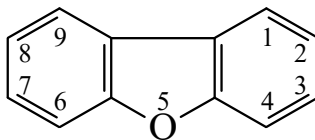




>>Entry Name: Dibenzofuran, 9CI

Synonym(s): Diphenylene oxide



CAS Registry Number: 132-64-9

Molecular Formula: C₁₂H₈O

Molecular Weight: 168.195

Accurate Mass: 168.057515

Percentage Composition: C 85.69%; H 4.79%; O 9.51%

Source/Synthesis: Recovered from coal tar fractions

Use/Importance: Used as component of heat-transfer oils

Physical Description: Cryst. with blue fluor. or prisms (MeOH)

Melting Point: Mp 82.8° (83-85°)

Boiling Point: Bp 287° (276°)

Solubility: Spar. sol. H₂O

Aldrich: 23637-3

Fluka: 42980

Rare Chemicals Library: S27649-9

Supelco: 44-2549

>>Derivative: Picrate

CAS Registry Number: 101606-96-6

Physical Description: Cryst. (C₆H₆/petrol)

Melting Point: Mp 98-99°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **3**, 171A, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 648B; 684B, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1505D, (*ir*)

Pring, B.G. *et al.*, *Acta Chem. Scand.*, 1968, **22**, 549, (*ms*)

Banerjee, A., *Acta Cryst. B*, 1973, **29**, 2070, (*cryst struct*)

Shiotani, A. *et al.*, *Angew. Chem., Int. Ed.*, 1974, **13**, 471, (*synth*)

Akermark, B. *et al.*, *J.O.C.*, 1975, **40**, 1365, (*synth*)

Florea, S. *et al.*, *Org. Magn. Reson.*, 1977, **9**, 133, (*cmr, pmr*)

Huckerby, T.N., *J. Mol. Struct.*, 1979, **54**, 95, (*cmr*)

Sierakowski, A.F., *Aust. J. Chem.*, 1983, **36**, 1281, (*synth*)

Sargent, M.V. *et al.*, *Adv. Heterocycl. Chem.*, 1984, **35**, 1, (*rev*)

Ullmann's Encycl. Ind. Chem., 5th Ed., VCH, Weinheim, 1985, **A12**, 130, (*rev*)

Lamotte, M. *et al.*, *J. Phys. Chem.*, 1990, **94**, 3931, (*uv*)

Jacob, J. *et al.*, *Fresenius' Z. Anal. Chem.*, 1991, **340**, 755, (*occur*)

Yamato, T. *et al.*, *J.O.C.*, 1991, **56**, 3192, (*synth*)

Sax, N.I., *Dangerous Properties of Industrial Materials, 5th edn.*, Van Nostrand Reinhold, 1979, 623