



>>Entry Name: Hexakis(cyano-C)iridate(3-), 9CI

Synonym(s): Hexacyanoiridate(III)

CAS Registry Number: 19356-47-9

$[\text{Ir}(\text{CN})_6]^{3(-)}$

Molecular Formula: $\text{C}_6\text{IrN}_6^{3(-)}$

Molecular Weight: 348.326

Accurate Mass: 348.981361

Percentage Composition: C 20.69%; Ir 55.18%; N 24.13%

Other Data: Reacts by photosubstitution

>>Derivative: Tri-K salt

CAS Registry Number: 20792-41-0

Molecular Formula: $\text{C}_6\text{IrK}_3\text{N}_6$

Molecular Weight: 465.621

Accurate Mass: 465.872482

Percentage Composition: C 15.48%; Ir 41.28%; K 25.19%; N 18.05%

Use/Importance: Commercially available

Physical Description: White cryst. (aq. EtOH)

Solubility: Sol. H_2O

>>Derivative: Di-Cs, Li salt

CAS Registry Number: 42055-52-7

Molecular Formula: $\text{C}_6\text{Cs}_2\text{IrLiN}_6$

Molecular Weight: 621.078

Percentage Composition: C 11.60%; Cs 42.80%; Ir 30.95%; Li 1.12%; N 13.53%

Physical Description: Cryst.

Solubility: Sol. H_2O

Other Data: Phase changes at 62, 145°

References:

Gmelin Handbook Inorg. Chem., Syst. No. 67, 1939, 108; Suppl., 1978, **2**, 181, (rev, bibl)

Watt, G.W. *et al.*, J. Inorg. Nucl. Chem., 1962, **24**, 1067, (synth)

Inoue, H. *et al.*, Inorg. Chim. Acta, 1973, **7**, 129, (synth)

Swanson, B.I. *et al.*, Inorg. Chem., 1974, **13**, 313, (synth, Raman, Cs_2Li salt)

Geoffroy, G. *et al.*, Inorg. Chem., 1974, **13**, 430, (ir, reactions, uv)

Ryan, R.R. *et al.*, Inorg. Chem., 1974, **13**, 1681, (cryst struct, Cs_2Li salt)