91	65,82	,6544
			15,60	114,04	1,56	87,68	,8717	The second secon	<u>,90777</u>		56,65	152,70	3,95	65,49	,6510
100 + 20	000	_	17,24	114,80 115,56	1,62	87,11 86,54	,8660 ,8603	100 + 70	,90847	-	57.48	153,49	3,99	65,15	,6477
22	,86030		18,06	116,31	1,75	85,97	,8547		,90916 ,90984	_	58,30 59,12	154,27	4,03	64,82	,6444
. 23	,86173		18,88	117,07	1,81	85,41	,8492	73	,91050		59,12	155,00	4,06 4.09	64,49 64,16	,6411 ,6379
24			19,71	117,83	1,88 .	84,86	,8437	74	,91116		60,76	156,64	4,12	63,84	,6347
100 + 25	,86451	-	20,53	118,60	1,93	84,32	,8383		,91181	_	61.58	157,42	4,16	63,52	,6316
26	-)	-	21,35	119,36	1,99	83,78	,8330			_	62,40	158,21	4.19	63,21	,6284
27 28	,86719 ,86850	_	22,17	120,12	2,05	83,25	,8277	77	,91308		63,22	159,00	4,22	62,89	,6253
29	,86979	_	23,81	121,65	2,16	82,72 82,20	,8225 ,8173	78	,91370 ,91432	-	64,04	159.79	4,25	62,58	,6222
	,87105		24,63	122,41	2,22	81,69					64,87	160,58	4.29	62,27	,6191
31	,87229	_	25,45	123,18	2,27	81,18	,8071	81	,91493 ,91554	_	66,51	161,37 162,16	4,32	61,97	,6161 ,6131
32	,87351		26,27	123,95	2,32	80,68	,8021	82	,91615		67,33	162,94	4,39	61,37	,6101
33	,87471	-	27,10	124,72	2,38	80,18	57972		,91675		68,15	163,73	4,42	61,08	6072
	,87589		27,92	125,49	2,43	79,69	,7923		,9 ¹ 734		63,97	164,52	4,45	60,78	,6043
100 + 35	,87705	_	28,74	126,25	2,49	79,20	,7875	100 + 85	,91793	-	69,79	165,31	4,48	60,49	,6014
	,87818 ,87929	1	29,56 30,38	127,02	2,54 2,58	78,72 78,25	,7827 ,7780	86	,91850	-	70,61			60,20	,5985
38	,88039		31,20	128,57	2,63	77,78	,7733	88	,91906 ,91961		71,43 72,26	166,89 167,68	4,54 4,58	59,92	,5957
39	,88147	_	32,02	129,34	2,68	77,32	,7687		,92015		73,08		4,60	59,64 59,36	,5929 ,5901
100 + 40		_	32,84	130,11	2,73	76,86		100 + 90			73,90	-	4,63	59,08	,5874
41	,88361	-	33,66	130,88	2,78	76,40	,7596	91	,92123	_	74,72	170,06	4,66	58,80	,5846
	,88466		34,49	131,65	2,84	75,95	,7551		,92176		75,54	170,85	4,69	58,53	,5819
	,88570 ,88672	- 1	35,31	132,43	2,88	75,51	,7507		,92229	-	76,36	171,64	4.72	58,26	,5792
100 + 45		_		133,20	2,93	75,07	,7464		,92281		77,18	172,44	4,74	57,99	,5766
46	,88872		36,95 37,77	133,97 134,75	2,98 3,02	74,64 74,21	,7421 ,7378	100 + 95	,92333	_	78,00	173,23	4.77	57,73	5739،
	,88 9 69		38,59	135,52	3,07	73,79	,7336		,92303	_	78,81 79,63	174,01 174,80	4,80 4,83	57,47	,571 3 ,5688
4.8	,89065	_	39,41	136,30	3,11	73,37	,7295		,92482		80,45	175,59	4,86	57,21 56,95	,5662
49	,89159	ا ــــــــــــــــــــــــــــــــــــ	40,23	137,07	3,16	72,95			,92531		81,28			56,69	,5636
											· · · · · · · · · · · · · · · · · · ·			ファンフィ	- درر

HEAT 70°.

			· · · · · · · · · · · · · · · · · · ·	·						·	-			rentra do, com prientidamento.	
I.	II.	III.	IV.	v.	VI.	VII.	VIII,	, I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.		bulk.	spirit	pliers.	weight.	,	mea- sure.	measure.		on of	spirit per cent.	pliers.
777 . 0					3	1						·		1	
$W_{\bullet} + Sp_{\bullet}$								$W \cdot + Sp.$							
100+100	1		82,11	177,19	4,92	56,44	,5611		,95469	100	164,22		6,47	38,80	,3857
99	,92629		82,94 83,79	178,00	4,94 4,97	56,18	,5585 ,5560	49	,95535 ,95601	_	167,57	261,07 264,53		38,30	,3808
97	,92729		84,66	179,65	5,01	55,66	,5534	47	,95668		174,70	268,15	6,55	37,29	,3707
96			85,54	180,50	5,04	55,40	,5508		,95735		178,50	271,93		36,77	,3656
100 + 95 94	1 4		86,43 87,35	181,37 182,26	5,06 5,09	55,14 54,86	,5482 ,5455	100 + 45	,95802 ,95870	_	182,47 186,61	275,88 280,00		36,25	,3604
93	,92926		88,29	183,18	5,11	54,59	,5428	43	,95938		190,95	284,33	6,62	35,17	,3497
92	1	_	89,25	184,11 185,06	5,14	54,31	,5400	42	,96006 ,96074		195,50	288,87 293,62		34,62 34,06	,3442
100 + 90			91,23	186,04	5,19	53,75	,5344	100 + 40	-		205,27	298,60	-	33,49	,3330
89	,93127	-	92,25	187,04	5,21	53,46	,5316	39	,96211		210,54	303,86	6,68	32,91	,3272
88 87	,93179 ,93231	_	93,30	188,06 189,10	5,24	53,17 52,88	,5287	38 37		_	216,08	309,40 315,24	6,68	32,32	,3214
. 86	,93284		95,47	190,17	5,30	52,58	,5228		,96415		228,08	321,41	6,67	31,11	,3094
100 4- 85	,93337		96,60	191,26	5,30	52,28	,5198 ,5168	100 + 35			234,60	327,90	6,70	30,50	,3032
83	,93392 ,93447	_	97,75	192,37	5,38 5,40	51,98 51,67	,5137	34	1 //		241,50 248,82	334,81	6,67	29,87	,2969
82	,93503	_	100,13	194,70	5,43	51,36	,5106	32	,96694		256,59	349,94	6,65	28,58	,2841
100 + 80			101,37	195,90	5,47	51,04	,5075	31			264,87	358,23		27,91	,2775
79	,93616 ,93672		102,64	197,13	5,51	50,73 50,40	,5043	100 + 30 29			273,70 28 3, 14	367,05 376,51	6,63	27,24	,2709
78	,93728	-	105,27	199,70	5,57	50,07	,4978	28	,96980	_	293,25	386,67	6,58	25,86	,2571
77 76	,93784 ,93841		106,64	201,04	5,60 5,62	49,74	,4945 ,4912	27 26			304,11	397,57 409,3 0		25,15	,2501
100 + 75	,93898		109,48	203,83	5,65	49,06	,4878	100 + 25			328,44	421,92		23,70	,2356
74	, ;		110,95	205,28 206,76	5,67	48,72	,4844 ,4809	24	1 7		342,12	435,64		22,95	,2282
73 72	,94015 ,94074	Commence	112,47 114,04	200,70	5,71 5,75	48,37 48,01	,4774	23	,97356 ,97435		357,00 373,23	450,56 466,83		22,19	,2207
71	,94133		115,65	209,86	5,79	47,65	,4738	21			390,00	484,65	6,35	20,63	,2051
100 + 70	,94193 ,94254		117,30	211,48	5,82 5,85	47,29 46,92	,4701 ,4664	100 + 20	117727	_	410,55	504,26	6,29	19,83	,1971
68			120,74	214,86	5,88	46,54	,4627	19	1 - 1	_	432,16 456,17	525,93 550,01	6,16	19,01	,1890
67	,94376		122,55	216,63 218,45	5,92	46,16	,4589	17	1 7 1	_	483,00	576,92	6,08	17,33	,1723
100 + 65	,94438		124,40	220,33	5,95 5,99	45,78	,4551 ,4512	100 + 15	177731		513,19	607,19	-	16,47	,1637
	,94562		128,29	222,27	6,02	44,99	,4473	14	,98121	_	586,50	680,70	5,80		,1461
63 62			130,32	224,27 226,34	6,05 6,08	44,59 44,18	34433 34302		,98217		684.25	725,91	5,70	13,77	,1370
61			134,60	228,48	6,12	43,77	,4393 ,4352		,98317 ,984 2 0		684 ,2 5 746,45	778,65 840,97	5,48	12,84	,1277
100 + 60	,94813		136,85	230,69	6,16	43,35	,4310	100 + 10	,98527		821,10	915,72	5,38	10,92	,1086
59 58	,94877 ,94942		139,16	232,97 235,34	6,19 6,22	42,49	,4268 ,4225	9	,98638 ,98754		912,33 1026,37	1007,11		9,93 8,92	,0987 ,0887
57	,95007		144,05	237,80	6,25	42,05	,4181	7	,98876		1173,00	1268,04	4,96	7,89	,0784
56			146,63	240,34	6,29	41,61	,4137	6	,99002		1368,50	1463,68	4,82	6,83	,0679
100 + 55	,95139 ,95205		149,29	242,97 245,69	6,32 6,33	41,16	,409 2 ,4046	100 + 5	,99134 ,99 2 72		1642,20 2052,74	1737,53		5,75 4,65	,0572 ,0463
53	,95270		154,88	248,53	6,35	40,23	,4000	3	,99417		2737,00	2832,64	4,36	3,53	,0351
	,95336		157,87 160,98	251,48 254,56	6,39	39,76 39,28	,3953		,99569		4105,50	4201,29	4,21	2,38	,0237
1 51	,95403		1100,901	4)4,5U	0,42	39,40	,3905	1	,99728		8210,99	8306,931	4,00]	1,20 (,0120

HEAT 71°.

Ι.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific			Bulk of	Diminu-	Quan-	Decimal	1	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of Spirit	multi- pliers.	Water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of Spirit	multi- pliers.
		sure.				per cent.				sure.		·	bulk.	per cent.	
Sp. + W.								Sp. + W			٠.	4,			
100 + 0	1 212			100,00		100,00		100 + 50	,89206	100	41,03	137,84	3,19	72,55	,7 2 08
1 2	,82206 ,82432	_	0,82 1,64	100,72 101,44	0,10	99,29 98,58	,9866 ,9796	5 I 5 2	,89297 ,89387	_	41,86 42,68	138,62 139,40	3,24	72,14	,7169 ,7129
3	,82652		2,46	102,16	0,30	97,89	,9727	53	,89476		43,50	140,17	3,33	71,34.	,7089
4	,82866		3,28	102,88	0,40	97,20	,9659	54	-		44,31	140,95	3,36	70,95	,7050
100 + 5	,83075 ,83278	_	4,10 4,93	103,61	0,49	96,5 2 95,84	,9590 ,9523	100 + 55 56			45,13 45,95	141,73 142,51	3,40	70,56 70,17	,6973
7	,83477	-	5,75	105,08	0,67	95,17	,9457	57	,89816		46,77	143,29	3,48	69,79	,6935
8	,83671 ,83860	_	6,57	105,81 106,55	0,76	94,51	,9391 ,9326	58 59			47,59 48,41	144,07 144,85	3,52 3,56	69,40	,6897 ,6859
100 + 10	***************************************		7,39 8,21	107,29	0,92	93,85	,93261	100 + 60			49,24	145,63	3,61	68,66	,6822
1.1	,84223		9,03	108,04	0,99	92,56	,9197	61	,90136		50,06	146,42	3,64	68,30	,6786
12	,84398		9,85	108,78	1,07	91,93	,9134	62 63	, ,		50,88 51,70	147,20 147,98	3,68	67,57	,6750 ,6714
13	,84570 ,84738		10,67	109,53	I,I4 I,20	91,30 90,68	,9072	64			52,52	148,77	3,75	67,21	,6679
100 + 15	,84903		12,31	111,03	1,28	90,06	,8949	100 + 65	,90438		53,34	149,55	3,79	66,86	,6644
16			13,14	111,78	1,36	89,46	,8889		,90512		54,16	150,33	3,83	66,52 66,17	,6609 ,6575
17 18	,85226 ,85383	_	13,95	112,53	1,42 1,48	88,86 88,27	,8830 ,8771	67 68	,90586 ,90659	_	54,98 55,80	Ĭ51,12 Ĭ51,90	3,90	65,83	,6541
	,85537		15,59	114,04	1,55	87,68	,8713		,90731		56,62	152,68	3,94	65,49	,6507
100 + 20	,85688	_	16,41	114,80	1,61	87,11	,8655	100 + 70	,90801		57,45	153,47	3,98	65,15	,6474
2 I 2 2	,85836 ,85982		17,23	115,56 116,31	1,67 1,74	86,54 85,97	,8598 ,8542	71 72	,90870 ,90938		58 ,2 7 59,09	154,26 155,05	4,01 4,04	64,82 64,49	,6441 ,6408
23	,86125		18,87	117,07	1,80	85,42	,8488	73	,91005		59,91	155,83	4,08	64,17	,6376
24	,86265		19,70	117,83	1,87	84,87	,8433	74			60,73	156,62	4,11	63,85	,6344
100 + 25	,86403		20,52	118,59	1,93	84,32	,8379	100 + 75	,91135	_	61,55 62,37	157,41 158,19	4,14 4,18	63,53 63,21	,6312 ,6281
26 27	,86539 ,86672	_	21,34	119,35	1,99 2,04	83,78 83,25	,8%25 ,8272	76 77	,91200 ,91263		63,19	158,98	4,21	62,90	,6250
28	,86802		22,98	120,88	2,10	82,72	,8220	78	,91325	_	64,01	159,77	4,24	62,59	,6219
29		_	23,80	121,65	2,15	82,20	,8168				64,83	160,56	4,27	62,28	,6188
100 + 30	,87057		24,62	122,41	2,21	81,69	,8117 ,8067	100 + 80 81	,91449 ,91510	_	65,65 66,47	161,35 162,14	4,30	61,98	,6158
31 32	_ '	_	25,44	123,94	2,32	80,68	,8017	82			67,29	162,92	4,37	61,38	,6099
33	,87423		27,09	124,71	2,38	80,18	,7968	83		-	68,11	163,71	4,40	61,08	,6070 ,6040
34	-		27,91	125,49	2,42	79,69	,7919	8 ₄			68,93	164,50	4,43 4,45	60,79 60,50	,6011
100 + 35	,87658 ,87771	_	28,73 29,55	126,25	2,48 2,53	79,20 78,72	,7870 ,78 2 3	86	,91749		70,57	166,09	4,48	60,21	,5983
37	,87882	_	30.37	127,79	2,58	78,25	,7776	87	,91862	1	71,39	166,88	4,51	59,92	,5954
38	,87992	- 1	31,19	128,56	2,63	77,78	,7719	88	,91917	_	72,22	167,67 168,46	4,55	59,64 59, 3 6	,5927 ,5899
	,88100		32,01	129,33	2,68	77,32	,7683	100 + 90	,91971		73,04	169,25	4,58	59,08	,5871
100 + 40	,88314	_	32,83 33,65	130,10	2,73	76,40	,7637 ,7592	91	,92025		74,68	170,04	4,64	58,81	,5844
42	,88419		34:47	131,64	2,83	75,96	,7547	92	,92132	_	75,50	170,83	4,67	58,54	,5817
43	,88523	-	35,29	132,42	2,87	75,52	,7503		,92185		76,32 77,14	171,63	4,69 4,72	58 ,2 7	,5790 ,5764
44			36,11	133,19	2,92	75,08	,7460	100 + 95	,92237		77,96	173,21	4,75	57,73	,5737
100 + 45 46	,88825		37,75	134,74	3,01	74,22	7375	96	,92339		78,77	173,99	4,78	57,47	,5711
47	,88922		38,57	135,51	3,06	73,79	,7332		,92389		79,59		4,81	57,21	,5686
48	,89018 ,89113		39,39	136,29	3,10	73,37	,7291 ,7249		,92439 ,92488		80,41 81,24	175,57	4,84	56,95 56,70	,5660 ,5634
49	5091131		40,21	. 5/,00	3,-3	1-190	3/2471	1 22	·//-T-0	, ')-T	. , , , , , ,	1. /	, , ,	

HEAT 71°.

