2. The relation between $-\Delta H$ (cal./mole of methylamine) and N (moles of water/moles of methylamine) is given by the linear equation $-\Delta H = 10{,}627 + 0.24193\ N$; the experimental values agree with the values calculated by this relation on the average to within 0.11%; the maximum deviation is 0.46%.

AUSTIN, TEXAS

NOTE

Note on the Preparation of Absolute Isopropanol

BY LEWIS E. GILSON

During several years of biochemical research the writer has found many instances where isopropanol could be substituted for ethanol in laboratory work. It is cheap and there are no restrictions governing its use; nor is it likely to be an object of theft. The commercial 91% azeotropic mixture was used instead of 95% ethanol and found to be fully equal or superior to the latter as a solvent or extracting medium. Absolute isopropanol was used in place of absolute ethanol.

Absolute isopropanol is easily prepared. The 91% grade is shaken with 10% of its weight of commercial flake sodium hydroxide, separated from the aqueous layer which forms, then shaken with a little more sodium hydroxide, decanted and distilled. The product obtained mixes with eight volumes of carbon disulfide, xylene or petroleum ether without the slightest trace of turbidity.

Dilute isopropanol can be concentrated by shaking with dry sodium chloride. Water is removed as a saturated layer of brine. The upper layer contains about 87% isopropanol and 2–3% of sodium chloride. While distilling, an additional quantity of brine separates. The distillate has so nearly the composition of the 91% azeotropic mixture that it can be used as such without further treatment. Or, after shaking the dilute isopropanol with sodium chloride and separating, it can be treated directly with sodium hydroxide and the absolute grade prepared.

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