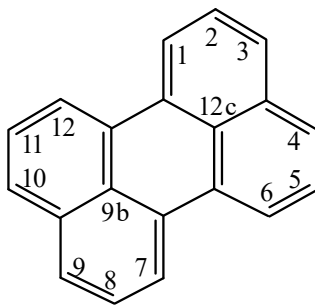




>>Entry Name: Perylene



CAS Registry Number: 198-55-0

Related CAS Registry Numbers(s): 12576-62-4

Molecular Formula: C₂₀H₁₂

Molecular Weight: 252.315

Accurate Mass: 252.0939

Percentage Composition: C 95.21%; H 4.79%

Source/Synthesis: Found in high-boiling petroleum fractions

Physical Description: Bronze plates (AcOH or toluene)

Melting Point: Mp 273-274°

Boiling Point: Bp 350-400° subl.

pKa Value: pK_a -5.2 (H₂SO₄ aq.)

Other Data: V. dilute soln. shows blue fluor. Deep-green soln. in conc. H₂SO₄ becoming blue, then reddish-violet. No activity as a complete carcinogen or a tumour initiator

Aldrich: P1120-4

Fluka: 77341

Sigma: P8625

Supelco: 44-2749

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **2**, 56B, (nmr)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 968A, (ir)

Clar, E. *et al.*, *Ber.*, 1932, **65**, 846, (synth)

Zincke, A. *et al.*, *Monatsh. Chem.*, 1932, **61**, 1, (synth)

Morgan, G.T. *et al.*, *J.C.S.*, 1934, 536, (synth)

Carruthers, W. *et al.*, *J.C.S.*, 1954, 2047, (synth)

Kamura, Y. *et al.*, *Bull. Chem. Soc. Jpn.*, 1976, **49**, 418, (uv)

IARC Monog., 1983, **32**, 411; *Suppl.* 7, 69, (rev, tox)

Harvey, R.G., *Polycyclic Aromatic Hydrocarbons: Chemistry and Carcinogenicity*, Cambridge University Press, 1991, 208, (rev)

Dore, A. *et al.*, *Synlett*, 1992, 807, (synth, pmr)

van Dijk, J.T.M. *et al.*, *J.O.C.*, 1996, **61**, 1136, (synth)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PCQ250