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I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan-	Decimal multi-	Water and			Water	Bulk of	Dimi-	Quan-	Decima
weight.	gravity.	mea-	measure.	mixture.	bulk.	tity of spirit	pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent.				sure.				per cent.	1
W. + Sp.								W. + Sp							
100+100	,92536	100	82,07	177,17	4,90	56,44	,5608	100 + 50	05422	100	164,13	257,70	6,43	38,81	,3856
9 9	,92586	_	82,90	177,97	4,93	56,18	,5583	4	,95501	_	167,49	261,01	6,48	38,31	,3807
- 1	,92636		83,75	178,79	4,96	55,92	,5557	4	,95567	-	170,98	264,47	6,51	37,81	3757
97 96	,92686 ,9 2 736	_	84,62 85,50	179,62 180,47	5,00	55,66 55,40	,5531 ,5506	4	,95635	_	174,61		6,52	37,30	,3706
	,92785		86,39	181,34	5,05	55,14	,5479	100 + 4			182,38	275,81	6,55	36,78 36,25	,3655
94	,92835		87,30	182,23	5,07	54,87	,5453		95838		186,52		6,59	35,72	,3550
	,92884		88,24	183,15	5,09	54,60	,5426	4:	,95906		190,86	284,25	6,61	35,17	,3496
	,92934 ,92984		89,20 90,18	184,08	5,12 5,15	54,32 54,04	,5398 ,5370	4		_	195,41	288,79	6,62	34,62	,3441
	,93033		91,18	186,01	5,17	53,76	,5342	100 + 40	,96043		200,17	293,54	$\frac{6,63}{6,65}$	34,06	,3385
	,93085		92,20	187,01	5,19	53,47	,5314	39	1		210,44	303,77	6,67	33,49 32,92	,3329
88	,93138	-	93,25	188,03	5,22	53,18	,5285	38	,96249		215,97	309,31	6,66	32,33	,3213
	,93190 ,93243		94,32	189,08 190,14	5,24 5,28	52,89	,5256 ,5226	37	,96318		221,81	315,15	6,66	31,73	,3153
	,93296		95,42	191,23	5,32	52,59	,5196	30 100 + 3	-		227,97	321,31	6,66	31,12	,3093
1 2 1	,93351		97,70	192,35	5,35	51,99	,5166		,96526		234,49 241,38	327,80 334,70	6,68	30,51	,3031
83	,93406	-	98,87	193,50	5,37	51,68	,5135		,96596		248,70	342,04	6,66	29,23	,2905
82 81	,93462	-	100,08	194,67	5,41	51,37	,5104		,96668	 —	256,47	349,83	6,64	28,58	,2840
	,93518 ,93576	-	101,32	195,87	5,45	51,05	,5073	3	-	_	264,74		6,63	27,92	,2774
	,93632	_	102,59	197,10	5,49 5,53	50,73	,5041 ,5009	100 + 30	1		273,57 283,00	366,9 z 376,38	6,6 ₅	27,25 26,57	2708, 2640,
	,93688	_	105,22	199,67	5,55	50,08	,4976	28			293,11		6,57	25,87	,2571
	,93744		106,59	201,01	5,58	49,75	,4943	2	97030		303,96	397,43	6,53	25,16	,2501
	,93801	-	107,99	202,39	5,60	49,41	34910	2(17/11/		315,66		6,51	24,44	,2429
	,93857		109,43	203,80	5,63 5,66	49,07 48,72	,4876 ,4842	100 + 25	1 - 1		328,28 341,96	421,77	6,52 6,48	23,71	2356, 2282,
	,93975	_	112,41	206,72	5,69	48,37	,4807	2	1 2. 21	_	356,83		6,44	22,96 22,20	,2207
	,94034		113,98	208,25	5,73	48,01	14772	22	97414	_	373,05	466,65	6,40	21,43	,2130
	,94093		115,59	209,82	5,77	47,66	,4736	2	127773		390,81	484,46		20,64	,2051
	,94153		117,24	211,44	5,80 5,83	47,29 46,92	,4699 ,4662	100 + 20	17/3/3	_	410,36		6,30	19,84	,1971
68	,94275		120,68	214,82	5,86	46,55	,4625	18	1 71 77		431,95 455,95	,	6,23 6,16	19,02	,1890 ,1807
67	,94336		122,49	216,60	5,89	46,17	,4588		,97831	_	482,77	576,68	6,09	17,34	,1723
	,94398	-	124,34	218,41	5,93	45,79	,4550	16	17777		512,95	606,93	6,02	16,48	,1637
	,94461		126,26 128,23	220,29	5,97 6,00	45,39	,4511	100 + 19	,98011	—	547,14	641,22	5,92	15,60	,1550
- 1	,94523		130,26	224,23	6,03	44,99	,4472 ,4432	1,4 1 :	,98105 ,98201		586,22 631,31	680,41 725,59	5,81	14,70	,1461
62	,94649		132,36	226,30	6,06	44,19	,4391	12	,98302		683,93	778,31	5,62	12,85	,1370 ,1277
	,94712		134,53	228,43	6,10	43,78	,4350	I]	,98405		746,10	840,60	5,50	11,89	,1182
	,94775 ,94840		136,78	230,64	6,14	43,36		100 + 10		-	820,71	915,31	5,40	10,92	,1086
58	,94905		139,09	232,93	6,19	42,50	,4266	9	,986 2 4 ,98740		911,90	1006,65	5,25	9,93	,0987
57	,9497 I		143,98	237,75	6,23	42,06	,4180	. 7	,98862		1173,46	1267,46	5,00	8,92 7,89	,0887 ,0784
56	,95037		146,56	240,29	6,27	41,61	,4136	ė	,99089		1367,86	1463,01	4,85	6,84	,0679
100 + 55			149,21	242,91	6,30	41,17			,99121	_	1641,43	1736,73	4,70	5,76	,0572
	,95169		151,95	245,63 248,47	6,32	40,71	,4045 ,3999	4			2051,79	2147,26	4,53	4,66	,0463
	,95301		157,80	251,42	6,38	39,77	,3952	2	,994°4 ,99557		2735,73 4103,59	2834,34 4199,35	4,39	3.53 2,38	,0351
			160,90	254,50	6,40		,3904		,99716	_		8303,07	4,10		,0237

3 A 2

HEAT 72°.

1	1	1	i		1		[1	<u> </u>	1			1		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Spirit and				Bulk of	Diminu-	Quan-	Decimal		Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent.	•	Ĭ		sure.			bulk.	per cent.	•
Sp. + W.		-						Sp. + W.							
								<u> </u>							
-	,81927		-	100,00		100,00	,9930	100 + 50	,89159	100	41,01	137,83	3,18	72,55	,7205
1 2	1 0 3'	_	0,82	100,72 101,44	0,10	99,29	,9860 ,9790	5 I 5 2	,89250 ,89341	_	41,84 42,66	138,61	3,23	72,15 71,74	,7165 ,7125
3	,82603		2,46	102,16	0,30	97,89	,9,721	53	,89430	_	43,48	140,16	3,32	71,34	,7085
4			3,28	102,88	0,40	97,20	,9653	54		—	44,29	140,94	3,35	70,95	,7046
100 + 5	,83026		4,10	103,61	0,49	96,52	,9585	100 + 55	,89602		45,11	141,72	3,39	70,56	,7007
6		_	4,92	104,34	0,58	95,84	,9518	1	,89687	_	45,93	142,50	3,43	70,17	,6969
7			5,74	105,08 105,81	0,66	95,17	,9452 ,9386	57 58	,89770 ,89852		46,75 47,57	143,28 144,06	3,47 3,5 I	69,79	,6931
9	100	•	7,39	106,55	0,84	93,85	9321	59			48,39	144,84	3,55	69,04	,6855
100 + 10			8,20	107,29	0,91	93,20	,9256	100 + 60			49,22	145,62	3,60	68,67	,6819
11	,84175		9,02	108,04	0,98	92,56	,9192	61	,90090		50,04	146,41	3,63	68,30	6782
12		_	9,84	108,78	1,06	91,93	,9129				50,86	147,19	3,67	67,93	,6746
13	1 0 7	_	10,66	109,53	1,13	91,30	,9067		,90242		51,68 52,50	147,97 148,76	3,71	67,57	,6710
$\frac{14}{100 + 15}$	-		11,48	110,28	1,20	90,68	,9005 ,8944	6 ₄ 100 + 6 ₅	,90317		53,32	149,54	$\frac{3,74}{3,78}$	66,87	,6640
100 + 15		_	13,13	111,03	1,28	90,06 89,46	,888 ₅	66			54,14	150,32	3,82	66,52	,6606
17	1 0		13,95	112,53	1,42	88,86	,8825	67	,90540	1 -	54,96	151,11	3,85	66,17	,6572
18	,85334		14,76	113,29	1,47	88,27	,8766	68	1 /	-	55,78	151,89	3,89	65,83	,6538
19			15,58	114,04	1,54	87,68	,8708				56,60	152,67	3,93	65,50	,6504
100 + 20			16,40	114,80	1,60	87,11	,8650	100 + 70	,90755	-	57,42	153,46	3,96	65,16	,6471
21	1 00	-	17,22	115,55	1,67	86,54 85,98	,8594 ,8537	71 72	,90824 ,90892		58,24 59,06	154,25	3,99 4,03	64,83	,6438 ,6405
23		_	18,86	117,06	1,74 1,80	85,42	-,8483	73	,90092		59,88	155,82	4,06	64,17	,6373
24	100	—	19,69	117,82	1,87	84,87	,8429	74		—	60,70	156,61	4,09	63,85	,6341
100 + 25			20,51	118,59	1.92	84,33	58374	100 + 75	,91090		61,52	157,39	4,13	63,53	,6309
26			21,33	119,35	1,98	83,79	,8321	7 ⁶			62,34	158,18	4,16	63,22	,6278
27 28	1 1		22,15	120,11	2,04	83,26	,8268 ,8216	77 78	,91218 ,91280		63,16	158,96 159,76	4,20	62,90 62,59	,6247
20			22,97	120,88 121,64	2,09 2,15	82,73 82,21	,8164	79 79		1	64,80	160,55	4,25	62,29	,6185
100 + 30			24,61	122,40	2,21	81,70	,8113			=	65,62	161,34	4,28	61,98	,6155
31			25,43	123,17	2,26	81,19	,8062	81	,91466		66,44	162,13	4,31	61,68	,6125
32	,87255		26,25	123,94	2,31	80,69	,8013	82	1 1		67,26	162,91	4,35	61,38	,6095
33			27,07	124,71	2,36	80,19	,7963	83 84	,91587 ,91646	1	68,08 68,90	163,69 164,49	4,39	61,09	,6067
34			27,89	125,48	2,41	79,70	7914	100 + 85		~~~~	69,72	165,28	4,41	60,50	,6000
100 + 35	,87610 ,877 2 4		28,71	126,24 127,01	2,47 2,52	79,21 78,73	,7819	86	,91704 ,91761		70,54	166,07	4,44 4,47	60,22	,5980
37	,87835	_	30,35	127,78	2.57	78,26		87	,91818		71,36	166,86	4,50	59,93	55952
38	,87944		31,17	128,55	2,62	77,79	,7715	88	,91873		72,19	167,65	4,54	59,65	,5924
	,88053		31,99	129,33	2,66	77,33	,7679	-	,91927	-	73,01	168,44	4,57	59,37	,5896
100 + 40	,88159		32,81	130,10	2,71	76,87		100 + 90			73,83	169,23	4,60 4,63	59,09 58,82	,5868 ,5841
	,88267 ,88372		33,63 34,46	130,87 131,64	2,76 2,82	76,41 75,96	,7588 ,7543		,92035 ,92088		74,65 75,47	170,02	4,66	58,54	,5814
	,88476		35,27	132,41	2,86	75,52			,92141		76,29	171,61	4,68	58,27	,5787
44		-	36,09	133,18	2,91	75,08			,92193		77,11	172,40	4,71	58,01	,5760
100 + 45	,88679		36,91	133,95	2,96	74,65		100 + 95	,92244		77,93	173,19	4,74	57,74	,5734
46	,88778		37,73	134,73	3,00	74,22	,7371	96	,92295		78,73	173,97	4,76	57,48	,5709
47	,88875	_	38,55	135,50	3,05	73,80			,92345		79 , 55 80,37	174,76	4,79 4,82	57 ,22 56,96	,5683
	,88971 ,89066,		39,37	136,28 137,05	3,09 3,14	73,38 72,96	,7287 ,7246		,92395 ,92445		۸ - ۱		4,85		,5631
45	1,09000	1	1.40,19.1	- J/, U	32.4	/~,90	1 7/ 240	99	・・フーサイン	1	,	1 - 1 - 133	11177	2 /1 -	, ,, ,, ,

TARLE II.

HEAT 720.

1.	li.	HI.	IV.	v.	VI.	vII.	VIII.	1.	II.	III.	IV.	v.	Ví.	VII.	VIII.
Water and spirit by	Specific gravity.	Spirit b y	by	Bulk of mixture.	Diminu- tion of	tity of	Decimal multi-	Water and spirit by	Specific gravity.	by	Water by measure.	Bulk of inixture.	Dimi- nuti- on of	Quan- tity of spirit	Decimal mulci-
weight.		mea- sure.	measure.		bulk.	per cent.	pliers.	weight.		mea- sure.	measure.	,	bulk.		
w. + Sp.								W. + Sp.							
100+100	.92493	100	82,03	177,15	4,88	56.45		100 + 50	,95397	100	164,05	257,64 250,95	6,41 6.46	38,81 38,32	,3854 ,3805
92	,92543	_	82,86	177,95 178,77	4,91 4,94	56,19 55,93	,5580 ,5555	49 48			167,41	264,41	6,49	37,81	,3755
95	1,92 43		84,58	179,60	4,98	55,67	,5529	47	,95601	-	174,53	268,03 271,79		37,30	,3705 ,3654
	,92693		85,46	180,45	5,01	55.41	,55°3 ,5476	100 + 45	95737		182,29	275,74	-	36,26	,3601
100 + 95	1		87,26	182,20	5,06	54,88	,5450	44	,95809	; —	186,44	279,86 284,18	6,58	35,73	,3549 ,3495
93	,92841		88,20	183,13 184,06	5,07	54,61 54-33	,5423 ,5395	4:			190,77	288,71	6,61	34,63	,3440
92	,92941		90,14	185,01	5,13	54.05	,5367	4	,9601		200,08	29:,46	-	34,07	,3384
100 + 90		1	91,14	185,99	5,15	53,77	,5339	100 + 40	1 /		205,07	298,44 303,69		33,50	,3327
86			92,16	186,98	5,18	53,48	,5311	3	96219	9 —	215,87	309,22	6,65	32,34	,3212
8;	9314	3	94,28	189,05	5,23	52,90 52,60	,5253	3	7 ,96281 6 ,96351		221,71	315,05			,3152
100 + 8			95,38	190,11	5,27 5,31	52,30	,5194	100 + 3		_	234,38	327,70	6,68	30,51	,3030
8.	19331	i	97,66	192,32	5,34	52,00	,5164	3	4 ,9649	8 —	241,27 248,58	334,59			,2968
8 8			98,83	193,47	5,36	51,69	,5133	11 -	3 ,9656 2 ,9664		256,35	349,72	6,63	28,59	,2839
8		8 -	101,28		5,44	51,06	,5071	3	1 ,9671	3	264,62	357,99		_	,2774
100 - 80	,9353	5 —	102,54		5,47	50,74	,5039	100 + 3	o ,9678 9 ,9685	8 —	273,44	366,80 376,25			,2707
79			103,84	1 - 2-	5,51	50,08	,4974		8 ,9693	1 -	292,97	386,40	6,57		
7	7,9370	3 —	106,54	200,98	5,56	49,75	,4941		9700, 6,9708	6 —	303,82	397,29		25,17	,2500
100 + 7	6 ,9376. 5 ,9381		107,94		5,59	49,42	,4874	-	5 ,9715		328,13	421,62	5,51	23,72	,2355
7	4,9387	5 —	110,85	205,21	5,64	48,73	,4840	2	4 ,9723	4 -	341,80	435,32			,2281
7			112,36		5,67	48,38	,4805	11	3 ,9731 2 ,9739		372,87	466,47	7 6,40	21,44	,2129
7	2 ,9399 1 ,9405		115.53	1	5,74	47,67	,4734	2	,9747	4	390,63	484,27			_
100 + 7			117,19	1 .	5,78	47,30	,4697 ,4660	: 4	9755		410,17	503,80 525,5			
1 -	9 ,9417 8 ,9423		118.87		5,80	46,55	,4623] 1	8 ,9772	5 -	455,74	549,5	7 6,1	18,20	
1	7 ,9429	5 -	122,43		5,87	46,18		13	7 ,978 I	- 1	482,54	576,4			
100+0	6 ,9435		124,28		5,90	45,40	-	100 + 1			546,88	640,9	5 5,9		
6	4 ,9448	3 -	128,1	222,19	5,98	4.5,00	,4470	1	9808	8	585,95				,1460
(3 ,9454	.6		224,19		44,60		1	13 ,9818 12 ,9828	36 -	683,61	777,9	7 5,6.	12,85	,1276
	1 .94.67	4 -	134,47	228,39	6,08	43,79	,4348	1	11,9839	0 _	745,76				_
100+6	,9473	7 -	136,7	0.0		43,37		100 +	9849, 10 1986, 9	9 —	820,33				
5	9 ,948c 8 ,9486	8 -			6,17	42,50	,4221	1	8 ,9872	26 —	1025,41	1120,2	6 5,1	8,93	,0887
5	7 .9493	14 -	143,9	237,70	1 /	42,07	,4178		7,9884		1172,92	1266,8			
100 + 9	5 .0506	-	- 146,49 - 149,1			41,17		100 +	5 ,9910		1640,67		-	4 5,70	,0572
	54 ,95 L3		- 151,8	245,58	6,30	40,71	,4043	ii .	4 ,992.	45 —	2050,83	2146,2	7 4.5	6 4,60	,0463
	,9519 52,952					39,78			3 ,9939		2734,46 4101,68	4197,4	1 4,2	7 2,38	
	51,9533			3 254,45			3902		1 ,997		8203,36	8299,2	1 4,1	5 1,2	,0120

Mr. GILPIN'S Tables

TABLE I.

