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Alkoxy compounds XIX. The stereoisomerism of some 2, 5-dialkyl-5-α-alkoxyethyl-1, 3-dioxanes

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Abstract

Using PMR spectra and GL chromatograms, it is shown that 2,5-di methyl-, 2-isopropyl-5-ethyl-, 2, 5-diisopropyl-5- α -isopropoxyethyl-1, 3-dioxane are mixtures of isomers. Efficient columns are used to fractionate these mixtures into the individual isomers, purities being checked by GLC. From PMR spectra and dipole moments it was concluded that the low-boiling isomers of the stereoisomeric dioxanes are trans forms with chair configuration, while the high-boiling isomers are cis, and have the unsymmetrical boat-shaped configuration. © 1969 The Faraday Press, Inc.

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