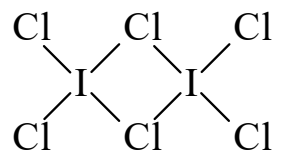




>>Entry Name: Iodine chloride (I₂Cl₆)

Synonym(s): Diiodine hexachloride. Di-μ-chlorotetrachlorodiiodine



CAS Registry Number: 865-44-1

Molecular Formula: Cl₆I₂

Molecular Weight: 466.525

Accurate Mass: 463.622058

Percentage Composition: Cl 45.60%; I 54.40%

Source/Synthesis: Can be made directly from the elements

Use/Importance: Commercially available; used as disinfectant

Physical Description: Bright yellow solid. Evolves chlorine on warming

Melting Point: Mp 101° (under pressure)

Solubility: Dec. by H₂O

Density: d₂¹⁵3.111

Other Data: Dec. at 65°. ΔH_f^o−89.3 kJ mol^{−1}

Aldrich: 35912-2

Fluka: 58115

>>Derivative: Monomer

Synonym(s): Iodine chloride (ICl₃). Iodine trichloride

Molecular Formula: Cl₃I

Molecular Weight: 233.263

Accurate Mass: 231.811029

Percentage Composition: Cl 45.60%; I 54.40%

References:

Truesdale, E.C. *et al.*, *J.A.C.S.*, 1931, **53**, 164, (*synth*)

Inorg. Synth., 1939, **1**, 167, (*synth*)

Fornevis, R. *et al.*, *Spectrochim. Acta A*, 1970, **26**, 581, (*ir, Raman*)

Schoeller, F. *et al.*, *Gas, Wasser, Waerme*, 1972, **26**, 228, (*use*)

Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **13**, 664, (*props*)