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The reaction of 2-aminomethylphenols and their copper(II) complexes with esters of phosphorus acids

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Abstract

2-Alkyl- and 2-dialkylaminomethylphenols (AMP) with different Hydrophobic substituents at the nitrogen atom and their copper(II) complexes (CAMP) react with the esters of phosphorus acids in aqueous solutions of ethanol in two stages: phosphorylated AMP (PAMP) are formed at the first stage and then hydrolyzed to the corresponding acids. The reactivity of AMP and PAMP significantly decreases when the hydrophobicity and steric hindrances of substituents at the nitrogen atom increase. An inverse dependence was found for CAMP.

Keywords

2-Aminomethylphenols, Acid-base properties, Complex formation, Copper(II), Esters of phosphorus acids, Hydrolysis, Reactivity