

the organic acid was precipitated. The product was practically pure, but was further purified by reprecipitating it from dilute sodium hydroxide. The yield was 93%, m. p. 234–236°.

CONTRIBUTION FROM THE
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A. M. VANARENDONK
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Correction. Para-Nitrophenyl Carbamyl Chloride and Para-Nitrophenyl Isocyanate.—In a recent paper it was stated that the product of the action of phosgene on *p*-nitraniline was *p*-nitrophenyl carbamyl chloride.¹ While this is the primary product of the reaction mixture, it has been found that after recrystallization from hot carbon tetrachloride as recommended in the procedure, the final purified product is then free from halogen and is *p*-nitrophenyl isocyanate, m. p. 57°. The analysis given is incorrect. Determination of the nitrogen by the micro Dumas method gave the following results.

Anal. Subs., 3.322 mg.: N₂ gas, 0.577 cc. at 31° and 744 mm. Calcd. for C₇H₄O₃N₂: N, 17.07. Calcd. for C₇H₃O₃N₂Cl: N, 13.97. Found: N, 17.09.

The purified product with m. p. 57° is therefore *p*-nitrophenyl isocyanate² and is the reagent from which the urethans were prepared. It is evident that the *p*-nitrophenyl carbamyl chloride lost hydrogen chloride during the recrystallization from boiling carbon tetrachloride.

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W. H. HORNE
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COMMUNICATIONS TO THE EDITOR

INTERATOMIC FORCES IN BINARY ALLOYS

Sir:

Under this title, N. W. Taylor has recently published [THIS JOURNAL, 53, 2423 (1931)] a test of Langmuir's theory of non-electrolyte solutions which seems to me unfortunate in three respects. Following Hildebrand and Sharma [*ibid.*, 51, 467 (1929)], he has confused Hildebrand's definition [*ibid.*, 51, 66 (1929)] of a "regular solution," for which at constant composition $T \log a_1/N_1$ is independent of the temperature, with that of a "symmetrical system," for which at constant temperature $\log (a_1/N_1)/N_2^2$

¹ Shriner and Cox, THIS JOURNAL, 53, 1601 (1931).

² This has also been noted by van Hoogstraten, Doctor's Dissertation Rijks University, Leiden, June 30, 1931.