

in the case of allyl cyanide and styrylacetic ester at the α - and β -carbon atoms, with migration of an α -hydrogen atom.

CAMBRIDGE, MASSACHUSETTS

NOTES

Some New *p*-Bromophenacyl Esters.—In using the method of Reid and Judefind [THIS JOURNAL, 42, 1043 (1920)] for the identification of organic acids, we have prepared the following *p*-bromophenacyl esters which are not listed by these authors: trimethylacetate, m. p. 76.5°; isocaproate, m. p. 77.3°; enanthate, m. p. 69.2°; isoheptylate, m. p. 75.5°; pelargonate, m. p. 63.5°.

CONTRIBUTION FROM THE
CHEMICAL LABORATORY OF THE
UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON

S. G. POWELL

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Preparation of *N*-*o*-Chlorobenzoyl-*o*-chlorobenzenesulfonamide.—Several years ago an investigation was undertaken in this Laboratory having for its object the preparation of diphenic sulfinide ("Diphen-saccharin"). It was hoped that this compound might be sweet, or at least that its preparation would throw some light on the general problem of sweet taste *vs.* molecular structure. The method attempted was the internal condensation of chlorobenzoylchlorobenzenesulfonamide by loss of two atoms of chlorine from the molecule.

Preparation of *N*-*o*-Chlorobenzoyl-*o*-chlorobenzenesulfonamide, $\text{Cl-C}_6\text{H}_4\text{CONHSO}_2\text{C}_6\text{H}_4\text{Cl}$.—Ten grams of *o*-chlorobenzenesulfonamide was treated with 9.5 g. of *o*-chlorobenzoyl chloride and the mixture heated (180–190°) in an oil-bath for one hour. The dark brown mass was dissolved in acetone, the solution filtered, and the solid again precipitated by the use of petroleum ether. The solid was heated on a clay plate (70–80°) until it was perfectly dry and odorless. Repeated crystallizations from dilute ethanol or dilute acetic acid finally gave a product with a constant melting point of 154–155°; white platelets, having a faint bitter taste, yield about 11 g.

Anal. Calcd. for $\text{C}_{13}\text{H}_9\text{O}_2\text{Cl}_2\text{NS}$: C, 47.27; H, 2.72; N, 4.24; Cl, 21.52; S, 9.70. Found: C, 47.24; H, 2.60; N, 4.19; Cl, 21.40; S, 9.76.

In attempting to prepare diphenic sulfinide from the compound named above, it was heated alone and in different solvents, and treated with metals and other reagents under a variety of conditions. Seventy-two experiments were carried out, only two of which gave any indication of success. In these cases the material was heated in amyl alcohol solution with copper