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## Phosphorus, Sulfur, and Silicon and the Related Elements

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## The Reaction of Benzothiazolesulfenamide with Phosphorus-Containing Reagents

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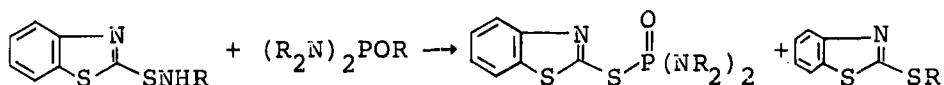
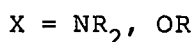
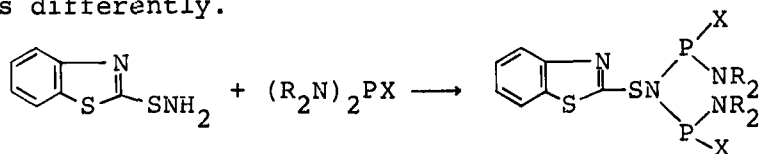
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# THE REACTION OF BENZOTHAZOLESULFENAMIDE WITH PHOSPHORUS-CONTAINING REAGENTS

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T.Sigeru reported the reaction of 2-benzothiazolesulfenamide with phosphites, but other P-reagents have not been used.

We found that this compound can react with tris(di-alkylamino)phosphines or bis(dialkylamino)phosphites to give products (I). No S-N bond cleavage was observed in the reaction performed as described by T.Sigeru. In the presence of substituent in amino group, the reaction proceeds differently.



T.Sigeru, S.Noboru, T.Hides, Chem. Lett. 1980, 695.