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Some Rearrangement Reactions of Organosodium and Organolithium Compounds

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100 grams of soil in the base exchange complex. Six months after the same soil had been treated with chemically pure calcium carbonate at the rate of six tons per acre the exchangeable hydrogen content was only 1.15 M.E. and the exchangeable base content was 24.54 M.E. The calcium carbonate treatment, therefore, increased the degree of saturation with bases from 60.13 per cent to 95.52 per cent.

In similar experiments calcium carbonate at the rate of six tons per acre increased the degree of saturation of Shelby loam from 63.82 per cent to 100 per cent, while calcium carbonate at the rate of five tons per acre was sufficient to increase the degree of saturation of Tama silt loam from 58.95 per cent to 100 per cent.

IOWA STATE COLLEGE,
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SOME REARRANGEMENT REACTIONS OF ORGANOSODIUM AND ORGANOLITHIUM COMPOUNDS

HENRY GILMAN AND FRITZ W. BREUER

In continuation of rearrangement reactions of organometallic compounds, it was desirable to ascertain whether R-Metal combinations (free of halogen or other acidic groups) would react after the manner of benzylmagnesium chloride types with compounds like formaldehyde, for example. This last reaction gives not only the normal product (*beta*-phenylethyl alcohol), but also *o*-tolyl carbinol. It has been shown that the corresponding organosodium and organolithium compounds behave in a similar manner. Incidentally, it is possible to prepare some organolithium compounds, like phenyl-lithium, very conveniently, in a short time, and in excellent yields in the customary three-necked flasks.

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ORGANOMAGNESIUM COMPOUNDS CONTAINING SOLUBILIZING AMINO GROUPS

HENRY GILMAN, STANTON A. HARRIS AND CHUAN LIU

There is an uncommon demand, particularly in cancer and related studies, for organomagnesium compounds which contain amino groups to increase the solubility of products and also endow