



>>Entry Name: 1,2-Dichloro-1,1,2-trifluoroethane, 9CI

Synonym(s): Fluorocarbon 123a. CFC 123a

CAS Registry Number: 354-23-4

Related CAS Registry Numbers(s): 34077-87-7 90454-18-5

F₂CClCHClF

Molecular Formula: C₂HCl₂F₃

Molecular Weight: 152.931

Accurate Mass: 151.940738

Percentage Composition: C 15.71%; H 0.66%; Cl 46.36%; F 37.27%

>>Variant: (±)-form

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Use/Importance: Refrigerant

Physical Description: Liq.

Boiling Point: Bp 28-30°

Density: d₄²⁷ 1.498

Refractive Index: n_D¹⁵ 1.3371

Hazard & Toxicity: Anaesthetic

References:

Glockler, G. *et al.*, *J. Chem. Phys.*, 1941, **9**, 387, (*Raman*)

Park, J.D. *et al.*, *J.A.C.S.*, 1951, **73**, 711, (*synth, ir*)

Fuller, G. *et al.*, *Tetrahedron*, 1962, **18**, 123, (*tox*)

Doucet, J. *et al.*, *J. Chem. Phys.*, 1975, **62**, 355, (*uv, pe*)

Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **10**, 861, (*props*)

Capnel, P. *et al.*, *Tetrahedron*, 1979, **35**, 2661, (*F-19 nmr*)

Service, C.F. *et al.*, *J. Fluorine Chem.*, 1982, **20**, 135, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TJY750