



>>Entry Name: Selenium fluoride (SeF₆), 11Cl

Synonym(s): Selenium hexafluoride. Hexafluoroselenium(VI)

CAS Registry Number: 7783-79-1

SeF₆ (*O_h*)

Molecular Formula: F₆Se

Molecular Weight: 192.95

Accurate Mass: 193.906938

Percentage Composition: F 59.08%; Se 40.92%

Source/Synthesis: Synth. from Se + F₂

Use/Importance: Gaseous electric insulator

Physical Description: Thermally v. stable colourless gas. White solid at low temp. Subl. before melting. Inert to H₂O

Melting Point: Mp -46.6°

Boiling Point: Subl.₉₄₅ -34.8°

Solubility: V. sl. sol. H₂O

Density: d^{-46.6} 3.27

Other Data: *T*_{crit.} 72°

Hazard & Toxicity: Poison by inhalation. Slowly attacks glass

References:

Inorg. Synth., 1939, **1**, 121, (*synth, props*)

Cohen, B. *et al.*, *Adv. Fluorine Chem.*, 1970, **6**, 343, (*rev*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 195, (*synth*)

Engelbrecht, A. *et al.*, *Adv. Inorg. Chem. Radiochem.*, 1981, **24**, 189, (*rev*)

Gmelin Handbook Inorg. Chem., Syst. No. 10, Suppl. Vol., 1984, **B2**, 39, (*bibl*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, SBS000