HEAT 73°.

		1						1			· · · · · · · · · · · · · · · · · · ·	Margan Company of the State of		-	-
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by		Spirit		Bulk of	Diminu-	Quan-	Decimal	Spirit and	Specific	Spirit	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	measure.	mixture.	on of	spirit	pliers.
		sure.			-	per cent.				sure.			bulk.	per cent.	
Sp. + W.								Sp. + W.							
100 + 0	,81878	100		100,00		100,00	,9924	100 + 50	,89112	100	40,99	137,82	3,17	72,56	,7201
I			0,82	100,72	0,10	99,29	,9 ⁸ 54	51	,89204		41,82	138,60	3,22	72,15	,7161
2	,82334 ,82553	_	1,64 2,46	101,44	0,20	98,58	,9784 ,9715	52	,89 29 4 ,89383		42,64 43,46	139,38	3,26	71,75	,7121
4	10-60	_	3,28	102,88	0,40	97,20	,9647	54	10		44,27	140,93	3,34	70,96	,7042
100 + 5	,82977		4,10	103,61	0,49	96,52	•9579	100 + 55	,89556		45,09	141,71	3,38	70,57	,7003
1	,83180		4,92	104,34	0,58	95,84	,9512	56			45,91	142,49	3,42	70,18	,6965 ,6927
7 8			5,74 6,56	105,08	0,75	95,17	,9446	57 58			46,73 47,55	143,27	3,50	69,42	,6889
9			7,38	106,55	0,83	93,85	,9315	59			48,37	144,83	3,54	69,04	,6852
100 + 10			8,20	107,29	0,91	93,21	,9250	100 + 60	,89964		49,19	145,61	3,58	68,67	,6815
II			9,02	108,03	0,99	92,57	,9186	61	1 / 10		50,01	146,40	3,61	68,31	,6779 ,6743
I 2	,84302 ,84474		9,84	108,78	1,06	91,93	,9123	62	1 -		50,83 51,65	147,18	3,69	67,58	,6707
14	,84642	_	11,48	110,28	1,20	90,68	,9000	64			52,47	148,75	3,72	67,23	,6672
100 + 15	,84806	_	12,30	111,02	1,28	90,07	,8939	100 + 65	,90345		53,29	149,53	3,76	66,88	,6637
16	84970	—	13,12	111,78	1,34	89,46	,8879	66	,90420		54,11	150,31	3,80	66,53	,6602
	,85129		13,94	112,53	1,41	88,87 88,27	,8820	67	,90494 ,90567		54,93	151,09	3,84 3,88	65,84	,6568 ,6534
	,85440		14,76	114,04	1,54	87,69	,8703		,90639		55,75 56,57	152,65	3,92	65,51	,6501
100 + 20			16,39	114,80	1,59	87,11	,8646	100 + 70		-	57,39	153,44	3,95	65,17	,6468
21	,85740	-	17,21	115,55	1,66	86,54		71	,90778	3	58,22	154,23	3,99	64,84	,6435
22	1 02 1	1	18,04	116,30	1,74	85,98	,8533	72		ł	59,85	155,80	4,02	64,51	,6402 ,6370
23	1000		19,68	117,82	1,86	85,42	,8423	73 74		1	60,67	156,59	4,08	63,86	,6338
100 + 25			20,50	118,58	1,92	84,33					61,49	157,38	4,11	63,54	,6306
26	,8644	3 -	21,32	119,34	1,98	83,79	,8316	76	,91109	<u> </u>	62,31	158,16	4,15	63,23	,6275
27	1 ~ ~ ~ .		22,14	120,11	2,03	83,26	,8263 ,8211	77	,91173		63,13	158,95	4,18 4,21	62,60	,6244
28	nca		22,96	120,87	2,09	82,73	,8159	75		3.1	63,95	159,74	4,24	1 -	,6182
100 + 30			24,60	122,40	2,20	81,70	,8108	100 + 80		_	65,59	161,32	4,27	_	,6152
31	0.0		25,41	123,17	2,24	81,19	,8058	81	9142	ı —	66,41	162,11	4,30	61,69	,6122
32		1	26,23	123,93	2,30	80,69			1		68,05	162,89	4,34	61,39	,609 2 ,6064
33	1 0		27,06 27,88	124,70	2,36	80,19	7959 7910	82	,9154		68,87	164,47	4,40	1	,6035
100 + 35			28,70	126,23	2,47	79,21	-	100 + 8		_	69,69	165,26	4,43		
36	,87676	-	29,52	127,00	2,52	78,73	,7815	86	,91716	5 —	70,51	166,05	4,46	60,22	,5977
37	,87788	3	30,34	127,78	2,56	78,26	,7768	87	,9177	3	71,33	166,84	4,49	59,94	,5949
38	,87897 ,88006	7	31,16	128,55	2,61	77,79			,9182		72,15	167,63	4,52	1 0	
100 + 40			32,80	129,32	2,71	76,87	,7629		_	-	73,79	169,21	4.58		,5865
4.1	,88220		33,61	130,86	2,75	76,41	7584	9	,9199		74,61	170,00	4,61	58,82	,5838
42	,8832	5 -	34:44	131,63	2,81	75,97	,7539	92	2 ,9204	4	75,43	170,79	4,64	58,55	,5811
43	,88420	-	35,26	132,41	2,85	75,53			,9209		76,25	171,59	4,66	58,28 58,01	,5784 ,5758
	,8853		36,08	133,17	2,91	75,09	7452	100 + 9	,92149	-	77,89	173,17	4,72		,5731
100 + 45	,8873		37,71	133,94	2,99	74,23	,7367	00 + 9	,9219		78,70	173,95	4,75	1	,5706
47	,8882	3 -	38,53	135,49	3,04	73,80	,7325	97	,9230	ı —	79,52	174,74	4,78	57,23	,5680
48	3 ,8892	+ -	39,35	136,27	3,08	73,38			,9235		80,33	175,53	4,80		,5654
49	89019	1_	140,17	137,04	3,13	72,97	,7242	11 99	,9240	-1	1 01,10	1 1/0,53	14,03	150,/1	,5629

HEAT 73°.

															
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI	VII.	VIII.
Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers,	Water and spirit by weight.	gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	multi- pliers.
$W_{\bullet} + Sp.$								W. + Sp.							
98	,92500 ,92550 ,92600	_	81,99 82,82 83,67 84,54 85,42	177,13 177,93 178,75 179,58 180,43	4,86 4,89 4,92 4,96 4,99	56,45 56,20 55,94 55,68 55,41	,5603 ,5578 ,5552 ,5526 ,5500	48 47	,95362 ,95431 ,95499 ,95567	_	163,98 167,33 170,82 174,45 178,24	260,89 264,35 267,97	6,40 6,44 6,47 6,48 6,51	38,82 38,33 37,82 37,31 36,80	,3853 ,3803 ,3753 ,3703 ,3652
100 + 95 94 93 92			86,31 87,22 88,16 89,12 90,10	181,29 182,18 183,10 184,03 184,98	5,02 5,04 5,06 5,09 5.12	55,15 54,88 54,61 54,33 54,05	,5474 ,5447 ,5420 ,5393 ,5365	100 + 45 44 43 42 41	,95704 ,95772 ,95842 ,95911	_	182,21 186,35 190,68 195,23 199,99	284,11 288,64 293,38	6,54 6,56 6,57 6,59 6,61	36,27 35,74 35,19 34,64 34,08	,3600 ,3548 ,3494 ,3439 ,3383
100 + 90 89 88 87		_ _ _	91,10 92,12 93,17 94,24 95,33	185,96 186,95 187,98 189,02 190.08	5,14 5,17 5,19 5,22 5,25	53,77 53,48 53,19 52,90 52,61	,5337 ,5309 ,5280 ,5251 ,5222	100 + 40 39 38 37 36	,96049 ,96119 ,96189 ,96259	_	204,98 210,24 215,77 221,60 227,75	303,60 309,13 314,96	6,62 6,64 6,64 6,64 6,65	33,51 32,94 32,35 31,75 31,14	,3326 ,3269 ,3211 ,3151 ,3091
100 + 85 84 83 82			96,46 97,61 98,78 99,99 101,23	191,17 192,29 193,44 194,61 195,81	5,29 5,32 5,34 5,38 5,42	52,31 52,01 51,70 51,38 51,07	,5191 ,5161 ,5131 ,5100 ,5069	34 33 32	,96400 ,96471 ,96542 ,96614	_	234,27 241,16 248,46 256,23 264,50	349,60 357,87	6,67 6,67 6,64 6,63 6,63	30,52 29,89 29,25 28,60 27,94	,3029 ,2967 ,2904 ,2839
100 + 80 79 78	,93495 ,93550 ,93606 ,93662	_	102,49 103,79 105,12 106,49 107,89	197,04 198,30 199,61 200,94 202,32	5,45 5,49 5,51 5,55 5,57	50,75 50,42 50,09 49,76 49,43	,5037 ,5005 ,4972 ,4939 ,4906	100 + 30 29 28 27 26	,96760 ,96833 ,96907 ,96982 ,97057	_	273,31 282,74 292,83 303,68 315,36	376,13 386,26 397,14	6,63 6,61 6,57 6,54 6,51	27,27 26,59 25,89 25,18 24,46	,2706 ,2639 ,2569 ,2499 ,2428
75 74 73 72 71	,93775 ,93834 ,93893	_	109,33 110,80 112,31 113,87 115,48	203,73 205,18 206,65 208,18 209,76	5,60 5,62 5,66 5,69 5,72	49,09 48,74 48,39 48,03 47,67	,4872 ,4838 ,4803 ,4768 ,4732	100 + 25 24 23 22 21	,97134 ,97211 ,97290 ,97371	=	327,98 341,64 356,49 372,70 390,45	435,16		23,73 22,98 22,22 21,44 20,65	,2355 ,2281 ,2205 ,2128 ,2050
100 + 70 69 68 67 66			117,13 118,82 120,57 122,37 124,22	211,37 213,03 214,76 216,52 218,34	5,76 5,79 5,81 5,85 5,88	47,31 46,94 46,56 46,18 45,80	,4695 ,4658 ,4621 ,4584 ,4546	100 + 20 19 18 17 16	,97706 ,97795		409,98 431,55 455,53 482,32 512,47	549,35 576,20 606,43	6,31 6,25 6,18 6,12 6,04	19,85 19,04 18,20 17,35 16,49	,1970 ,1889 ,1806 ,1722 ,1636
100 + 65 64 63 62		_	126,14 128,11 130,14 132,24 134,41	220,21 222,15 224,15 226,22 228,35	5,93 5,96 5,99 6,02 6,06	45,41 45,01 44,61 44,20 43,79	,4507 ,4468 ,4428 ,4387 ,4346	13	,98072 ,98172 ,98271	_	546,63 585,68 630,73 683,29 745,41	640,68 679,83 724,97 777,63 839,86	5,76 5,66	15,61 14,71 13,79 12,86 11,90	,1549 ,1460 ,1369 ,1276 ,1182
100 + 60 59 58 57		_	136,65 138,97 141,36 143,84 146,42	230,55 232,84 235,20 237,65 240,19	6,10 6,13 6,16 6,19 6,23	43,37 42,94 42,51 42,07 41,63		7	,98596 ,98712 ,98834		819,95 911,05 1024,93 1172,39 1366,58	1005,75	5,46 5,30 5,17 5,08 4,90	9,94 8,93 7,90 6,84	,1085 ,0987 ,0886 ,0784 ,0679
53 52	,95029 ,95096 ,95162 ,95229	_	149,07 151,81 154,66 157,64 160,76		6,26 6,28 6,29 6,34 6,36	41,18 40,72 40,26 39,79 39,31	,4042 ,3996 ,3949	3 2		=	1639,91 2049,88 2733,18 4099,78 8199,55	1735,13 2145,29 2828,73 4195,47 8295,35	4,59 4,45 4,31	5,76 4,66 3,53 2,38	,0572 ,0463 ,0351 ,0237 ,0120

HEAT 74°.

1	1	1	1	·			1	1		T 1			1		
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.	-18	bulk.	spirit	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers.
0						1	-1	0 . 177		A. A. Shington dropes				-	
Sp. + W.				-				Sp. + W.				·····			
100 + 0			-	100,00	_	100,00		100 + 50		100	40,97	137,81	3,16	72,56	,7197
1 2	1 2 27		0,82	100,72 101,44	0,10	99,29 98,58	,9848 ,9778	51 52	,89157 ,89248	_	41,80 42,62	138,59	3,21	72,10	,7157 ,7117
3	,82504	-	2,46	102,16	0,30	97,89	,9709	53	,89337		43,44	140,14	3,30	71,35	,7078
4			3,28	102,88	0,40	97,20	,9641 ,9573	54 100 + 55	,89425		44,25	140,92	$\frac{3,33}{3,37}$	70,96	,7039
100 + 5		_	4,10	104,34	0,49	95,84	,9506	56	,89595		45,89	142,48	3,4I	70,18	,6962
7 8	,83330		5,74	105,07	0,66	95,17	,9440		,89678 ,89760		46,71	143,26	3,45	69,80 69,42	,69 2 4
9	1, 2, ,	_	6,56 7,38	105,81 106,54	0,75	94,51 93,86	,9374 ,9309	5° 59	100		47,53 48,35	144,04 144,82	3,49	69,05	,6849
100 + 10	,83899		8,20	107,28	0,92	93,21	,9245	100 + 60	,89918	_	49,17	145,60	3,57	68,68	,6812
I 1			9,01	108,03 108,78	0,98	92,57 91,93	,9181 ,9118,	61	,89997 ,90073		49,99 5 0,81	146,39	3,60	68 ,31 67,94	,6776 ,6739
13	,84426	_	10,65	109,52	1,13	91,30	,9056		,90149		51,63	147,95	3,68	67,58	,6703
14	,84594		11,47	110,27	1,20	90,68	,8995	64			52,45	148,74	3,71	66,88	,6668
100 + 15	1 ~		12,30	111,02	1,28	90,07 89,47	,8934 ,8874	100 + 65	,90299 ,90374	*	53,27 54,09	149,52	3,75	66,53	,6599
17	,85080	l	13,93	112,52	1,41	88,87	,8815	67	,90448	-	54,91	151,08	3,83	66,18	,6565
18	1 2 31	-	14,75	113,28	1,47 1,54	88,28 87,69	,8756 ,8698		,90521 ,90593		55,72 56,54	151,86	3,86	65,84 65,51	,65 31 ,6498
100 + 20			16,39	114,79	1,60	87,11	,8641	100 + 70	-	-	57,36	153,42	3,94	65,17	,6464
. 21	,85691	 —	17,20	115,54	1,66	86,54	,8584	71	,90732		58,19	154,22	3,97	64,84	,6431
22	1 2 21		18,03	116,30 117,05	1,73	85,98 85,43	,8528 ,8473		,90800 ,90867	_	59,00 59,82	155,00	4,00	64,51 64,19	,6399 ,6367
24	,86121		19,67	117,81	1,86	84,88	,8419	74	,90933		60,64	156,58	4,06	63,86	,6335
100 + 25	1		20,49	118,58	1,91	84,33	,8365 ,8311		,90999 ,91063		61,46 62,28	157,36 158,15	4,10 4,13	63,54	,6303
26		_	21,31	119,34	2,03	83,26	,8258			1	63,10	158,93	4,17	62,91	,624.1
28	1 -	1	22,95	120,87	2,08	82,74	,8206 ,8155		,91190		63,92 64,74	159,72 160,51	4,20	62,60 62,30	,6210
100 + 30			23,77 24,59	121,63	2,14	82,22	,8104	100 + 80	,91253		65,56	161,30	4,26	61,99	,6149
31	1	-	25,40	123,16	2,24	81,19	,8053	81	,91376		66,38	162,09	4,29	61,69	,6119
32	1		26,22	123,93	2,29	80,69 80,20	,8004 ,7954		, ,,,		67,20 68,02	162,87 163,66	4,36	61,40	,6089
33	10.0		27,86	125,47	2,39	79,71	,7906	84	,91556		68,84	164,46	4,38	60,81	,6032
100 + 35	,87514		28,68	126,23	2,45	79,22	,7858	100 + 85	,91614		69,66	165,24 166,03	4,42	60,52	,6003
36	,87628 ,87740	_	29,50	127,00	2,50 2,55	78,74 78,27	,7811 ,7764	87	,91671 ,91728		70,48	166,82	4,45 4,48	60,23 59,94	,5974 ,5946
38	87850	_	31,15	128,54	2,61	77,80	,7707	88	,91784		72,12	167,61	4,51	59,66	5918
	,87959		31,96	129,31	2,65	77,33	7671	100 + 90	,91839	4	72,94	168,40	4,54	59,38	,5890 ,5862
100 + 40	88173		32,78	130,09 130,86	2,69	76,42	,7025		,91947		74,58	169,98	4,60	\$8,83	,5835
4.2	,88278	—	34,43	131,63	2,80	75,97	,7535	92	,92000		75,39	170,77	4,62	58,56	,5808
43	,88 3 82 ,88484	_	35,24 36,06	132,40	2,84 2,89	75,53	,7491 ,7448		,92053		76,21	171,57	4,64	58,02	,5781
100 + 45	,88585	_	36,88	133,94	2,94	74,66	,7405	100 + 95	,92155		77,85	173,15	4,70	57,75	,5728
46	88684,		37,69	134,71	2,98	74,23	,7363	96	,92207	/ -	78,66 79,48	173,93	4,76	57,49 57,23	,5703
47	,88781 ,88877	_	38,51	135,49	3,02	73,81	,7321		,92307		80,30	175,51	4,79	56,97	,5651
	,88972		40,15	}	3,12	72,97	1		,92358		81,12	176,31	4,81	56,72	,5626

HEAT 74°.

