



>>Entry Name: Trichlorosilane, 9CI

Synonym(s): Silochloroform. Silicon trichloride hydride

CAS Registry Number: 10025-78-2

Related CAS Registry Numbers(s): 19165-34-5

SiHCl₃ (C_{3v})

Molecular Formula: Cl₃HSi

Molecular Weight: 135.452

Accurate Mass: 133.891308

Percentage Composition: Cl 78.52%; H 0.74%; Si 20.73%

Source/Synthesis: Synth. by direct reaction of HCl gas with Si or by hydrogenation of SiCl₄

Use/Importance: Used in the synth. of organotrichlorosilanes and in the production of semiconductor-grade Si. Polym. catalyst. Commercially available

Physical Description: Colourless fuming liq.

Melting Point: Mp -128.2°. Mp -126.5°

Boiling Point: Bp 33°. Bp 31.8°

Solubility: Sol. CS₂, CCl₄, C₆H₆, CHCl₃; dec. in H₂O

Density: d₄²⁵ 1.331

Hazard & Toxicity: Flammable, corrosive

Aldrich: 17555-2

References:

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