



>>Entry Name: Iodine chloride (ICl)

Synonym(s): Iodine monochloride

CAS Registry Number: 7790-99-0

ICl

Molecular Formula: ClI

Molecular Weight: 162.357

Accurate Mass: 161.873325

Percentage Composition: Cl 21.84%; I 78.16%

Use/Importance: Commercially available; disinfectant

Physical Description: Brownish-red cryst.

Melting Point: Mp 27.4°

Boiling Point: Bp 97°

Solubility: Hydrol. by H₂O

Density: d₄²⁰ 3.124

Other Data: ΔH_f^o -23.8 kJ mol⁻¹; ir ν 384 cm⁻¹

Aldrich: 40299-0

Fluka: 24906

Sigma: I8756

References:

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

Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **13**, 663, (*props*)

Coxan, J.A. *et al.*, *J. Mol. Spectrosc.*, 1980, **79**, 363; 380, (*uv, ir*)

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