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The Velocites of Hydrolysis of Mono- and Polyhydroxy-Diphenyl Ketimines

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The velocities of hydrolysis into the corresponding ketones have been determined for these monomethoxy-diphenyl ketimine hydrochlorides. The 2-methoxy-diphenyl ketimine has a decidedly slower rate of hydrolysis than the other two. The 4-methoxy compound is definitely slower than the 3-methoxy-diphenyl ketimine. All of these have slower rates of hydrolysis than diphenyl ketimine hydrochloride although the 3-methoxy compound is only slightly slower.

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THE VELOCITIES OF HYDROLYSIS OF MONO- AND POLYHYDROXY-DIPHENYL KETIMINES

JAMES B. CULBERTSON AND JAMES L. NAUMAN

The velocities of hydrolytic decomposition of the three monohydroxy-diphenyl, the resorcyl phenyl and the phloroglucinyl phenyl ketimine hydrochlorides have been measured. As a result of these measurements it has been found that the phenolic group in the 2and 4-positions in the monohydroxy diphenyl ketimines gives rise to a marked retardation of the hydrolysis velocity compared with that of diphenyl ketimine, while the velocity of the 3-hydroxydiphenyl ketimine was even faster than that of the diphenyl ketimine.

The polyhydroxy diphenyl ketimines with their hydroxy groups in the 2- and 4-positions are remarkably slow in their rates of hydrolysis.

This is a preliminary report. Further work is planned on diaryl ketimines having phenolic groups on both benzene rings with a view to establishing certain theoretical factors which the above data suggest may be involved in the stabilizing influence of these hydroxy groups in the benzene rings upon the hydrolysis of the imine group attached to the carbon atom between these rings. Department of Chemistry,

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