

Phosphorus, Sulfur and Silicon and the Related Elements 2009 vol.184 N4, pages 987-991

---

## An unusual reaction of triphenylphosphine with dichlorodinitrobenzofuroxan

Galkina I., Tudriy E., Kataeva O., Yusupova L., Luftmann H., Galkin V.

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

---

### Abstract

A novel phosphorylation reaction of dichlorodinitrobenzofuroxan by triphenylphosphine has been studied. An unusual course of the reaction with the participation of benzofuroxan nitro groups as reactive centers has been established. It is shown that as final product of the reaction, a stable diphenolate diphosphobetaine with strong participation of the mesomeric ketoylide structure is formed. The structure of the product has been confirmed by X-ray diffraction.

<http://dx.doi.org/10.1080/10426500902719636>

---

### Keywords

Dichlorodinitrobenzofuroxan, NO generation, Phosphorylation, Triphenylphosphine