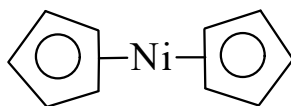




>>Entry Name: Nickelocene, 9Cl

Synonym(s): Di- π -cyclopentadienylnickel, 8Cl. Bis(cyclopentadienyl)nickel



CAS Registry Number: 1271-28-9

Molecular Formula: C₁₀H₁₀Ni

Molecular Weight: 188.879

Accurate Mass: 188.013596

Percentage Composition: C 63.59%; H 5.34%; Ni 31.07%

Source/Synthesis: Synth. from NiCl₂, CpH and base

Use/Importance: Commercially available. Catalyst for cross-coupling reactions and for polym. and cross-linking of 1-acetylene monomers. Universal quencher of org. triplets

Physical Description: Dark green needles (petrol)

Melting Point: Mp 171-173°

Other Data: Subl. *in vacuo*. Paramagnetic

Hazard & Toxicity: Cancer suspect agent. Toxic

Aldrich: N752-4

Fluka: 72255

References:

Aldrich Library of Infrared Spectra, 3rd edn., 1981, 1565C, (*ir*)

Fischer, E.O. *et al.*, *Z. Naturforsch., B*, 1953, **8**, 217, (*synth*)

Wilkinson, G. *et al.*, *J.A.C.S.*, 1954, **76**, 1970, (*synth, ir*)

Friedman, L. *et al.*, *J.A.C.S.*, 1955, **77**, 3689, (*ms*)

Knox, G.R. *et al.*, *J.C.S.*, 1961, 4619, (*synth*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1849, (*synth*)

Koehler, F.H., *J. Organomet. Chem.*, 1976, **110**, 235, (*cmr, pmr*)

Seiler, P. *et al.*, *Acta Cryst. B*, 1980, **36**, 2255, (*cryst struct*)

Rajadurai, S. *et al.*, *Chem. Phys. Lett.*, 1986, **129**, 244, (*use*)

Douglas, W. *et al.*, *J. Organomet. Chem.*, C14, 1986, **308**, (*use*)

Ziegler, H.L. *et al.*, *Chem. Ber.*, 1988, **121**, 159, (*synth, ir*)

Synthetic Methods of Organometallic and Inorganic Chemistry, (ed. Hermann, W.A.), Thieme, 1997, **8**, 14-15, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, NDA500