Stereochemistry of organophosphorus compounds 15. Synthesis and permutational lability of 1,6,10-trioxa-8-8-dimethyl[(5-methoxy)-5-phosphaspiro(4.5)]dec-2-ene

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Abstract

1. We have synthesized 1,6,10-trioxa-8,8-dimethyl[(5-methoxy)-5-phosphaspiro(4.5)]dec-2-ene, a compound in which the trigonal-bipyramidal phosphorus bond arrangment undergoes pseudorotation at temperatures below 36°C. Thermodynamic activation parameters for the pseudorotation process have been evaluated from the observed temperature variation of the parameters of the1H NMR spectrum. 2. The enol acetate of β -neopentylglycolphosphonepropionic aldehyde has been prepared. © 1978 Plenum Publishing Corporation.

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