

## Dipole moments and structure of some cyclic phosphonic esters

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### Abstract

1. We were the first to determine the group dipole moment of the 4,4,5,5-tetramethyl-2-oxo-1,3,2-dioxaphospholane ring, which is directed toward the exocyclic bond of phosphorus at an angle of  $81^\circ$ . 2. The 5,5-dimethyl-2-phenyl-2-oxo- and 2-p-chlorophenyl-2-oxo-1,3,2-dioxaphosphorinanes exist in solutions as a conformational equilibrium of the forms with an equatorial and axial P=O group, with predominance of the latter. © 1979 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF00929257>

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