TABLE IV.—NEOARSPHENAMINE EXPERIMENTS. DOSES IN MG./KG.

Sample.	Yield.	% As.	200.	240.	280.	320.	M. T. D.
128	19 Gm.	18.2	+++++	+++++	+++++	+++++	320+
136	17	18.6	+++++	++−−−	.....	.....	200
138	20	18.5	.....	.....	++++−	+++−−	300+
141*	25	18.1	+++++	+++++	+++++	+++++	320+

Average tolerance = 285 mg./Kg.

* Failed at 360 mg./Kg.

All preparations on this small scale were very dry.

A determination of loss on drying at 78° in CO_2 gave volatile matter = 1.2%.

SUMMARY.

1. Two laboratory methods are described in detail for the preparation of neoarsphenamine.

2. The nature and dimensions of the variation in its toxicity action are compared with values previously reported.

3. Toward average samples, prepared by these processes, the rat shows a tolerance of 255 mg./Kg. Under particularly favorable manipulation this value approaches more closely to the maximum.

4. The increase in toxicity which results in the final steps amounts to 90 mg./Kg. for the average sample, but with perfected conditions we have approached within 45 mg./Kg. (*i. e.* M. T. D. = 320+ mg./Kg.).

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SOLUBILITY OF PHENOL IN LIQUID PARAFFIN.

Jules Cofman-Nicoresti reports experiments on the solubility of phenol in liquid paraffin, in the *Pharmaceutical Journal and Pharmacist* of April 29, 1922, p. 349. The conclusions the contributor draws from the experiments are as follows:

"1. The solubility of phenol in liquid paraffin at 15° C. is not above 1 percent.

"2. The quantity of phenol, exceeding 1 percent, dissolved in liquid paraffin by means of heat will, when cool, separate in a liquid, oily layer, which layer will occupy the lower part of the solution."

Further references made in the article are reprinted:

"Boemingham (*Exper. Cancer.*, December 8, 1921; see *P. J.*, Vol. 108, p. 298) points out the dangers of using liquid paraffin as a substitute for glycerin in phenol solutions. He mentions a case in which a young physician prescribed as ear-drops, for a boy of ten, suffering from earache, liquid phenol in liquid paraffin. A glass dropper was used to administer the drops; the pure phenol collected in the tip of the dropper and was injected in the child's ear, with the result that half the tympanic membrane was destroyed and the external meatus and the auricle very badly corroded.

"A similar case came before the law courts in a North town about two years ago. A prescription for ear-drops containing 6.2 percent of pure phenol in liquid paraffin had been dispensed by a pharmacist. The patient, after using half of the solution in the bottle (1 oz. bottle), complained of pains in his ears, and suspecting that the prescription had been wrongly dispensed, sent it to an analyst, who found 10.3 percent of phenol in the solution.

"An action was taken against the chemist for wrongly dispensing the prescription, and, in spite of the chemist's defense, the jury, apparently impressed by the analytical evidence, found for the plaintiff, giving heavy damages against the chemist with the result that the unfortunate pharmacist was sent to the bankruptcy court."