



>>Entry Name: Sulfur fluoride (SF₆), 11Cl

Synonym(s): Sulfur hexafluoride. Hexafluorosulfur(VI)

CAS Registry Number: 2551-62-4

SF₆ (*O_h*)

Molecular Formula: F₆S

Molecular Weight: 146.056

Accurate Mass: 145.962488

Percentage Composition: F 78.05%; S 21.95%

Source/Synthesis: Synth from S + F₂

Use/Importance: Used as a gaseous dielectric; commercially available

Physical Description: Colourless, odourless gas of high chemical stability and inertness. Non flammable. White sublimable solid at low temps. Stable to H₂O and to glass

Melting Point: Mp -50.8°

Boiling Point: Subl. -63.8°

Solubility: V. insol. H₂O; s1. sol. EtOH

Density: d 1.88

Other Data: Stable up to 500°. *T*_{crit.} 45°, *P*_{crit.} 38.3 atm.

Aldrich: 29570-1

References:

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 1688C, (*ir*)

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Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **1**, 184, (*synth*)

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