



>>Entry Name: Sulfur fluoride (S₂F₁₀), 11Cl

Synonym(s): Disulfur decafluoride. Bi(pentafluorosulfur)

CAS Registry Number: 5714-22-7

F₅S-SF₅

Molecular Formula: F₁₀S₂

Molecular Weight: 254.116

Accurate Mass: 253.92817

Percentage Composition: F 74.76%; S 25.24%

Source/Synthesis: Synth. from F₅SCl + H₂ with uv irradiation

Physical Description: Colourless liq. Stable to H₂O in the presence of acid or base. Disproportionates at 150° to SF₆ + SF₄

Melting Point: Mp -53°

Boiling Point: Bp 26.7°

Hazard & Toxicity: Extremely toxic

References:

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Seel, F., *Adv. Inorg. Chem. Radiochem.*, 1974, **16**, 297, (*rev*)

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

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