>>**Entry Name: 2,2-Dichloro-1,1,1-trifluoroethane,** 9Cl
Synonym(s): Fluorocarbon 123. Freon 123. Fron 123. CFC 123. HCFC 123

CAS Registry Number: 306-83-2
F_3CCHCl_2

Molecular Formula: $C_2HCl_2F_3$
Molecular Weight: 152.931
Accurate Mass: 151.940738
Percentage Composition: C 15.71%; H 0.66%; Cl 46.36%; F 37.27%
Use/Importance: Refrigerant, degreasing solvent. Potential replacement for Fluorocarbon 11 with low ozone depletion capacity. Shows anaesthetic props.
Physical Description: Liq.
Melting Point: Mp –107°
Boiling Point: Bp 28.7°. Bp_{747} 27.1°
Density: d_4^{15}1.475
pKa Value: pK_a 17.2 (37°)
Refractive Index: n_D^{15} 1.3330
Hazard & Toxicity: Severe exposure has been linked to human liver damage (disputed)

Supelco: R47-2155

References:

Kushida, K. *et al.*, *Proton and Fluorine Nuclear Magnetic Resonance Spectral Data*, Japan Halon Co., 1988, 016; 017, *(F-19 nmr, pmr)*
McBee, E.T. *et al.*, *Ind. Eng. Chem.*, 1947, **39**, 409, *(synth)*
Nielsen, J.R. *et al.*, *J. Chem. Phys.*, 1953, **21**, 1060, *(ir, Raman)*
Ng, S.*, J. Magn. Reson.*, 1972, **7**, 370, *(pmr)*
Burns, T.H.S. *et al.*, *Anaesthesia*, 1982, **37**, 278, *(use)*
Zurer, P.*, Chem. Eng. News*, Aug. 25, 1997, 8, *(haz)*
Lewis, R.J.*, Sax's Dangerous Properties of Industrial Materials, 8th edn., Van Nostrand Reinhold*, 1992, TJY500

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