I.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and Spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.	6.41.27	mea- sure.	measure.		bulk.	spirit	pliers.	weight.	8	mea- sure.	measure.	7 5	on of bulk.	spirit per cent.	pliers.
		- sarc.				Per centi								-	
W. + Sp.	******************************							W. + Sp.					-		
100+100		100	81,95	177,11	4,84	56,46	,5600	100 + 50		100	163,91	257,52	6,39	38,83	,3852 ,3802
	,92457 ,92507	_	82,78 83,63	177,91	4,87 4,90	56,20	,5575 ,5549	49 48	,95396 ,95465		167,25	260,83 264,29	6,42 6,45	38,34 37,83	,3753
97	,92557	-	84,50	179,56	4,94	55,68	,5524	47	,95533	_	174,37	267,91	6,46	37,32	,3703
	,92607 ,92656		85,38	180,41	4,97	55,42 55,16	,5598		,95602 ,95671		178,16	271,67 275,60	6,52	36,81 36,28	,3651
100 + 95 94	,92706		87,18	182,16	5,00 5,02	54,89	,5471 ,5445	100 + 45	3	_	186,26	279,72	6,54	35,75	3546
93	,92756		88,12	183,08	5,04	54,62	,5418	43	,95810		190,59	284,04	6,55	35,20	,3492
92 91	,92806 ,92856		89,08 90,06	184,00 184,96	5,08 5,10	54,34 54,06	,5390 ,5362	42 41	,95879 ,95949		195,14		6,58 6,60	34,65 34,09	,3438
100 + 90	-		91,06	185,94	5,12	53,78	,5334		,96018		204,89		6,61	33,52	,3325
89	,92959		92,08	186,92	5,16	53,49	.5306	39	,96089		210,14	303,51	6,63	32,95	,3268
88	,93012 ,93065	_	93,13	187,95 188,99	5,18 5,21	53,20 52,91	,5277 ,5248	38 37	,96159 ,96230		215,67	309,04 314,86	6,63 6,61	32,36 31,76	,3210
86			95,29	190,05	5,24	52,62	,5219	36	,96301		227,65	321,00		31,15	,3090
	,93173		96,41	191,14	5,27	52,32	,5189	100 + 35	,96372		234,16		6,66	30,53	,3029
	,93229		97,57	192,26	5,31	52,02 51,71	,5159 ,5129	34	,96444 ,96515		241,05 248,35	334,39 341,71	6,66 6,64	29,90	,2966
	,93205		99,94	193,41	5,33	51,39	,5098	33 32	,96588		256,11	349,49	6,62	28,61	,2838
.81	•9 3 397		101,18	195,78	5,40	51,08	,5067	31	,96661		264,38	357,75	6,63	27,95	,2773
100 + 80	,93455		102,44	197,01	5,43	50,76	,5035	100 + 30	,96734	-	273,18 282,61	366,56 376,00	6,62	27,28 26,60	,2706 ,2638
79. 78	,93509 ,93566	_	103,74	198,27	5,47 5,49	50,43	,5003 ,4970	29 28	,96808 ,96883		292,70		6,57	25,90	,2569
77	,93622		106,44	200,91	5,53	49,77	,4937	27	,96958		303,54	397,00	6,54	25,19	,2499
-	,93679		107,84	202,28	5,56	49,44	,4903	26	,97033		315,21		6,51	24,47	,2427
100 + 75 74	,93735 ,93794		109,28	203,70	5,58	49,09	,4869 ,4835	100 + 25 24	,97110 ,97188		327,83 341,48	421,32 435,01	6,51 6,47	23,74	,2354
73	٠.		112,26	206,62	5,64	48,40	,4801	23			356,33	449,89	6,44	22,23	,2205
	,93911	4	113,82	208,15	5,67	48,04	,4766	22	, , , ,		372,53	466,13	6,40	21,45 20,66	,2128
$\frac{71}{100 + 70}$,93970		117,08	209,72	5,71	47,68	,4730 ,4693	100 + 20	,97432 ,97515	_	390,27 409,79		6,36	19,86	,1970
69		_	118,77	213,00	5,77	46,95	,4656	19	,97601		431,35	525,10	6,25	19,04	,1889
68	1700		120,51	214,72	5,79	46,57	,4619	18	97688	_	455,32		6,19	18,21	,1806
6 ₇	,94215 ,94278		122,31	216,49	5,82 5,87	46,19 45,81	,4582 ,4544	17 16	1 - 2 - 2	_	482,10 512,23	575,97 606,18	6,13 6,05	17,36	,1722
100 + 65	-	-	126,08	220,17	5,91	45,42	,4505	100 + 15			546,38	640,41	-	15,62	,1549
64	,94404	—	128,05	222,11	5,94	45,02	,4466	14	,98056	-	585,41	679,54 724,66			1460
63 62	,94468 ,94532		130,08		5,97 6,00	44,62 44,21	,4426 ,4385	13	,98157 ,98256		630,44 682,97	724,66	5,78	13,80	,1369
61	17175		134,35	228,31	6,04	43,80	,4344		,98360		745,07	839,49		11,91	,1181
100 + 60	,94661		136,59	230,51	6,08	43,38	,4303	100 + 10	,98469		819,57	914,08	5,49	10,94	,1085
59	,94727		138,90		6,11	42,95	,4261	9			910,63	1005,30		9,95 8,93	,0987 ,0886
58 57	,94794 ,94860	_	141,30	235,15	6,17	42,52	,4218 ,4175	7	,988 2 0		1171,86	1265,74	5,12	7,90	,084
	,94927		146,35	240,14	6,21	41,64	,4131	6	,99047		1365,95	1461,02	4,93	6,85	,0679
100 + 55	,94993	_	149,00	242,76	6,24	41,19	,4086	100.+ 5	,99080		1639,15	1734,34		5,77	,0572
	,95060 ,95126		151,74		6,26	40,73	,4041 ,3995		,99218		2048,93	2827,43	4,03	4,66 3,53	,0463
52	,95193	_	157,57	251,26	6,31	39,80	,3948	2	,99518		4097,87	4193,52	4,35	2,38	,0237
5.1	,95260		160,69	254,34	6,35	39,32	,3900		,99678		8195,74	8291,50	4,24	1,21	,0120

HEAT 75°.

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I	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	'II.	III.	IV.	$\mathbf{v}.$	VI.	VII.	VIII.
Spirit and	Specific		Water	Bulk of	Diminu-	Quan-	Decimal			Spirit	Water	Bulk of	Dimi-	Quan-	Decima
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.		. 1		per cent.	1			sure.	*	A. 2		per cent.	
Sp. + W.								Sp. + W.			er en mei menemalisti alah perfenerakya				
100 + 0	,81780	100		100,00		100,00	0012	100 + 50	80018	100	40,96	137,80	3,16	72,57	,7193
100 T 0	,82010	_	0,82	100,72	0,10	99,29	,9842	51			41,78	138,58	3,20	72,16	,7153
2	,82235	_	1,64	101,44	0,20	98,58	,9772	52	,89201	-	42,60	139,36	3,24	71,76	711
3	,82455	· · ·	2,46	102,16	0,30	97,89	,9703	53			43,42	140,13	3,29	71,36	,7074
4	,82669		3,28	102,88	0,40	97,21	,9635	54	-		44,23	140,91	3,32	79.97	,703
100 + 5	,82878 ,83082	_	4,10	103,61	0,49	96,52 95,84	,9567 ,9500	100 + 55 56		-	45.05 45.87	141,69	3,36	70,58 70,19	,6996 ,6958
7	,83281	_	4,91 5,73	104,34	0,57	95,17	,9434	57			46,69	143,25	3,44	69,81	,692
8	,83476		6,55	105,81	0,74	94,51	,9368	58	,89713		47,51	144,03	3,48	69,43	,683
9	0 ///		7,37	106,54	0,83	93,86	,9303	59			48,33	144.81	3,52	69,05	,684
100 +,10		_	8,19	107,28	0,91	93,21	,9239	100 + 60	89872	-	49,15	145,59	3,56	68,68	,680
11	,84031	-	9,83	108,03	0,98	92,57	,9176		,89950		49,97	146,38	3,59	68,32	,677
12 13	16 2 1		10,65	108,77	1,06	91,94	,9113		,90020		50,79	147,16	3,63	67,59	,670
- 3 14			11,47	110,27	1,20	90,69	,8990		1		52,43	148,73	3,70	67,24	,666
100 + 15			1.2,29	111,02	1,27	90,07	,8930	100 + 65	,90252	_	.53,25	149.51	3.74	66,89	,663
	,84872	*	13,11	111,77	1,34	89,47	,8870		,90327		54,07	150,29	3,78	66,54	,659
17	, ,		13,93	112,52	1,41	88,87	,8810	67			54,89	151,07	3,82	66.19	,656
18	1		14,75	113,28	1,47	88,28 87,69	,8751 ,8693		,90474		55,70	151,85	3,85	65,85	,652 ,649
19			16,38	114,03	1,53	87,12	,8636	69	-	-		153,41	3,93	65,18	,646
100 -F 20 21	,85642		17,20	114,79	1,59	86,55	,8579	100 + 70 71	1 '		57.34 58,16	154,20	3,96	64,85	,642
22	,85788		18,02	116,30	1,72	85,99	,8523	72			58,98	154,99	3,99	64.52	,639
2.3	,85932		18,84	117,05	1,79	85,43	,8468	7.3		Section Control of the Control of th	59,80	155,78	4,02	64,20	2630
	,86073		19,66	117,81	1,85	84,88	,8414	74			60,62	156,56	4,06		,633
100 + 25	1 000	-	20,48	118,57	1,91	84,34 83,80	,8360 ,8306	100 + 75	,90952		61 44 62,26	157,35	4.09	63,55	,630
26 27		_	21,30	119,33	2,02	83,27	,8253	77			63,08	158,92	4,16		,623
28			22,94	120,86	2,08	82,74	,8201	78			63,90	159,71	4,19	62,61	,620
29	,86738		23,76	121,62	2,14	82,22	,8150	. 79			64,71	160,50	4,21	62,31	,617
100 + 30	,86864		24,58	122,39	2,19	81,71	,8099	100 + 80			65,53	161,28	4.25	62.00	,614
31			25,39	123,16	2,23	81,20	,8049	81	1 - 00		66,35	162,86	4.28	61,70	,611
32 33	1 0		26;21 27,03	123,92	2,29	80,70 80,20	,7999 ,7950	82 82	,91392 ,91452		67,17	163,65	4.31	61,11	,605
	,87350		27,85	125,46	2,39	79,71	,7901	84			68,81	164.44	4 37	60,81	,602
100 + 35			28,67	126,22	2,45	79,22	,7853	100 + 85	,91569	_	69.63	165,22	4,41	60.52	,000
36	,87580		29.49	126,99	2,50	78,74	,7806	86	,91626	_	70,45	166,01	4,44		
37	87692	-	30,31	127,76	2,55	78,27	7759		,91683	-	71.27	166,80	4,47	59,95	,594
	,87802		31,13	128,53	2,60	77,80	,7712	88	,91739		72,09 72,91	167,59	4,50	1	,591
39 100 + 40	,87911		31,95	129,31	2.69	77,34		100 + 90			73,73	169,17	4,56		,586
100 + 40	,88125	-	32,77	130,85	2,09	76,42	,7576		,91902		74,55	169,96	4.59	58,84	,583
42	,88230	_	34,41	131,62	2,79	75,98		92	,91955		75.36	170,75	4,61	58,57	,580
43	,88334		35,22	132,39	2,83	75,54	,7487	93	,92008	3 -	76,18	171.55	4.63	58,30	,577
	,88437		36,04	133,16	2,88	75,10	37444		-92060	-	77,00	172,34	4,66		•575
100 + 45	,88538	-	36,86	133,93	2,93	74,67			92111		77,82	173,13	4,69		,572
4.0	,88637 ,88734		37,68 38,50	134,70	2,98	74,24 73,81		11	,92162		78,63 79,45	173,91	4.72 4.75		,570
4.8	,88830		39,32	136,25	3,07	73,39			,92263		80,27	175,49	4,78	56,98	,564
	88925			137,03	3,11		,7234		,92314		1 0	176,29	4,80	56,73	,562

HEAT 75°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	- I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by	Specific gravity.	by	by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Water and spirit by	Specific gravity.	Spirit by mea-	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	Quan- tity of spirit	Decimal multi- pliers.
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.	* *	sure.	ineasure.			per cont.	
w. + sp.								W. + Sp.				,			
100 + 100	,92364	100	81,92	177,09	4,83	56,47	,5598	100 + 50			163,84		6,38	38,84	,3850 ,3801
99 98	,92414		82,75	177,89	4,86	56,21	,5572	49 48	,95361		167,18 170,66	260,78 264,24	6,42	38,35 37,84	,3751
98		ł	83,60 84,46	178,71 179,54	4 89 4,92	55,95	,5547	40			174,29	267,85	6,44	37,33	,3701
	,92563		85,34	180,39	4,95	55,43	,5495	46	,95568		178,08	The second second	6,47	36,82	,3650
100 + 95	1 - //	1	86,23	181,25	4;98	55,17	,5469	100 + 45	,95638		182,Q4 1,86,18	275,53 279,65	6,51	36,29 35,76	,3598
94 93		ī	87,14 88,08	182,14 183,05	5,00	54,90	,5442	44	,95707 ,95777		190,51	283,97	6,54	35,21	,3491
93		1	89,04	183,98	5,06	54,35	,5388	42	1 0		195,05	288,49	6,56	34,66	,3436
91	1 - 2		90,02	184,94	5,08	54,07	,5360		,95917		199,81	293,23		34,10	,3380
100 + 90	,	1	. 91,02	185,91	5,11	53,79	,5332	100 + 40			204,80	298,20 303,43	6,62	33,53	,3324
89 88	1 / / (92,04	186,90 187,92	5,14	53,50	,5304	39			215,57	308,95	6,62	32,37	,3209
87	,93023		93,09	188,96	5,20	52,92	,5275	37	1 - / -		221,40	314,76	6,64	31,77	,3149
	,93077		95,25	190,02	5,23	52,62	,5217	36		يا ا	227,55	320,90	_	31,16	,3089
100 + 85			96,37	191,11	5,26	52,32	,5187	100 + 35			234,05	327,41	6,64	30,54	,3028
84	1	_	97,52	192,23	5,29	52,02	,5157	34	1 / 0/		240,94 248,24	334,29 341,61	6.63	29,91	,2902
83	1 / 1 1 1		98,69	193,38	5,31	51,71	,5126	33			256,00	349,38	6,62	28,62	,2837
81	1.7.7.7		101,14	195,75	5,39	51,08		31	,96634	<u> </u>	264,26	357,64	6,62	27,96	,2772
100 + 80			102,40	196,98	5,42	50,77	,5032	100 + 30			273,06	366,44	6,62	27,29	,2705
	,93469		103,69	198,24	5,45	50,44	,5000	29		3 -	282,48	375,88 386,00	6.57	26,60 25,91	,2637
78	1 , , , ,		105,02	199,54 200,88	5,48	50,11	,4967	28	9699		303,40	396,86	6.54	25.20	2408
76	,93638	_	107,79	202,25	5,54	49,44	,490I	26	,97000	2	315,07	408,55	6,52	24,48	-
100 + 75			109,23	203,66	5,57	49,10	,4867	100 + 29	,97080	5 -	327,68	421,17	6,51	23,74	,2354
	93753		110,70	205,10	5,60	48,75	,4833	24		5 -	341,33	434,86 449,73	6.44		,2204
73	1		112,21	206,59	5,62	48,40	4798 4763	23	1 .		372,36	466,96	6,40	21,46	,2127
71			115,38	209,69	5,69	47,69	,4727	2 1			389,09	483,73			,2049
100 + 70			117,03	211,31	5,72	47,32	,4691	100 + 20			409,60	503,29	6,31	19,87	,1970
60	,94050	-	118,72	212,97	5,75	46,95	,4654	10	9758,9766	I —	431,15	524,90 548,91	6.20	18,21	,1806
67	+/3T	,	120,46		5,78	46,58		1			481,88	575,74			51722
66	ノンノーファ		124,12	218,27	5,85	45,82	,4542	16		ó	511,99	605,93	6,06	16,50	,1636
100 + 6	,9430	ī —	126,03	220,14	5,89	45,43		100 + 1	,9794	3 -	546,13	640,15	5,98	15,62	,1549
62	4 ,94362	<u> </u>	127,99	222,07	5,92	45,03	,4464	I.	4 ,9803	9 -	585,14	679,25	5,89	14,72	,1460
6	,9442		130,02		5,95	44,63	,4424	I I	3,9813 2,9824	8 -	630,15	724,35 776,96	5,70	12,87	
1 -	2 ,9449; 1 ,9455		132,12		6,02	43,81	,4342	I			744,72	839,12	5,60	11,92	,1181
100 + 60			-		6,06	43,39		100 + 10	,9845	4 -	819,19	913,68			1 .
5	9,9468	9 -	138,84	232,74	6,10	42,96	,4259		9856, 19	7 -	910,21	1004,85	5,36	9,95	,0987
5			141,23		6,13	42,53	,4216		9868, ₉ 9880, ₇	4 -	1023,99	1118,76	5,16	7,90	
	7 ,948 2 6 ,9489		143,71	237,55	6,16	42,09			6,9893	3 -	1365,32	1460,36	4,96	6,85	
100 + 5			148,93		6,22	41,20	_	100 +	5 ,9906		1638,39	1733,55	4,84	5,77	,0572
	4,9502		1 7		6,24	40,74			4 ,9920	5 -	2047,98	2143,32	4,66	4,66	,0462
5	3 ,9509	0 -	154,52	248,26	6,26	40,28	3 ,3993	1	3 ,9935	1 -	2730,64		4,51	3,53	
	2 ,9515			251,21	6,29	39,81	1 ,3946		2 ,9950 i ,9966		4095,96	4191,58	4.27	2,38	1
5	1,9522	4] —	160,61	254,28	6,33	1 39,3	3 ,3898	11	-1,9900	<u>"</u>	1 0.3.192	1 5 - 5/,0	1777	1	

