Proceedings of the Iowa Academy of Science

Volume 41 | Annual Issue

Article 54

1934

Behavior of Bromine Derivatives of Guaiacol toward Nitrating Agents

L. Chas. Raiford *State University of Iowa*

R. E. Silker State University of Iowa

Let us know how access to this document benefits you

Copyright ©1934 lowa Academy of Science, Inc. Follow this and additional works at: https://scholarworks.uni.edu/pias

Recommended Citation

Raiford, L. Chas. and Silker, R. E. (1934) "Behavior of Bromine Derivatives of Guaiacol toward Nitrating Agents," *Proceedings of the Iowa Academy of Science*, *41(1)*, 171-171. Available at: https://scholarworks.uni.edu/pias/vol41/iss1/54

This Research is brought to you for free and open access by the IAS Journals & Newsletters at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

1934]

ABSTRACTS

171

tuent is hydrolyzed very rapidly at room temperature, so that its reaction velocity must be measured at 0° C. The second and third ketimine salts, each having one ortho-substituted methyl, are hydrolyzed at a moderate rate at 25° .

DEPARTMENT OF CHEMISTRY,

CORNELL COLLEGE,

MT. VERNON, IOWA.

BEHAVIOR OF BROMINE DERIVATIVES OF GUAIA-COL TOWARD NITRATING AGENTS

L. CHAS. RAIFORD AND R. E. SILKER

Attempts to nitrate 4, 5, 6-tribromoguaiacol by means of nitrous acid as directed by Zincke¹ failed to give any product that could be identified. The use of nitric acid of various concentrations also failed to give more than traces of nitro product. Treatment of the acetyl and benzoyl derivatives with fuming nitric acid at room temperature gave 2-methoxy-3-nitro- 4, 5, 6-tribromophenyl acetate and 2-methoxy-3-nitro-4, 5, 6-tribromophenyl m-nitrobenzoate, respectively. It is significant that bromine was not lost in these nitrations and that in the last case both nuclei were nitrated.

STATE UNIVERSITY OF IOWA,

IOWA CITY, IOWA.

THE ACID AND ALKALINE HYDROLYSES OF SILK FIBROIN

EUNICE WALDE AND RACHEL EDGAR

It is known in a general way that acid and alkali are destructive to silk fibroin, but there are only few and scattered data recorded in the literature.

In this laboratory, the acid and the alkaline hydrolyses of silk fibroin have been followed by determination of the nitrogen, weight, wet breaking strength and elongation at the breaking load of a degummend silk fabric after treatment for ten hours with sodium hydroxide ranging from 0.0 to 0.5 N at 25° and 40°C., hydrochloric acid of concentrations 0.0 to 2.0 N at 40°C., and with acid and alkali for one hour at 100°C.

At 40°C., 0.5 N sodium hydroxide and 2.0 N hydrochloric acid 1 J. prakt. chem. (2) 61,561 (1900).

1