

Bulletin of the Academy of Sciences of the USSR Division of Chemical Science 1952 vol.1 N5,
pages 825-830

New method for the synthesis of phosphonic and phosphinic esters and their thio analogs Communication 13. Addition of O,O-diethyl hydrogen phosphorothidite to ketones and aldehydes

Pudovik A., Zametaeva G.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

1. It has been shown that O,O-diethyl hydrogen phosphorothioite in presence of sodium ethoxide reacts readily at the double bond of unsaturated ketones with formation of keto phosphonothionic esters. It adds to saturated ketones at the carbonyl group with formation of α -hydroxy phosphonothionic esters. 2. O,O-Diethyl hydrogen phosphorothioite adds at the carbonyl group of unsaturated and saturated aldehydes with formation, respectively, of unsaturated and saturated α -hydroxy phosphonothionic esters. 3. A method has been developed for the synthesis of keto phosphonothionic esters and of unsaturated and saturated α -hydroxy phosphonothionic esters. © 1953 Consultants Bureau.

<http://dx.doi.org/10.1007/BF01198872>
