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## Reactions of 5,7-dichloro-4,6-dinitrobenzofuroxane and -fuzazane with triphenylphosphine

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### Abstract

Reactions of 5,7-dichloro-4,6-dinitrobenzofuroxane and 5,7-dichloro-4,6-dinitrobenzofurazane with triphenylphosphine proceed through a nucleophilic aromatic substitution of chlorine and nitro groups in the six-membered ring of the heterocycles. The structure of the phosphorylation products was established from the IR, <sup>31</sup>P NMR, and mass spectra and from XRD and elemental analysis. Schemes of the routes of the phosphorylation are discussed. © 2012 Pleiades Publishing, Ltd.

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