Proceedings of the Iowa Academy of Science

Volume 32 | Annual Issue Article 46

1925

Bromination of Methyl-4-Acetylaminophenyl Ketone

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BROMINATION OF METHYL-4-ACETYLAMINO-PHENYL KETONE

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(ABSTRACT)

Bromination of a water or acetic acid solution of methyl-2-acetyl-aminophenyl ketone gives a nuclear substitution product; with dry material or in the presence of concentrated sulfuric acid, halogen enters the side chain, Baeyer and Bloem [Ber., 17, 963 (1884)]. With methyl-4-acetylaminophenyl ketone it has been found in this laboratory that the highest yield of nuclear bromide is obtained by allowing 1.84 molecular proportions of bromine, dissolved in 19.8 volumes of glacial acetic acid to drop during a period of twenty minutes into a solution containing one molecular proportion of the ketone dissolved in 20 times its weight of 50% acetic acid, while the mixture is shaken and the temperature kept at 20-21°, and the whole allowed to stand for 3¾ hours. When water is not present, substitution usually takes place in the side chain. This work has been done in order to identify products obtained in the study of the condensation reactions of methyl-4-aminophenyl ketone.

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CONDUCTANCE IN LIQUID HYDROGEN SULFIDE SOLUTIONS

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(ABSTRACT)

Hydrogen sulfide has been found to act more like an organic solvent than as an inorganic one in the character of the substances that are soluble in it. As a result, most of its solutions are non-conductors, but it has been found that the halides of the phosphorous family do conduct, with the exception of bismuth which forms an insoluble compound with the hydrogen sulfide. With the other elements of the family the amount of conductance increases with the atomic weight of the element, the antimony chloride being of the order of 10,000 times that of the phosphorus.

Acetic acid conducts very little, but, if the OH is replaced by SH, Cl or NH_2, the conductance increases very much. Replacing the H of the radical by Cl or NH_2 reduces the conductance to zero.