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The Preparation of Pure Di-Isobutyl

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pyrex round bottomed flask, high yields were obtained with times of reaction less than an hour. The product obtained is high grade. This reaction can be carried out in the absence of a solvent thus eliminating one step in the process, namely the separation from the solvent. As the sodium is used up fresh charges can be introduced and the process kept up.

CORNELL COLLEGE.

THE PREPARATION OF PURE DI-ISOBUTYL

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(ABSTRACT)

The preparation of pure 2, 5 dimethyl hexane by means of the Wurtz reaction has been studied and the results show a number of interesting things. One is that the presence of solvent slows down the time of reaction so much as to produce practically none of the desired substance. In the second place, it has been shown that the iso-butyl bromide can be mixed directly with sodium under conditions which will permit of refluxing. In a short time as indicated by the reflux temperature, the reaction is practically complete and yields nearly quantitative are obtained. There is a loss of either bromide or product through the open end of the system in the vapor phase. A study of the velocity factors of this reaction has been made.

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SYSTEMS FORMED BY CERTAIN INORGANIC COMPOUNDS WITH LIQUID SULPHUR DIOXIDE

HOWARD T. BEACH WITH P. A. BOND

(ABSTRACT)

The solubility relationships of the liquid tetrahalide compounds with sulphur dioxide are investigated. Tin tetrabromide, carbon tetrachloride, and titanium tetrachloride all give binary liquid systems at certain temperatures and concentrations. Tin tetrachloride normally shows the solid liquid solubility effect, but mixtures can be supercooled to give a metastable binary liquid system. Tin tetraiodide shows ordinary solid liquid solubility effect with probable compound formation. The temperature-composition diagrams are presented and discussed. Methods are developed for