

Ionization constants of cyclic derivatives of phosphorus acids in n-propyl alcohol

Ovchinnikov V., Galkin V., Cherkasov R., Pudovik A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

1. Ionization constants for various types of cyclic phosphorus acids have been determined in abs. n-propanol. The pKa values of these acids are determined by the electronic nature of the dioxyalkylene substituent and the structural singularities of the exocyclic reaction center. 2. Factors affecting the phosphonate-phosphite tautomerism of the cyclic phosphorus acids are suggested. Passage from the phosphonate form of the phosphoric acids to the phosphite is promoted by the acceptor activity of the O-R-O group and the low value of the intracyclic angle at the P atom. © 1978 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF00924379>