HEAT 76°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	·III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea-	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea-	Water by measure.	Bulk of mixture.	Dimi- nuti- on of	Quan- tity of spirit	Decimal multi- pliers.
Sp. + W.		sure.				per cent.		Sp. + W.		sure.	***********		bulk.	per cent.	
оргг								ор. т. т.				·			
100 + 0		100		100,00	() (100,00	,9907	100 + 50			40,94	137,79	3,15	72,57	,7190
I 2	,81961 ,82185		0,82	100,72	0,10	99,29	,9836 ,9767	51 52			41,76 42,58	138,57	3,19	72,17	,7150
3	,82406		2,46	102,16	0,30	97,89	,9698	53	1 0 .		43,39	140,12	3,27	71,37	,7071
4	,82620		3,28	102,88	0,40	97,21	,9630	54	1 0		44,21	140,90	3,31	70,98	,7032
100 + 5	,82829	_	4,10	103,61	0,49	96,52	.,9562	100 + 55	,89417	-	45,03	141,67.	3,36	70,59	,6993
6	1,2,33		4,91	104,34	0,57	95,84	,9495	56	,89501	-	45,85	142,45	3,40	70,20 69,82	,6955
7	,83232 ,83427		5,73	105,07	0,66	95,17	,9429		,89584 ,89666	_	46,66 47,48	143,23 144,01	3,43	69,44	,6879
9			7,37	106,54	0,74	94,51	,9363		,89747		48,30	144,79	3,51	69,06	,6842
100 + 10			8,19	107,28	0,91	93,21	,9234	100 + 60		-	49,12	145,57	3,55	68,69	,6805
11	,83982	-	9,01	108,03	0,98	92,57	,9171		,89904		49,94	146,36	3,58	68,33	,6769
12		-	9,83	108,77	1,06	91,94	,9108	62			50,76	147,14	3,62	67,96	,6733
13	,84329 ,84498	_	10,64	109,52	1,12	91,31	,9046 ,8985	63 64	1		51,58	147,92 148,71	3,66	67,60 67,24	,6697
100 + 15			12,28	111,02	1,19	90,09	,8925	100 + 65			52,40	149,49	3,73	66,89	,6627
	,84824		13,11	111,77	1,34	89,47	,8865	56			54,04	150,27	3,77	66,54	,6592
17	,84983		13,92	112,52	1,40	88,87	,8805	67	1 -	i	54,86	151,05	3,81	66,20	,6558
	,85140		14,74	113,27	1,47	88,28	,8746	68	1 /	1	55,67	151,83	3,84	65,86	,6524
	,85293		15,56	114,03	1,53	87,70	,8688	69			56,49	152,61	3,88	65,52	,6491
100 + 20		-	16,37	114,79	1,58	87,12	,8631	100 + 70		1	57,31	153,39	3,92	65,19 64,86	,6458
2 I 2 2	1		17,19	115,53	1,72	85,99	,8575	7 I	,90540		58,13 58,95	154,19	3,94	64,53	,6425
23			18,83	117,04	1,79	85,43	,8464		90775	1	59,77	155,76	4,01	64,20	,6360
24			19,65	117,81	1,84	84,88	,8409	- 74			60,59	156,54	4,05	63,88	,6328
100 + 25	,86163	_	20,47	118,57	1,90	84,34	,8355	100 + 75			61,41	157,33	4,08	63,56	,6297
26	じっこう		21,29	119,33	1,96	83,80	,8302	76	1 1		62,23	158,12	4,11	63,25	,6265
27 28		_	22,11	120,09	2,02	83,27 82,74	,8249	77 78	,91036		63,05	158,90	4,15	62,62	,6234
29	1 27	_	23,74	121,61	2,13	82,22	,8146	79			64,68	160,48	4,20	62,31	,6173
100 + 30	,86816		24,57	122,38	2,19	81,71	,8095	100 + 80			65,50	161,26	4,24	62,01	,6143
31		· -	25,38	123,15	2,23	81,20	,8045	81	177	1	66,32	162,05	4,27	61,71	,6113
32		-	26,20	123,92	2,28	80,70	7995	82	1 2 311	1	67,14	162,84	4,30	61,41	,6084
33	,87184 ,87303		27,02	124,68	2,34	80,21 79,72	,7945 ,7897	83 84			67,96 68,77	163,63	4,33	60,82	,6055
100 + 35	-		28,66	126,21	2,45	79,23	,7849	100 + 85		-	69,59	165,21	4,38	60,53	,5997
36	,87533	3 -	29,48	126,98	2,50	78,75	,7802	86	,91581		70,41	165,99	4,42		5968
37	87644	-	30,30	127,75	2,55	78,27	77755	87	,91638	3	71,24	166,78	4,46	59,96	,5940
38	87754	H -	31,12	128,52	2,60	77,80		88	,91694	1 -	72,05	167,57	4,48	59,68	
	,8786		31,93	129,30	2,63	77,34			,91749		72,87	168,36	4,51	59,40	,5884
100 + 40	88077 88077		32,75	130,07	2,68	76,89	1	100 + 90	,91802	-	73,69	169,15 169,94	4,54	59,12,	,5857 ,5830
4:	2 ,88182	2	34,39	131,61	2,78	75,98			,9191		75,32	170,73	4,57	58,57	,5803
4:	,8828	7 -	35,20	132,38	2,82	75,54			,91964		76,14	171,52	4,62	58,30	,5776
44	,88390	_	36,02	133,15	2,87	75,10		94	,92016		76,97	172,32	4,65		
100 + 4	,8849	1 -	36,84	133,92	2,92	74,67		100 + 99	,9206		77,78	173,11	4,67	57,77	,5723
40	,88590		37,66	134,69	2,97	74,24			,92118		78,59	173,88	4,71	57,51	,5698
4	,8878	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	38,48	135,47	3,01	73,82			,9210		79,41	174,67	4,74	1 /	
	,8887		40,12	1			,7231		92270			176,26			
													1 /		

HEAT 76°

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ı.	II.	III.	IV.	v.	VI.	VII.	VIII.	ı.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Water and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
	gravity.	by	by	mixture.	tion_of	tity of	multi-	spirit by	gravity.	by	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
weight.	-	mea- sure.	measure.		buik.	spirit per cent.	pliers.	weight.		mea- sure.	measure.	į.		per cent.	phers.
									 					,	
W. + Sp.								W. + Sp.							
100+100	,92320	100	81,88	177,06	4,82	56,48	,5595	100 50	,95255,	100	163,76	257,40	6,36	38,85	,3849
	,92370		82,71	177.86	4,85	56,22	,5569		,95325		167,10	260,71	6,39	38,36	,3800
- 1	,92420		83,56 84,42	178,68	4,88	55,96	,5544		,95395		170,58	264,17 267,78	6,41 6,43	37,85	,3750
	,92519		85,30	179,51 180,36	4,91 4,94	55,70 55,44	,5518		,95464 ,95534		177,99	271,54	6,45	36,82	,3649
	,92569		86,19	181,22	4,97	55,18	,5466		,95603		181,95		6,49	36,30	,3596
	,92619		87,10	182,11	4,99	54,91	,5440		,95674		186,09	279,57	6,52	35,77	,3544
	,92669		88,03	183,02	5,01	54,64	,5413	43	95744		190,42	283,89	6,53	35,22	,3490
	,92720	_	88,99	183,95	5,04	54,36	,5386	42	,95814	-	194,95		6,54	34,67	,3435
	<u>92771</u>		89,97	184,91	5,06	54,08	,5358		,95885		199,71	-	6,56	34,11	,3379
	,92822		90,97	185,89	5,08	53,80	,5330	100 + 40		-	204,70		6,59 6,61	33,54	,3323
	,92874 ,92927		91,99 93,04	186,87 187,90	5,12 5,14	53,51 53,22	,5302	39 38			209,95	303,34	6,61	32,37	,3208
	,92980		94,11	188,94	5,17	52,93	,5244	37	,96169	_	221,29	314,67	6,62	31,77	,3148
~ ~ !	,93034		95,20	190,00	5,20	52,63	,5214	36	1		227,44		6,63	31,17	,3088
100 + 85	,93089	_	96,32	191,08	5,24	52,33	,5184	100 + 35	,96314		233,94	327,31	6,63	30,55	,3027
84	,93145		97,47	192,20	5,27	52,03	,5154	34	,96386		240,82	334,19	6,63	29,92	,2965
	,93201	-	98,64	193,35	5,29	51,72	,5124	33			248,12		6,62	29,28	,2901
	,93258	-	99,85	194,52	5,33	51,41	,5093 ,5062	32	,96532 ,96606	-	255,88 264,13	0.17. /	6,61 6,60	28,63 27,97	,2836
	,93314			195,72	5,37	51,09					-	357,53	6,61	27,30	,2771
• 1	,93370		102,35	196,94	5,41 5,44	,50,77 50,44	,5030 ,4998	100 30	,96680 ,96756		272,93 282,34	375,75	6,59	26,61	,2637
	93483		104,97	199,51	5,46	50,12	,4965	28			292,43	385,86	6,57	25,91	,2568
77	,93540		106,34	200,85	5,49	49,79	,4932	27			303,25	396,72	6,53	25,21	,2498
	93597		107,74	202,21	5,53	49,45	, 4899	26	,96984		314,92		6,52	24,49	,2426
	,93653		109,17	203,62	5,55	49,10	,4865	100 + 25	,97062	-	327,52		6,50	23,75	,2353
	,93712		110,64	205,06	5,58	48,76	,4831	24	, , ,		341,17	434,70	6,47	23.00	,2279
	,93770	- 1	112,15	206,56 208,09	5,59 5,62	48,41 48,06	,4796 ,4761	23	,97223		356,00 372,18	449,56	6,44 6,40	22,24	,2204
71	,93888	3	115,32	200,65	5,67	47,70	,4725	21	,97305 ,97389		389,90	483,54	6,36	20,68	,2049
-	,93949		116,97	211,27	5,70	47,33	,4689	100 + 20	,97473		409,40		6,31	19,88	,1969
	,94010		118,66	212,93	5,73	46,96	,4653		,97560	1 1	430,94	524,69	6,25	19,06	,1888
	,94072		120,40	214,64	5,76	46,59	,4616	18	,97648	_	454,89	548,69		18,22	,1806
6.61	,94134	_	122,20	216,41	5,79	46,21	,4578	17	,97739		481,65		6,14	17,37	,1722
	,94197	_	124,06	218,22	5,84	45,82	,4540	16	171 3		511,75		6,07	16,51	,1636
100 + 65	,94262 ,94325	_	125,97	220,10	5,87	45,43	,4501 ,4462	100 + 15			545,87 584,86	639,88 678,96	5,99	15,63	,1548
63	,94325	_	127,93 129,96	224,03	5,90 5,93	45,04 44,64	,4422	12	,98120	_	629,85	724,04	5,81	13,81	,1368
62	,94454		132,05	226,10	5,95	44,23	,4382	12	,98222	_	682,34	776,62	5,72	12,87	,1276
61	,94520	_	134.,22	228,22	6,00	43,82	,4341	11	,98328		744,37	838,76	5,61	11,92	,1181
100 + 60	,94585		136,46	230,43	6,03	43,40		100 + 10			818,80		5,52	10,95	,1085
59	,94651		138,77	232,70	6,07	42,97	,4258	9	,98550		909,78	1004,40	5,38	9,96	,0986
58	,94718 ,94785		141,16 143,64	235,06	6,10 6,14	42,54 42,10	,4215 ,4172	8 7	,98668 ,98791		1023,51	1118,26 1264,60		8,94 7,91	,0886 ,0783
	,94/05		143,04	237,50	6,18	41,66	,41/2	7 6	,98918		1364,68	1459,69		6,85	,0679
_	,94920		148,86	242,65	6,21	41,21	,4.083	100 + 5	27.7	-	1637,62	-	4,87	5,77	,0572-
54	,94986	_	151,59	245,37	6,22	40,75	,4038	4			2047,03	2142,33	4,70	4,67	,0462
53	,95053		154,44	248,20	6,24	40,29	,3992	3	,99337	-	2729,36	2824,82	4,54	3,54	,0351
	,95121	-	157,43	251,15	6,28	39,82	,3945	2			4094,04	4189,62	4,42	2,39	,0236
51	ا95188,		160,53	254,23	6,30	*39,33	,3897	I	,99650		0100,08	8283,78	4,301	1,21	,0120

HEAT 77°.

