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## **$\beta$ -Keto phosphonic esters - Communication 5. Structures of the products of the reaction of some $\alpha$ -halo ketones of the carbocyclic series with triethyl phosphite and sodium diethyl phosphite**

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### **Abstract**

1. On the basis of chemical and spectrographic data it was shown that the product of the action of sodium diethyl phosphite on 2-chlorocyclopentanone is diethyl 1,2-epoxycyclopentylphosphonate. The product of the action of sodium diethyl phosphite on 2-bromocyclohexanone is a mixture of 1-cyclohexen-1-yl diethyl phosphate and diethyl 1,2-epoxycyclohexylphosphonate. 2. The products of the action of sodium diethyl phosphite and of triethyl phosphite on 2-chloro-2-methyl-cyclohexanone consist of diethyl 2-methyl-1-cyclohexen-1-yl phosphate; the product of the action of triethyl phosphite on 3-bromo-3-methyl-2-butanone is diethyl isopropenyl phosphate. 3. The product of the action of sodium diethyl phosphite on 3-bromocamphor is the corresponding mixed phosphoric ester. © 1961 Consultants Bureau Enterprises, Inc.

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