



>>Entry Name: Dibutyl butylphosphonate, 9CI, 8CI

CAS Registry Number: 78-46-6



Molecular Formula: $\text{C}_{12}\text{H}_{27}\text{O}_3\text{P}$

Molecular Weight: 250.317

Accurate Mass: 250.169782

Percentage Composition: C 57.58%; H 10.87%; O 19.17%; P 12.37%

Use/Importance: Insect repellent. Extractant for actinides from radioactive wastes; can be used to separate Am(III) from Eu(III)

Physical Description: Liq. with pleasant odour

Boiling Point: Bp_{20} 160-162°

Refractive Index: n_{D}^{25} 1.4302

Aldrich: 43556-2

References:

Kosolapoff, G., *J.A.C.S.*, 1945, **67**, 1180, (*synth*)

Doto, P.C. *et al.*, *ACS Symp. Ser.*, 1981, **161**, 109, (*use, rev*)

Kalina, D.G. *et al.*, *Sep. Sci. Technol.*, 1981, **16**, 1127, (*props, use*)

Horwitz, E.P. *et al.*, *Sep. Sci. Technol.*, 1981, **16**, 403; 417, (*props, use*)

Muscatello, A.C. *et al.*, *Sep. Sci. Technol.*, 1982, **17**, 859, (*props, use*)

Kalina, D.G., *Solvent Extr. Ion Exch.*, 1984, **2**, 381, (*use*)

Li, E.Z. *et al.*, *Zh. Obshch. Khim.*, 1984, **54**, 2136; *J. Gen. Chem. USSR (Engl. Transl.)*, 1984, **54**, 1909, (*thermodynamic data*)

Teulade, M.P. *et al.*, *Tet. Lett.*, 1987, **28**, 405, (*P-31 nmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, DDV800