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I.	II.	III.	IV.	V.	VI.	VII.	VIII.	∘ I	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water-by	Specific	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan-	Decimal multi-	Spirit and			Water	Bulk of mixture.	Dimi-	Quan-	Decimal
weight.	gravity.	mea-	measure.	mixture.	bulk.	tity of spirit	pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.		}		per cent.				sure.			bulk.	per cent.	1
$\overline{\mathrm{sp.} + \mathrm{W.}}$			` , '					Sp. + W.	,		2 2		``		
100 + 0	,81680	100		100,00	_	100,00	,9901	100 + 50	88922	100	40,92	137,78	3,14	72,58	,7186
1		_	0.82	100,72	0,10	99,29	,9830	51	,89017		41,74	138,56	3,18	72,17	,7146
2			1,64	101,44	0,20	98,59	,9761		,89106		42,56	139,33	3,23	71,77	,7106
3			2,46 3,28	102,16	0,30	97,89	,969 2 ,9624		,89195		43,37	140,11	3,26	71,37	,7067
100 + 5	,82780		4,10	103,61	0,40	97,21		54	,8928 <u>3</u> ,89369		44,19	140,89	3,30	70,98	,7028
100 + 5			4,91	103,01	0,49	95,84	,9556 ,9490	100 + 55 56	,89453	_	45,83	141,00	3,35	70,59 70,21	56989 56951
\ 7	,83183		5,73	105,07	0,66	95,17	,9423	57	,89536	_	46,64	143,22	3,42	69,82	,6913
/8	,83378		6,55	105,81	0,74	94,51	,9357	58	,89619		47,46	144,00	3,46	69,44	,6875
9	,83568		7,36	106,54	0,82	93,86	,9292	59	,89700		48,28	144,78	3,50	69,06	,6838
100 + 10		_	8,18	107,28	0,91	93,21	,9229	100 + 60	,89780		49,10	145,56	3,54	68,69	,6801
ΙΙ	,83933	<u> </u>	9,00	108,02	0,98	92,57	,9166	61		_	49,92	14.6,35	3,57	68,33	,6766
12	. I		9,82	108,77	1,05	91,94	,9103		,89934		50,74	147,13	3,61	67,96	,6730
13 14			10,64	109,51	1,13	91,31	,9041 ,8980	, ,	,90010		51,56	147,91	3,65	67,60	,6694
100 + 15			11,46		1,20	90,69		64		-	52,38		3,69	66,90	,6659
16			12,28	111,01 111,76	1,27	90,08 89,47	,8919 ,8859	100 + 65 66	990159		53,19	149,48 150,26	3,71 3,76	66,55	,6623
- 1 7			13,91	112,51	I,34 I,40	88,87	,8800	. 67	,90235 ,90309		54,84	151,04	3,80	66,20	,6555
18			14,73	113,27	1,46	88,28	,8741	68	,90382		55,65	151,81	3,84	65,86	,6521
19	,85244	_	15,55	114,02	1,53	87,70	,8683	. 69	,90454		56,47	152,60	3,87	65,53	,6488
100 + 20			16,36	114,78	1,58	87,12	,8626	100 + 70	,90523		57,28	153,38	3,90	65,19	,6454
2 I	,85544	ļ —	17,18	115,53.	1,65	86,55	,8570	71	,90594		58,11	154,17	3,94	64,86	56422
22	,85690	-	18,00	116,29	1,71	85,99	,8514	72	,90662		58,92	154,96	3,96	64,53	,6389
23	,85834	_	18,82	117,04	1,78	85,44	, ⁸ 459	73	,90729		59,74	155,75	3,99	64,20	,6357
1	,85975		19,64	117,80	1,84	84,89	,8404	74			60,56	156,53	4,03	63,88	,6325
100 + 25 26		-	20,46	118,56	1,90	84,34	,8350	100 + 75	,90862		61,38	157,31	4,07	63,57	,6293
20 27	12 TX		21,28	119,32	1,96	83,80	,8297	76	,90926		62,20	158,11	4,09	63,25	,6262
28			22,10	120,09	2,01 2,07	83,27	,8244 ,8192	77 78	,90990 ,91054		63,02 63,84	158,89	4,13 4,17	62,62	,6231
29		_	23,73	121,61	2,12	82,23	,8141	70 79	,91117		64,65	160,46	4,19	62,32	,6170
100 + 30	-		24,56	122,38	2,18	81,72	,8090	$\frac{79}{100 + 80}$			65,47	161,24	4,23	62,02	,6140
31			25,36	123,14	2,22	81,21	,8040	. 81		t ·	66,29	162,04	4,25	61,71	,6110
32			26,19	123,91	2,28	80,71	,7990	82			67,11	162,82	4,29	61,41	,6081
1	,87136	-	27,01	124,67	2,34	80,21	7941,	83	,91361	_	67,92	163,61	4,31	61,13	,6052
34			27,83	125,44	2,39	79,72	5 7893		,91420		68,74	164,40	4,34	60,83	,6023
100 + 35			28,65	126,20	2,45	79,23	,7845	100 + 85			69,56	165,19	4,37	60,54	,5994
36	87485	-	29,46	126,97	2,49	78,75		86	,91536	<u> </u>	70,38	165,98	4,40	60,25	,5965
37	,87596 ,87706		30,28	127,74	2,54	78,27		87	,91593	T .	71,20	166,76	4,44	59,97	,5937
20	,8781		31,10	129,29	2,59	77,81	,7704 ,7658	80	,91649 ,91704		72,02	167,55	4,47 4,50	59,68	,5909 ,5881
100 + 40			32,74	130,06	2,68	76,89		100 + 90			73,66	169,13	4,53	59,13	,5854
41	88020		32,74	130,83	2,73	76,43	,7568		,91750		74,48	169,92	4,56	58,85	,5827
	,88134		34,37	131,60	2,77	75,99	7523		,91866		75,29	170,71	4,58	58,58	5800
43	,88230		35,19	132,37	2,82	75,55	,7479		,91920		76,11	171,50	4,61	58,31	,5773
44	,88343		36,01	133,14	2,87	75,11	,7436		,91972		76,93	172,29	4,64	58,04	•5747
100 + 45	,88442	-	36,83	133,91	2,92	74,68	,7393	100 + 95	,92023	_	77,75	173,08	4,67	57,77	,5720
46	,88543	; —	37,64	134,68	2,96	74,25	,7351	96	,92074	⊢	78,56	173,86	4,70	57,51	,5695
	,88640		38,46	135,46	3,00	73,82	,7309		,92125		79,37	174,65	4,72	57,26	,5669
48			39,28	136,23	3,05	73,40			,92175		80,20	175,44	4,76	57,00	,5643
1 49	1.88831	1	140,10	137,01	3,09	1 /2,99	,7227	99	,92226	l —	81,01	176,23	14,78	56,74	,5618

HEAT 77°.

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I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	H.	111.	IV.	v.	VI.	VII.	VIII.
Water and		Spirit		Bulk of	Diminu-	Quan-	Decimal	Water and	Specific	Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	spirit by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent.				sure.				per cent.	
W. + Sp.							1 .	W. + Sp.	2.						
100 + 100	02275	100	81,84	177.01	1 00	r6 (0)				100	160.60		6.0	38,86	,3847
3	,92326	-	82,67	177,04	4,80	56,48 56,23	,5592	100 + 50 49	,95289		163,68	² 57,34 260,64	6,38	38,36	,3798
98	- 0,5	_	83,52	178,66	4.86	55,97	55541		,95359		170,50	264,11	6,39	37,86	,3748
	,92425		84,38 85,26	179,49	4,89	55,71 55,44	,5516	47 46			174.13	267,71 271,46	6,42	37,35	,3698
100 + 95			86,15	181,20	4.95	55,18	,5464	100 + 45			181,86	275,39	6,47	36,31	,3595
94	92575ء		87,06	182,09	4,97	54,92	,5437	44	,95640	-	186,00	279.50	6,50	35,77	,3542
93 92	1 - 2		87,99 88,95	183,00	4,99 5,02	54,65 54,37	,5410	43 42	,95710		190,33	283,81	6,52	35,23 34,68	,3489
91	1 -		89,93	184,89	5,04	54,08	,5355	4I		_	199,61		6,54	34,12	,3378
100 + 90		_	90,93	185,86	5,07	53,80	,5327	100 + 40	,95922		204,60	298,03	6,57	33,55	,3322
89 88	,92830		91,95	186,84 187,87	5,11	53,51	,5299 ,5270	39 38			209,85	303,26	6,59 6,60	32,97 32,38	,3265
87		_	94,07	188,91	5,16	52,94	,5241	3° 37	1		221,19		6,60	31,78	,3147
86	92991	_	95,16	189,97	5.19	52,64	,5212	36	,96211	_	227,34		6,62	31,18	,3087
100 + 85	,93046		96,28	191,05	5,23	52,34	,5182	100 + 35	,96280		233,83	327,21		30,56	,3026
			97,43 98,60	192,17	5,26	52,04	,5152 ,5121	34 33		_	240,71 248,00	334,09	6,60	29,93	,2964, ,2900
82	93215		99.80	194,48	5,32	51,42	,5090	32	,96503	_	255,76	349,16	6,60	28,64	,2835
81	93272		101,04	195.68	5 36	51,10	,5059	31			264,01		6,60	27,98	,2770
100 + 80 79	•93327 •93385		102,30	196,91 198,17 \	5,39 5.42	50,78 50.45	,5028 ,4996	100 + 30	,96652 ,96728		272,80 282,21	366,20	6,60 6.48	27,31 26,62	,2704
78	,93441		104,92	199,47	5,45	50,12	,4963	2 8	,96804		292,29	385,73	6,56	25,92	,2567
77 76	,93498 ,93555	_	106,29	200,81	5,48	49,80	4930		,96881		303,11	396,58	6,53	25,22	,2497
100 + 75	,93611		109,12	202,18	5,51	49,46	,4897° ,4863	$\frac{26}{100 + 25}$,96958 ,97038	_	$\frac{314,77}{327,37}$	408,25		24,50	,2426
74	,93670		110,59	205,03	5,56	48,77	,4829		,97117		341,01		6.47	23,01	,2279
73	100		112,10	206,52	5,58	48,42	,4794		,97199	-	355,83	449,39	6 44	22,25	,2203
71	,93784 ,93847		113,66	208,06 209,62	5,60 5,65	48,07 47,70	,4759 ,4723		,97282 ,97366	_	372,00 389 , 72	483.35	6,40 6,37	21,48	,2126
100 + 70	.93908		116,92	211,24	5,68	47.34	,4687				409,21		$\frac{6.37}{6.32}$	19,89	,1969
	,93969		118,60	212,90	5,70	46,97	,4651	19	,97538	-	430,74	524,48	6,26	19,07	,1888
68	,94031 ,94094		120,35	214,60	5,75 5,77	46,59 46,22	,4614 ,4576		,97627		454,67 481,42	548,47	6,20 6,14	18,23	,1805
66			124,00	218,18	5:82	45,83	,4538	16	,97810	_	- 511,51	575,28 605,43	6.08	16,52	,1636
100 + 65			125,91	220,05	5,86	45,44	,4499	100 + 15	,97905	-	545,61	639,61	6,00	15,63	,1548
	,94285 ,94350		127,87	221,99	5,88	45,04	,4460	14	,98003	-	584,58	678,68	5,90	14,73	,1459
62	,94415		129,90	223,98	5,92 5,94	44,64	,4421 ,4380	1 3 I 2	,98101 ,98203		629,56 682,02	723,73	5,83	13,81	,1368 ,1275
61	,94481		134,16	228,18	5,98	43,82	,4339	11	,98310		744,02	838,40	5,62	11,93	1181
100 + 60			136,39	230,38	6,01	43,41		100 + 10		_	818,42	912,89	5,53	10,95	,1085
	,94613 ,94680		138,70	232,65 235,01	6,05	42,98	,4256	9 8	,98533 ,98651		909,36	1003,96	5,40	9,96	,0986 ,0886
57	,94747	-	143.57	237,45	6,12	42,11	,4170	7	,98775		1169,21	1264,03	5,18	7,91	,0783
	,94810	******	146,14	239,98	6,16	41,67	,4126	6	,98902		1364,04	1459,02	5,02	6,85	,0679
100 + 55	,9488z ,94948		148,79	242,60	6,19	41,21	,4081		,99036		2636,85 2046,06	1731,95	4,90	5,77	,0572
	,95016		54,37	245,31	6,22	40,76	,4036 ,3990		,99176		2728,08	2141,34 2823,50	4,72	4,67 3,54	,0462 ,0351
52	,95084		157,36	251,09	6,27	39,83	,3943	2	,99476		4092,12	4187,66	4,46	2,39	,0236
51	,95151		160,45	254,18	6,27	39,34	,3895	. 1	,99636		8184,23	8279,90	4,33	1,21	,0120

HEAT 78°.

1															-
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure	Bulk of mixture,	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Spirit and water by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	tity of	Decimal multi- pliers.
Sp. + W.								Sp. + W.					-		
100 + 0 1 2 3 4	,81861 ,82086 ,82308 ,82522	_	0,82 1,64 2,46 3,28	100,00 100,72 101,44 102,16 102,88	0,10 0,20 0,30 0,40	100,00 99,29 98,59 97,89 97,21	,9894 ,9824 ,9755 ,9686 ,9618	100 + 50 51 52 53	,88969 ,89059 ,89148		40,90 41,72 42,54 43,35 44,17	137,77 138,55 139,32 140,10 140,88	3,13 3,17 3,22 3,25 3,29	72,59 72,18 71,78 71,38 70,99	,7182 ,7142 ,7102 ,7063 ,7024
8 9	,82730 ,82935 ,83134 ,83328 ,83518		4,09 4,91 5,73 6,55 7,36	103,60 104,34 105,07 105,81 106,54	0,49 0,57 0,66 0,74 0,82	96,52 95,85 95,18 94,52 93,86	,9551 ,9484 ,9418 ,9352 ,9287		,89321 ,89406 ,89489 ,89572 ,89653		44,99 45,81 46,62 47,44 48,26	141,65 142,43 143,21 143,99 144,77	3,34 3,38 3,41 3,45 3,49	70,60 70,21 69,83 69,45 69,07	,6985 ,6947 ,6909 ,6872 ,6835
11 12 13 14	,83883 ,84059 ,84231 ,84400		8,18 9,00 9,82 10,63 11,45	107,28 108,02 108,77 109,51 110,26	0,90 0,98 1,05 1,12 1,19	93,21 92,57 91,94 91,31 90,69	,9223 ,9160 ,9098 ,9035 ,8974	62 63 64	,89811 ,89888 ,89964 ,90039	_	49,08 49,89 50,71 51,53 52,35	145,55 146,33 147,11 147,89 148,68	3,53 3,56 3,60 3,64 3,67	68,70 68,34 67,97 67,61 67,26	,6798 ,6762 ,6726 ,6690 ,6655
16 17 18 19	,84564 ,84727 ,84886 ,85042 ,85195		12,27 13,09 13,91 14,73 15,54	111,01 111,76 112,51 113,26 114,02	1,26 1,33 1,40 1,47 1,52	90,08 89,47 88,88 88,28 87,70	,8914 ,8854 ,8795 ,8736 ,8678	66 6 ₇ 68	,90407	=	53,16 53,99 54,81 55,62 56,44	149,46 150,24 151,02 151,80 152,58	3,70 3,75 3,79 3,82 3,86	66,91 66,56 66,21 65,87 65,54	,6620 ,6586 ,6552 ,6518 ,6484
2 I 22	,85347 ,85495 ,85641 ,85784 ,85926		16,35 17,18 18,00 18,82 19,63	114,78 115,53 116,29 117,04 117,80	1,57 1,65 1,71 1,78 1,83	87,13 86,56 85,99 85,44 84,89	,8622 ,8565 ,8509 ,8454 ,8400		,90547	— -	57,26 58,08 58,89 59,71 60,53	153,36 154,16 154,94 155,73 156,51	3,90 3,92 3,95 3,98 4,02	65,20 64,87 64,54 64,22 63,89	,6451 ,6419 ,6386 ,6354 ,6322
26 27 28	,85064 ,86200 ,86333 ,86465 ,86594		20,45 21,27 22,09 22,90 23,72	118,56 119,32 120,08 120,84 121,60	1,89 1,95 2,01 2,06 2,12	84,34 83,80 83,27 82,75 82,23	,8346 ,8293 ,8240 ,8188 ,8137	100 + 75 76 77	,90816 ,90880 ,90945 ,91008		61,35 62,17 62,99 63,81 64,62	157,29 158,09 158,87 159,65 160,44	4,06 4,08 4,12 4,16 4,18	63,57 63,26 62,94 62,63 62,33	,6290 ,6259 ,6228 ,6197 ,6167
100 + 30 31 32 33 34	,86719 ,86844 ,86967 ,87089 ,87208		24,54 25,35 26,18 26,99 27,81	122,37 123,14 123,91 124,67 125,44	2,17 2,21 2,27 2,32 2,37	81,72 81,21 80,71 80,22 79,73	,8086 ,8036 ,7986 ,7937 ,7889	100 + 80 81 82 83 84	,91136 ,91195 ,91255		65,44 66,26 67,08 67,89 68,71	161,22 162,02 162,81 163,59 164,38	4,22 4,24 4,27 4,30 4,33	62,02 61,72 61,43 61,13 60,83	,6137 ,6107 ,6078 ,6049 ,6020
36 37 38 39	,87324 ,87437 ,87548 ,87658 ,87767		28,64 29,45 30,27 31,09 31,90	126,20 126,97 127,73 128,51 129,28	2,44 2,48 2,54 2,58 2,62	79,24 78,76 78,28 77,81 77,35	,7841 ,7793 ,7746 ,7700 ,7654	87 88	,91432 ,91490 ,91547 ,91603 ,91659	_	69,53 70,35 71,17 71,98 72,80	165,17 165,96 166,74 167,53 168.32	4,36 4,39 4,43 4,45 4,48	59,69	,5991 ,5962 ,5934 ,5966 ,5878
42 43 44	,87981 ,88086 ,88191 ,88295		32,72 33,54 34,36 35,17 35,99	130,06 130,83 131,59 132,36 133,13	2,66 2,71 2,77 2,81 2,86	76,89 76,44 75,99 75,55 75,11	,75 ⁶ 4 ,75 ¹ 9 ,7475 ,743 ²	92 93 94	,91767 ,91821 ,91875 ,91928	_	73,62 74,44 75,25 76,08 76,90	169,11 169,90 170,69 171,48 172,27	4,51 4,54 4,56 4,60 4,63	58,32 58,05	,5851 ,5824 ,5797 ,5770 ,5744
47 48	,88496 ,88593	_	36,81 37,62 38,44 39,26 40,08	133,90 134,67 135,45 136,22 137,00	2,91 2,95 2,99 3,04 3,08	74,68 74,25 73,83 73,41 73,00	,7389 ,7347 ,7305 ,7264 ,7223	97 98	,91979 ,92030 ,92081 ,92131		77,71 78,52 79,33 80,16 80,97	173,06 173,83 174,63 175,42 176,20	4,65 4,69 4,70 4,74 4,77	57,52 57,26	,5717 ,5692 ,5666 ,5641 ,5616

HEAT 78%.

