

Aminoalkylphosphines, the water-soluble chiral phosphines.

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Artykuł

Streszczenie

Chiral water-soluble heterocyclic phosphines 2,2',2''-[1,3,5-diazaphosphinane-1,3,5-triyltris(methyleneimino)]tripropanoic acid (1), 2,2',2''-[1,3,5-diazaphosphinane-1,3,5-triyltris(methyleneimino)] tris(3-phenylpropanoic) acid (2) and 2,2',2''-[1,3,5-diazaphosphinane-1,3,5-triyltris(methyleneimino)]tris(4-methylpentanoic) acid (3) were obtained in reactions of tris(hydroxymethyl)phosphine with chiral amino acids: alanine, phenylalanine and leucine. Course of reaction of amino acids depends on the acidity of solution, at pH \approx 6 mainly heterocyclic compounds were obtained, however in basic solutions products of Mannich-type condensation 2,2',2''-[phosphinetriyltris(methyleneimino)]tripropanoic acid (4), 2,2',2''-[phosphinetriyltris(methyleneimino)]tris(3-phenylpropanoic) acid (5) and 2,2',2''-[phosphinetriyltris(methyleneimino)]tris(4-methylpentanoic) acid (6) are formed. The prepared compounds were characterized using spectroscopic methods.