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Pyrrolidine from N-alkyl-N-Chloroureas (Abstract)

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Nothing, however, was known about this effect in the indanones substituted in the 7 position. In these ketones free rotation about the bond between the carbonyl group and the ring is prevented and the increased opportunity for resonance might influence the steric effect.

The ketone 4, 7-dimethyl indanone-1, in which one ortho position is occupied by a methyl group and the other by the end of aliphatic ring, was prepared. It readily formed an oxime (m.p. 175.5 - 177.5° C), a semicarbazone (decomposed 215 - 221° C) and a phenyl-hydrazone (m.p. 99- 101° C).

MOUNT VERNON,
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PYRROLIDINE FROM N-ALKYL-N-CHLOROUREAS

(ABSTRACT)

GEORGE H. COLEMAN AND GLEN ALLIGER

Previous work in this laboratory has shown that when N-n-butyl-N-chloro-p-toluenesulfonamide, N-n-butyl-N-chloroacetamide, or N-n-butyl-N-chloropropionamide is dissolved in sulfuric acid and heated, ring closure occurs with the formation of pyrrolidine in good yields. It was thought that N, N'-di-n-butyl-N, N'-dichlorourea might react in a similar manner. This was found to be the case. When this compound was dissolved in 95 per cent sulfuric acid and heated for a period of one hour at 120-130° C. pyrrolidine was formed in yields of 50 to 55 per cent. Under similar conditions N, N-dimethyl-N'-n-butyl-N'-chlorourea gave pyrrolidine in yields of 5 to 10 per cent.

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AZOYL DERIVATIVES OF SUGARS AND SEPARATION BY CHROMATOGRAPHIC ADSORPTION

(ABSTRACT)

GEORGE H. COLEMAN AND ALFORD G. FARNHAM

Azobenzene-p-benzoyl derivatives of d-d-glucose and B-d-glucose, fructose, galactose, lactose, maltose, sucrose, trehalose, gentiobiose and cellobiose have been prepared. They have been analyzed for per cent of azoyl and their specific rotations in chloroform determined. The chromatographic separation of d-d-glucose and fructose azoates as described by Reich has been repeated using silicic acid as an adsorbent. Using a mixture of "magnesol"