ı.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and	Specific		Water	Bulk of	Diminu-	Quan-	Decimal	Water and	Specific	1 1	Water	Bulk of	Dimi-	Quan-	Decim
spirit by	gravity.	bу	by	mixture.	tion of	tity of	multi-	spirit by	gravity.	by	by	mixture.	nuti-	tity of	multi-
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of bulk.	spirit per cent.	pliers
V. + Sp.								$W_{\bullet} + Sp.$							
00+100	,02230	100	81,80	177,01	4,79	56,49	,5590	100 + 50	,05183	100	163,60	257,28	6,32	38,87	,384
	,92281	_	82,63	177,81	4,82	56,23	,5564	49			166,94		6,36	38,37	379
98	1 00	_	83,48	178,63	4,85	55,97	,5539	,	,95323		170,42	264,04	6,38	37,87	37.4
97	,92381		84,34	179,46	4,88	55,71	,5513	47	,95394		174,05	267,64	6,41	37,36	,369
96			85,22	180,31	4,91	55,45	,5488		,95465		177,83		6,44	36,84	,362
00 + 95 94	1	_	87,02	181,17 182,07	4,94 4,95	55,19 54,93	,5461 ,5434	100 + 45 44			181,78 18 5, 91	275,32 279,43	6,46	36,32 35,78	359 354
93			87,95	182,97	4,98	54,65	,5407	43	,95677		190,24	283,74	6,50	35,24	3348
92	1		88,91	183,90	5,01	54,37	,5380		,95748		194,77	288,26	6,51	34,69	>343
91		_	89,89	184,86	5,03	54,09	,5352	41			199,52	292,99	6,53	34,13	•33
00 + 90			90,89	185,84	5,05	53,81	,5324	100 + 40	,95890	-	204,51	297,95	6,56	33,56	ء33ء
89 88	,92786		91,91	186,81	5,10	53,52	,5296 ,5267	39 38	,95962		209,75	303,18 308,69	6,57	32,98	
87	,92894		92,95 94,02	187,84 188,88	5,11	53,24 52,95	,5238	37			215,27	314,50	6,58	32,39 31,79	,320
86			95,11	189,94	5,17	52,65	,5209	36	1 1		227,23	320,64		31,19	ı
00 + 85			96,23	191,03	5,20	52,35	,5179	100 + 35			233,72		-	30,57	,30
84	,93059		97,38	192,14	5,24	52,05	,5149	34	,96326	· -	240,59	333,99	6,60	29,94	,29
83	, , ,		98,55	193,28	5,27	51,74	,5119		,96400) —	247,89		6,59	29,30	,29
82 81	1-23 1		99,75	194,45	5,30	51,42	,5088	32	,96474		255,64 263,88	349,05		28,65	,28
00 + 80			101,00	195,65	5,35	51,11	,5057	31			272,67	357,30	-	27,99	,27
79 - 79	,93285		102,25	196,87	5,38 5,41	50,79 50,46	,5025 ,4994	100 + 30			282,08	375,50		27,32	
78	,93399		104,87	199,44	5,43	50,13	,4961	28			292,15	385,60		25,93	,25
77	,93456	(106,24	200,78	5,46	49,81	,4928	27	,96855		302,97	396,44	6,53	25,23	,24
76			107,64	202,14	5,50	49,47	,4895	26	1200	-	314,62	408,10		24,50	
00 + 75	,93570		109,07	203,55	5,52	49,12	,4861	100 + 25			327,21	420,72	6,49	23,77	,23
74 73	,93629 ,93687		110,54	205,00 206,48	5,54	48,78	,4827		97093	,	340,85 355,66	434,38 449 ,22		23,02	,22
73	93743		112,61	208,02	5,57	48,08	,479 2 ,4757	23 22	,		371,83	466,43	6,40	21,49	,21
71	1		115,21	209,58	5,63	47,71	,4721	21	1		389,54		6,37	20,69	,20.
00 + 70			116,86	211,20	5,66	47,35	,4685	100 + 20		_	409,02	502,70	6,32	19,89	,19
69	,93928		118,54	212,86	5,68	46,98	,4649		,97516	<u> </u>	430,54		6,27	19,07	,18
68 67	177777	_	120,29	214,56	5,73	46,60	,4612	18			454,46	548,26		18,23	
66	,94054 ,94117	_	122,08	216,33 218,14	5,75 5,80	46,23 45,84	,4574 ,4536	17	,97697 ,9779°		481,20 511,27	575,05 605,18	6,15	17,39 16,53	,17
00 + 65	1 1		125,85	220,01	5,84	45,45		100 + 15			545,35	639,35		15,64	
64	,94246		127,81	221,95	5,86	45,05	,4458	14	,97983	_	584,30	678,40	5,90	14,74	14
63	,94311		129,84	223,94	5,90	44,65	,4419	13	,98082	:\ —	629,26	723,42	5,84	13,82	
62			131,93	226,00	5,93	44,24	,4378		,98185		681,70	775,96	5,74	12,88	
	,94442		134,10	228,13	5,97	43,83	,4337		.98292		743,67	838,04	-	11,93	,11
00 + 60			136,33	230,33	6,00	43,42	,4296	100 + 10	,98401		818,03	912,49		10,96	,10
	,94575 ,94642	_	138,64	232,60 234,96	6,04	42,99 42,56	,4254 ,4211	8	,98516 ,98635		908,93	1003,52	5.20	9,97 8,95	,09
	94709		143,50	237,40	6,10	42,12	,4168	1	,98759		1168,65	1263,46	5,10	7,91	,07
	,94776		146,07	239,93	6,14	41,68	,4124		,98887		1363,40	1458,35	5,05	6,86	,06
00 + 55			148,72	242,55	6,17	41,22	,4079	100 + 5			1636,08	1731,16	4,92	5,78	,05
54	,94911		151,45	245,26	6,19	40,77	,4034		,99161		2045,10	2140,35	4,75	4,67	,04
	,94979		154,30	248,09	6,21	40,31	,3988	3			2727,80	2822,19	4,61	3,54	, -
	,95047 ,95115	5	157,28 160,38		6,24	39,83	,3941 ,3894		,99462		4090,20	4185,70 8276,03	14,50	2,39	,02

HEAT 79°.

	T. T.		77.7	**************************************	***						T 7 7	* 7	.,,	1777	
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Spirit and water by	gravity.	Spirit by	Water by	Bulk of mixture.	Diminu- tion of	Quan- tity of	Decimal multi-	Spirit and water by	Specific gravity.	Spirit by	Water by	Bulk of mixture.	Dimi- nuti-	Quan- tity of	Decimal multi-
weight.		mea- sure.	measure.		bulk.	spirit per cent.	pliers.	weight.		mea- sure.	measure.		on of	spirit per cent.	pliers.
						Per cent.	· ·						-	Per conce	
Sp. + W.								Sp. + W.							
100 + 0		100	_	100,00		100,00	,9888	100 + 50	,88829	100	40,88	137,76	3,12	72,59	,7178
1 2	1.0	_	0,82	100,71	0,11	99,29	,9818	51	,88921 ,89011		41,70 42,52	138,54	3,16	72,18	,7138
3	,82258	_	2,45	102,15	0,30	97,89	,9749 ,9680	53			43,33	140,09	3,24	71,39	,7059
4	,824.72		3,27	102,87	0,40	97,21	,9612	54	,89187		44,15	140,87	3,28	71,00	,7020
100 + 5	,82681	_	4,09	103,60	0,49	96,52		100 + 55	,89273		44,97	141,64	3,33	70,60	,6981
6	,82885 ,83084		4,90 5,72	104,33	0,57	95,85	,9478 ,9412	56 57		_	45,79 46,60	142,42 143,20	3,37	70,21	,6943
8			6,54	105,80	0,74	94,52	,9346	58	,89525	_	47,42	143,98	3,44	69,45	,6868
9			7,35	106,53	0,82	93,86	,9281		,89606	-	48,24	144,76	3,48	69,07	,6831
100 + 10	,83652		8,18	107,27	0,91	93,22	1 /	100 + 60	1		49,06 49,87	145,54	3,52	68,70 68,34	6794
11	1 20 00		9,00	108,76	0,98	92,58	,9155		1 ~		50,69	140,32	3,55	67,97	,6759
*	,84182		10,63	109,50	1,13	91,32	,9030	63	,89918		51,51	147,88	3,63	67,61	,6687
14	-	-	11,45	110,26	1,19	90,70	,8969	64			52,32	148,66	3,66	67,26	,6651
100 + 15			12,27	111,01	1,26	90,09	,8908	100 + 65			53,14	149,45	3,69	66,91 66,56	,6617 ,6583
16	1 0 0		13,09	111,76	1,33	89,48	,8848 ,8790		,90142		53,96 54,78	150,23	3,73	66,21	,6549
	,84993		14,72	113,26	1,46	88,29	,8731	68	,9028		55,59	151,79.	3,80	65,87	,6515
19	,85146		15,54	114,02	1,52	87,70	,8673	69	,90361		56,41	152,57	3,84	65,54	,6482
100 + 20			16,35	114,78	1,57	87,13	,8617	100 + 70	1	1	57,23	153,35	3,88	65,21	,6448
21	,85446 ,85592		17,17	115,52	1,65	86,56		7 1 7 2		1	58,05	154,15	3,90	64,87	,6416
4 23	,85735	-	18,81	117,03	1,78	85,45	,8449	73	1		59,68	155,71	3,97	64,22	,6351
24	,85877		19,62	117,79	1,83	84,90	,8395	74		-	60,50	156,49	4,01	63,90	
100 + 25			20,44	118,55	1.89	84,35	,8341	100 + 75	90779) -	61,32	157,28	4,04	63,58	,628.7
26 27	1000		21,26	119,31	2,00	83,81	,8288	76 77			62,96	158,07	4,07 4,11	63,26	,6256
28	,86416	5 -	22,89	120,84	2,05	82,76	,8183	78	1	1	63,78	159,63	4,15	62,64	,6194
29			23,71	121,60	2,11	82,24	-	79			64,59	160,42	4,17	62,33	,6164
100 + 30			24,53	122,37	2,16	81,73	,8081	100 + 80	1	1	65,41 66,23	161,20 162,00	4,21	62,03	,6134
31			25,34	123,13	2,21	81,22	,8031	82	1		67,05	162,79	4,23	61,73	,6104
33	1 0		26,98	124,66	2,32	80,22	,7932	83	,91260	/	67,86	163,57	4,29	61,14	,6046
34			27,80	125,43	2,37	79,73	,7884	84			68,68	164,36	4,32	60,84	,6017
100 + 35	,87276		28,02	126,19	2,43	79,24	,7836	100 + 85	,91386		69,50	165,15	4,35	60,55	,5988
30	,87389 ,87500		29,43	127,73	2,47	78,76		87	,91444		70,31	165,94	4,37 4,4.I	60,26 59,98	,5959 ,59 3 1
	,87610		31,07	128,50	2,57	77,82	,7696	88	,91557		71,95	167,51	4,44	59,69	,5903
39	,87719		31,89	129,27	2,62	77,36			,9161	_	72,77	168,30	4,47	59,41	
100 + 40			32,71	130,05	2,66	76,90		100 + 90	,91668		73,59	169,09 169,88	4,50	59,14	
41	,87933 ,88038		33,53	130,82	2,71	76,44	,7560 ,7515	9	,91722		74,40	170,67	4,52	58,86 58,59	
43	,88143	3 -	35,16	132,35	2,81	75,56	,747 I	93	,91830	—	76,04	171,46	4,58	58,32	,5767
44	,88247	7	35,97	133,12	2,85	75,12	,74.28	94	,9188		76,86	172,24	4,62	58,05	
100 + 45	,88348	3 -	36,80	133,89	2,91	74,69		100 + 99			77,68	173,03	4,65	57,79	,5715
40	,88448 ,88540		37,60 38,42	134,66	2,94	74,26			,91986		78,48 79,29	173,81	4,67	57,53	
48	,8864	z —	39,24	136,21	3,03	73,41	,7260	98	,92087	/	80,12	175,40	4,72	57:01	,5638
49	,88736	<u> </u>	40,06	136,99	3,07	73,00	,7219	99	92138	3) —	80,93	176,18		56,75	,5613

HEAT 79°.

			·	-	·					· to a constant 20 for				·	
I.	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Diminu- tion of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.	Water and spirit by weight.	Specific gravity.	Spirit by mea- sure.	Water by measure.	Bulk of mixture.	Dimi- nuti- on of bulk.	Quan- tity of spirit per cent.	Decimal multi- pliers.
W. + Sp.						per tent.	·	W + Sp.		surc.		,		Per cent.	*
100 + 100	,92186 ,92237	100	81,76 82,59	176,98 177,79	4,78 4,80	56,50 56,24	,55 ⁸ 7 ,5562	100 + 50	,95147 ,95217	100	163,52 166,86	257,22 260,52		38,88 38,38	,3 ⁸ 45 ,3796
98 97	,92286 ,92337	_	83,44 84,30	178,61 179,44	4,83 4,86	55,98 55,72	,5536	48 47	,95288 ,95359	_	170,34 173,97	263,97 267,57	6,37 6,40	37,88 37,37	,3746 ,3696
100 + 95		_	85,18	180,29	4,89	55,46 55,20	,5485 ,5459	100 + 45			177,74	271,32	6,44	36,85 36,33	,3645
93	,92487 ,92537 ,92588		86,98 87,91 88,87	182,04 182,95 183,88	4,94 4,96 4,99	54,93 54,66 54,38	,5432 ,5405 ,5378	44 43 42	,95644	-	185,82 190,15 194,68	279,36 283,67 288,19	6,48	35,79 35,25 34,70	,3540 ,3487 ,3432
100 + 90		_	89,35 90,85	184,84	5,01 5,04	54,10 53,82	,5350		,95787 ,95858	_	204,41	292,91	6,52 6,54	34,14	,3376
			91,87 92,91 93,98	186,79 187,81 188,85	5,08 5,10 5,13	53,53 53,25 52,95	,5294 ,5265 ,5236	39 38 37	,95930 ,96003 ,96076	_	209,65 215,17 220,98	303,10 308,60 314,42	6,57	32,99 32,40 31,80	,3263 ,3205 ,3145
86	,92905 ,92960		95,07	189,91	5,16	52,65	,5207 ,5177	$\frac{36}{100 + 35}$,96149 ,96220		227,13	320,56	6,57 6,60	31,20	,3085
83	,93016 ,93072 ,93129		97,33 98,50 99,70	192,11 193,25 194,42	5,22 5,25 5,28	52,05 51,75	,5147 ,5117 ,5086	34 33	,96371	-	240,48 247,77	333,89 341,20 348,94	6,57	29,95 29,31 28,66	,2962 ,2899 ,2834
	,93187		100,95	195,62	5,33 5,36	51,43 51,12 50,80	,5055	31	,96445 ,96521 ,96596		255,52 263,76 272,54	365,96	6,58	28,00	,2769
79 78	,93301 ,93357	_	103,49 104,82	198,10	5,39 5,42	50,47 50,14	,499 2 ,4959	29 28	,96673 ,96750	_	281,95 292,01	375,38 385,47	6,57 6,54	26,6 ₄ 25,94	,2635
-	,93414 ,93472 ,93529	_	105,19	200,74. 202,11	5,45 5,48 5,51	49,81 49,47 49,13	,4926 ,4893 ,4 ⁸ 59		,96829 ,96908		302,83 314,47 327,06	396,30 407,95 420,57	6,52	25,23 24,51 23,78	,2496 ,2424 ,235 I
74	,93588 ,93646		110,49	204,96 206,45	5,53 5,55	48,79 48,44	,4825 ,4790	24	,97069	_	340,69 355,49	434,22 449,06	6,47 6,43	23,03	,2278
72 71	,93765		113,55	207,98 209,54 211,16	5,57 5,61	48,08	,4755 ,4719	22 2I	,97321		371,66 389,36	466, 2 6 482,99	6,37	21,49	,2125
	,93888 ,93951	_	118,49	212,82 214,52	5,64 5,67	47,36 46,99 46,61	,4683 ,4647 ,4610	100 + 20 19 18	,97494	-	408,83 430,34 454,25	502,51 524,07 548,04	6,27	19,90 19,08 18,24	,1968 ,1887 ,1804
66	,94077		122,02	216,29	5,73 5,78	46,23 45,85	,4572 ,4534	16	17111		480,97 511,03	574,82 604,94	6,09	17,39	,1720 ,1635
	,94142 ,94207 ,94272	,	125,79 127,75 129,78	219,97 221,91 223,90	5,82 5,84 5,88	45,46 45,06 44,66	,4495 ,4456 ,4417	100 + 15 14 13	,97865 ,97963 ,98063		545,10 584,03 628,97	639,09 678,12 723,12	5,91	14,75	,1547 ,1458 ,1367
62 61	,94337 ,94403	_	131,87	225,96 228,09	5,91 5,95	44,25 43,84	,4376 ,4336	12 11	,98167 ,98 2 74		681,38 743,32	775,63 837,68	5,75 5,64	12,89	,1275 ,1180
	,94469 ,94537 ,94604		136,27 138,57 140,95	230,28 232,55 234,91	5,99 6,02 6,04	43,43 43,00 42,57	,4294 ,4252 ,4209	100 + 10	,98384 ,98499 ,98619		817,65 908,51 1022,07	912,10 1003,08 1116,76	5,43	10,96 9,97 8 ,95	,1084 ,0986 ,0886
57 56	,94671 ,94738		143,43 146,00	237,35 239,88	6,08 6,12	42,13 41,69	,4166 ,4122	7	,98743 ,98872	_	1168,09 1362,76	1262,89 1457,69	5,20	7,92 6,86	,0678
	,94806 ,94874 ,94942		148,65 151,38 154,23	242,50 245,21 248,04	6,15 6,17 6,19	41,23	,4078 ,4033 ,3987	4	,99006		1635,31 2044,14	1730,37 2139,35 2820,86	4,79	5,78 4,67	,0571
52	,94942 ,95010 ,95079		157,21	250,98 254,06	6,23 6,25	39,84 39,36	,3940				2725,51 4088,27 8176,55	4183,74	4,53	3,54 2,39 1,21	,0351 ,0236 ,0120

HEAT 80°.

