The synthesis of II was accomplished by condensing the previously described^{4,5} N,N-dimethyl-N'(α -pyridyl)-ethylenediamine with α -thienyl cholride. The product, b. p. 173-175° at 3 mm., n^{25} D 1.5835 was obtained in a 64% yield. Anal. Calcd. for C₁₄H₁₉N₃S: N, 16.09. Found: N, 16.12. The monohydrochloride melted at $161-162^{\circ}$. Anal. Calcd. for C₁₄H₂₀N₃SC1: N, 14.12. Found: N, 14.16. The methiodide had m. p. $156-157^{\circ}$ (dec.). Anal. Calcd. for $C_{15}H_{22}$ -N₃SI: N, 10.42. Found: N, 10.39.

Preliminary pharmacological data⁷ indicate that, experimentally in animals, II exhibits the same order of antihistaminic activity as I. The toxicity of both compounds is approximately equal.

Additional information concerning II and other homologs will be published at some future date.

- (5) Whitmore, Mosher, Goldsmith and Rytina, ibid., 67, 393 (1945).
- (6) Blicke and Leonard, ibid., 68, 1934 (1946).
- (7) Roth, Richards and Shepperd, Federation Proc., in press (1947).

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t-BUTYLSILICON COMPOUNDS

Sir:

From t-butyllithium¹ and silicon tetrachloride we have synthesized in 55% yield the first tertiary alkyl silicon compound, t-butyltrichlorosilane, m. p. 98-99°, b. p. 133° at 740 mm.

(1) Organolithium compounds have been used to make organosilicon compounds: Fleming and Laurens, U. S. Patent 2,386,452, (1945); C. A., 40, 603 (1946); Gilman and Clarke, THIS JOURNAL, 68, 1675 (1946).

Anal. Calcd. for C₄H₉SiCl₃: Si, 14.6; Cl, 55.6; mol. wt., 191. Found: Si, 14.7; Cl, 55.7; cryoscopic mol. wt. in benzene, 189.

t-Butyltrichlorosilane is unusual. It is a white waxy solid which becomes granular on standing and sublimes readily at room temperature, giving well-defined fern-like crystals (Fig. 1). It is less easily hydrolyzed than other alkyltrichlorosilanes.

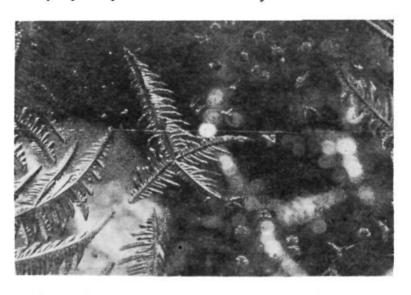


Fig. 1.—Photograph of crystals of sublimed t-butyltrichlorosilane by Dr. M. L. Willard, H. Francis, G. Kauffman, T Reissmann.

With methylmagnesium bromide the above compound gives a 61% yield of t-butyltrimethylsilane, m.p. 75–77°, b. p. 103° at 740 mm.

Anal. Calcd. for C7H18Si: Si, 21.6; mol. wt., 130. Found: Si, 21.7; mol. wt., 132.

It is a white waxy solid with faint camphoric odor. It sublimes readily to crystals resembling those in Fig. 1. Distillation of t-butyltrimethylsilane from hot coned. sulfuric acid gave a product with unchanged m. p., thus indicating a high degree of inertness of the C-Si bond.

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