



>>Entry Name: Iridium(IV) chloride (IrCl₄)

Synonym(s): Iridic chloride

CAS Registry Number: 10025-97-5

IrCl₄

Molecular Formula: Cl₄Ir

Molecular Weight: 334.031

Accurate Mass: 332.838325

Percentage Composition: Cl 42.45%; Ir 57.55%

Source/Synthesis: Formed by action of Cl₂ or aqua regia on (NH₄)₂IrCl₆

Use/Importance: Commercially available as hydrate

Physical Description: Hygroscopic, dark-brown, amorphous solid

Solubility: Sol. H₂O, EtOH

Hazard & Toxicity: Poison by ingestion

References:

Gmelin Handbook Inorg. Chem., Syst. No. 67, 1939, 63, (rev)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1969, 2, 228, (use)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold, 1992, IGJ499*