1 .	II.	III.	IV.	v.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII.
Spirit and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	1		Spirit	Water	Bulk of	Dimi-	Quan-	Decimal
water by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi- pliers.	water by weight.	gravity.	by mea-	by measure.	mixture.	nuti- on of	tity of spirit	multi- pliers.
		sure.				per cent.	Parote			sure.	,		bulk.		Pilet G.
Sp. + W.				,				Sp. + W.						-	
100 + 0	,81530	100		100,00		100,00	,9882	100 + 50	,88781	100	40,86	137,75	3,11	72,60	,7174
] 1	,81761	-	0,82	100,71	0,11	99,29	,9812	51	,88873		41,68	138,53	3,15	72,19	,7134
2 3	127		1,63 2,45	101,43	0,20	98,59 97,89	9743 9674	52	,88963 ,89052		42,50 43,31	139,30	3,20	71,79	,7094 ,7055
4	82422		3,27	102,87	0,40	97,21	,9606	54	1 0		44,13	140,86	3,27	71,01	,7016
100 + 5	,82631	_	4,09	103,60	0,49	96,52		100 - 55	,89225		44,95	141,63	3.32	70,61	,6977
6 7	,82835 ,83034		4,90 5,72	104,33	0,57	95,85 95,18	,9472 ,9406		,89310 ,89394		45,77 46,58	142,41	3,36	70 ,22 69,84	,6939 ,6901
8	,83228	_	6,54	105,80	0,74	94,52	,934.0	5/ 58			47,40	143,97	3,43	69,46	,6864
1	,83418		7,35	106,53	0,82	93,86	,9275		,89559		48,22	144,75	3,47	69,08	,6827
100 + 10	1		8,17	107,27	0,90	93,22		100 + 60	,89639 ,89718		49,04 49,85	145,53	3,51	68,71	,6791
	83960	_	9,81	108,01	1,05	92,58	,9149 ,9087	62	,89795		49,05 5 0,67	146,31 147,09	3,54 3,58	68,35	,6755 ,6719
13	,84133	_	10,62	109,50	1,12	91,32	,9025	63	,89871	_	51,49	147,87	3,62	67,62	,6683
14	1		11,44	110,25	1,19	90,70	,8964	64			52,30	148,65	3,65	67,27	,6648
100 + 15	1	_	12,26	111,00	1,26 1,33	90,09 8 9 ,48	,8903 ,8843	100 + 65		_	53,12 53,94	149,44	3,68	66,92 66,57	,6613
17	,84788		13,89	112,50	1,39	88,88	,8784	67	,90169		54,76	151,00	3,72 3,76	66,22	,6545
18	,84944	—	14,71	113,26	1,45	88,29	,8726		,90242		55,57	151,78	3,79	65,88	,6511
19	1		15,53	114,01	1,52	87,71	,8668	<u> </u>	,90314		56,39	152,56	3,83	65,55	,6478
100 + 20			16,34	114,77	1,57	87,13 86,56	,8611 ,8555	100 + 70	,90385 ,90454	_	57,21 58,03	153,34	3,87	65,21 64,88	,6445 ,6412
22		_	17,98	116,28	1,70	86,00	,8499		,90522		58,84	154,91	3,90 3,93	64,55	,6379
23	,85686	_	18,80	117,03	1,77	85,45	,8444	73	,90590		59,66	155,70	3,96	64,23	,6347
$\frac{24}{100 + 25}$,858 2 7		19,61	117,79	1,82	84,90	,8390	74	,90657		60,48	156,48	4,00	63.91	,6315
26		_	20,43	110,55	1,00	84,35 83,81	,8336 ,8283	100 + 75 76	,90788	_	62,11	157,27	4,02 4,06	63,59	,6284 ,6253
27	,86235		22,07	120,07	2,00	83,28	,8231	77	,90853		62,93	158,84	4,09	62,96	,6222
28		-	22,88	120,83	2,05	82,76	,8179	1	,90917		63,75	159,62	4,13	62,65	,6191
100 + 30		-	23,70	121,59	2,11	82,24	,8128	79 100 + 80			64,56	160,41	4,15	62.34	,6161
31	06 0		24,52	123,12	2,21	81,22	,8027	81	,91103	ł	66,20	161,19	4,19	62,04 61,74	,6131
32	,86872	_	26,15	123,89	2,26	80,72	•797 <u>7</u>	82		1	67,02	162,77	4,25	61,44	,6071
33	10		26,97	124,65	2,32	80,23	,7928 ,7880	8 ₃ 8 ₄			67,83 68,65	163,55 164,34	4,28	61,14	,6042
$\frac{34}{100 + 35}$		1-	27,79	126,18	2,37	79,74		100 + 85	l		69,47	165,13	4,31	60,85	,6013
36	,87341	_	29,42	126,95	2,47	78,77	,7784	86	,91398		70,28	165,92	4,34	60,27	,5985
37	,87452		30,24	127,72	2,52	78,29	•7737	87	,91455	<u> </u>	71,10	166,71	4,39	59,99	5928
38	,87562 ,87670		31,06	128,49	2,57	77,82	,7691		,91511		71,92	167,49	4,43	59,70	,5900
100 + 40			31,87	129,26	2,61	77,36	,7645	100 + 90	,91567		72,74	168,28	4,46	59,42 59,15	,5872 ,5845
41	,87884	-	33,51	130,81	2,70	76,45	,7555		,91677		74,37	169,86	4,40 4,5 I	58,87	,5818
42	87990	 -	34,32	131,57	2,75	76,00	,7511	92	,91731	-	75,19	170,65	4,54	58,60	,5791
	,88095		35,14	132,34	2,80	75,56	,7467	93	,91785 ,91838		76,00 76,82	171,44	4,56	58,33 58.06	,5764
100 + 45			36,78	133,88	2,90	74,69	7424	100 + 95			77,64	*****************	4,63	57,80	,5738
46	,88400	 -	37,59	134,65	2,94	74,26			,91942		78,45	173,79	4,66	57,50	,5686
47	88498,	-	38,41	135,43	2,98	73,84	7297و	97	,91993	-	79,26	174,58	4,68	57,28	,5661
48	,88594 ,88688	_	39,23	136,20 136,98	3,06	73,42	,7256 ,7215		,92043		80,08 80,90		4,71	57,02	
149	11 3 0 0 0 0 0 0		1 40,04	1,50,90	1 3,00	1 2,01	1 3/415	ı 99	,92093	l	1 00,90	1/0,10	14,74	56,76	1,5010

HEAT 80°.

I.	п.	III.	IV.	V.	VI.	VII.	VIII.	I.	II.	III.	IV.	v.	VI.	VII.	VIII,
Water and	Specific	Spirit	Water	Bulk of	Diminu-	Quan-	Decimal	Water and	}	Spirit	Water	V • Bulk of	VI. Dimi-	Quan-	Decimal
spirit by weight.	gravity.	by mea-	by measure.	mixture.	tion of bulk.	tity of spirit	multi-	spirit by weight.	gravity.	by	by	mixture.	nuti- on of	tity of spirit	multi- pliers.
wergha		sure.	incasure.		Duik.	per cent.	piiers.	weight.		mea- sure.	measure.		bulk.	per cent.	phers.
W. + Sp.			-					W. + Sp.							
100+100	,92142	100	81,73	176,96	4,77	56,51	,5584	100 + 50	,95111	100	163,45	257,16	6,29	38,89	,3843
9 9		_	82,56	177,77	4,79	56,25	,5559	49	,95181	_	166,79	260,46	6,33	38,39	,3794
9 ^ફ 97	,92242	_	83,40 84,26	178,59	4,81 4,84	55,99 5 5 ,73	,5533 ,5508	48 47		1	170,26	263,91 267,50	6,35	37,89 37,38	,3744
96			85,14	180,27	4,87	55,47	,5482		,95395		177,66	271,25	6,41	36,86	,3643
100 + 95	,92393		86,03 86,94	181,13 182,02	4,90	55,21	,5456	100 + 45		-	181,61	275,18	6,43	36,34	,3591
94 93	,92443 ,92493		87,87	182,02	4,92 4,94	54,94 54,67	,5429 ,5402	44 43	1	=	185,74 190,06	279,29	6,45	35,81	,3538
92	,92544	}	88,83	183,86	4,97	54,39	5375ء	42	,95682	-	194,59	288,11	6,48	34,71	,3431
91 100 + 90	,92595		90,81	184,81	5,00	54,11	•5347	-	95754 95826		199,33		6,50	34,15	,3375
89		_	91,83	185,78 186,77	5,03	53,83 53,54	,5319	100 + 40	,95898		204,32	297,79	6,53	33,58	,3319
8 8	,92753		92,87	187,78	5,09	53,26	,5262	38	,95971		215,07	308,53	6,54	32,41	,3203
87 86	,92807 ,92862		93,94	188,82 189,88	5,12	52,96 52,66	,5233	37	,96044 ,96118		220,88	314,34	6,54	31,81	,3144
	,92917	1	96,15	190,96	5,19	52,36	,5175	100 + 35			233,51	326,92	6,59	30,59	,3023
84	,92973		97,29	192,07	5,22	52,06	,5144	34	,96266	_	240,37	333,79	6,58	29,96	,2961
83 82	,930 2 9 ,93086		98,46 99,66	193,21 194,38	5,25 5,28	51,75 51,44	,5114	33 32	1		247,66 255,40	341,09	6,57	29,32	,2898
81	,93144	_	100,90	195,58	5,32	51,13	,5052	31		=	263,64	357,07	6,57	28,01	,2768
100 + 80	,93201		102,16	196,80	5,36	50,81	,502 I	100 + 30	,96568		272,42	365,85	6,57	27,33	,2701
79 78			103,45	198,07	5,38	50,48	,4989	29 28	1 - 1		281,82 291,88		6,56	26,65	,2634
70	,93315 ,93372		104,77	199,37	5,40 5,43	50,15 49,82	,4957 ,4924	27	(_	302,69	385,34	6,54 6,53	25,95 25,24	,2565
76	,93430		107,53	202,07	5,46	49,48	,4890	26	,96882	_	314,33	407,81	6,52	24,52	,2424
100 + 75	,93488 ,93546	_	108,97 110,44	203,48	5,49	49,14 48,80	,4856	100 + 25	,96963	1	326,91	420,42	6,49	23,79	,2351
74 73	,93540	_	111,95	204,93 206,41	5,51 5,54	48,45	,4822 ,4788	24 23	1		340,53 355,33		6,46	23,04	,2277
72	,93664		113,50	207,94	5,56	48,09	,4753	22	,97212	-	371,49	466,09	6,40	21,50	,2125
71 100 + 70	,93724 ,93785		115,10	209,51	5,59 5,63	47,73	,4717 ,4681	100 + 20	17/	_	389,18		6,37	20,71	,2047
69		_	118,44	211,12	5,66	47,37 47,00	,4645	19	,97385 ,97473		408,64 430,14	502,32	6,32 6,27	19,91	,1967 ,1886
68 6-	,93910		120,18	214,48	5,70	46,62	,4608	18	,97563	_	454,04	547,83	6,21	18,25	,1804
6 ₇ 66	,93973 ,94037		121,97	216,25 218,06	5,72 5,76	46, 2 4 45,86	,4570 ,4532	17 16	, , , , ,		480,75		6,09	17,40	,1720
100 + 65	,94102		125,73	219,93	5,80	45,47	,4493	100 + 15	,97845		544,85	638,83	6,02	15,65	,1547
64	,94167		127,69	221,86	5,83	45,07	,4454	14	,97943	_	583,76	677,84	5,92	14,75	,1458
	,94 232 ,94 2 98		129,72 131,81	223,85 225,91	5,87 5,90	44,67 44,26	,4415 ,4375	13	,98044 ,98148	_	628,67 681,06	722,82 775,30		13,83	,1367 ,1275
61	,94364		133,98	228,04	5.94	43,85	,4334	11	,98256		742,97	837,32		11,94	,1180
100 + 60			136,21	230,23	5,98	43,43	,4292	100 + 10	,98367		817,27	911,70	5,57	10,97	,1084
	,94498 ,9456 5		138,51 140,89	232,50 234,86	6,01 6,03	43,01 42,58	,4250 ,4 2 07	9 8	,98482 ,98602		908,08	1002,64 1116,26	5,44	9,97 8,96	,0986 ,0885
57	,94632		143,37	237,30	6,07	42,14	,4164	7	,98727		1167,53	1262,32		7,92	,0783
-	194700		145,94	239,83	6,11	41,69	,4120	6	,98856		1362,12	1457,03	5,09	6,86	,0678
100 + 55 54	,94768 ,948 3 6		148,58	242,45 245,16	6,13	41, 2 4 40,79	,4076 ,4031	100 + 5	,98991		1634,54	1729,58	4,96	5,78	,0571
53	194904		154,16	247,99	6,17	40,79	,3985	4	,99131 ,99278		2043,18	2138,36 2819,54	4,60	4,68 3,55	,0462 ,0350
52 51	·94973		157,13	250,93	6,20	39,85	,3938	2	199432	-	4086,35	4181,79	4,56	2,39	,0236
51	,95042		100,231	253,99	6,24	39,37	,3891	I I	,99592		ا 70,70 ا	8268,26	4,441	1,21	,0120

a .c	^		31.00	
Specific gravity	of water	at the	different	degrees of heat.

Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.	Heat.	Specific gravity.
30 31 32 33 34	1,00078 1,00082 1,00085	36 37 38	1,00092 1,00093 1,00094	41 42 43	1,00093 1,00092 1,00090	46 47 48	1,00083 1,00080 1,00076	5 I 5 2 5 3	1,00068 1,00063 1,00057 1,00051	56 57 58	1,00031 1,00024 1,00016	61 62 63	,99991 ,99981 ,99971	66 67 68	,99939 ,99928 ,99917	71 72 73	,99882 ,99869 ,99856	76 77 78	,99802 ,99788

Although the titles of the Columns in the preceding Tables, with what has been said in the introductory discourse, may render the Tables sufficiently obvious to the generality of readers, yet to some perhaps an example may be necessary; I shall therefore shew in what manner the quantity by measure of pure Spirit of ,825 specific gravity at 60° of heat, may readily be found by the help of these Tables.—In order to which, we must know the heat, the specific gravity, and quantity of spirit which the vessel contains.

Example. Suppose the heat to be 35°, the specific gravity ,909, and the quantity of spirit 138,99 measures.

Under 35° of heat, and in Column II. of specific gravity, find ,909; and in the same horizontal line, take out from Column VIII, the decimal multiplier ,7297, by which multiply 138,99, cutting off as many figures to the right as there are decimals in both factors; then we shall have 101,421003 for the measures of pure spirit, of the specific gravity ,825 at 60° of heat.

Now a mere inspection of the Columns in the Tables will shew that a spirit of that strength was obtained, by adding 51 parts of water by weight to 100 parts of spirit, as in Column I. which produced the specific gravity found in the same horizontal line, Column II. It will as readily be seen, that the same specific gravity results from adding together their equivalents in measure, Columns III. and IV. and that Column V. contains the quantity, which the two quantities really measure after the mixture has been made.

ERRATA.

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Page 281, column IV. line 34, for 126,12, read 125,12.

283, —— I. — 17, for 100 + 54, read 100 + 34.

Ibid. —— IV. — 34, for 126,05, read 125,05.

Ibid. —— V. —— 2 from bottom, for 4886,96, read 4286,96.

285, —— VIII. —— 23, for ,5046, read ,5056.

286, —— IV. —— 8 from bottom, for 77,99, read 76,99.

287, —— VIII. —— 23, for ,5044, read ,5054.

289, —— II. —— 28, for ,95485, read ,95385.

290, —— IV. —— 1 dele 0,84.
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