



>>Entry Name: 1,2-Dichloro-1,1-difluoroethane

Synonym(s): Fluorocarbon 132b

CAS Registry Number: 1649-08-7

Related CAS Registry Numbers(s): 25915-78-0

$\text{F}_2\text{CClCH}_2\text{Cl}$

Molecular Formula:  $\text{C}_2\text{H}_2\text{Cl}_2\text{F}_2$

Molecular Weight: 134.94

Accurate Mass: 133.95016

Percentage Composition: C 17.80%; H 1.49%; Cl 52.55%; F 28.16%

Use/Importance: Component of water-removing agents. Blowing agent, propellant, photoresist. remover. Working fluid for refrigerators and heat pumps; solvent. Shows anaesthetic props.

Melting Point: Fp  $-101^\circ$

Boiling Point: Bp  $45-47^\circ$

Density:  $d_4^{20}$  1.416

Refractive Index:  $n_D^{20}$  1.3620

Hazard & Toxicity: Exp. reprod. effects (by inhalation)

#### References:

Deviney, M.L. *et al.*, *J.A.C.S.*, 1957, **79**, 4915, (*props*)

Haszeldine, R.N. *et al.*, *J.C.S.*, 1957, 2193, (*synth*)

Bucket, H.P. *et al.*, *J. Mol. Spectrosc.*, 1963, **11**, 47, (*ir, Raman*)

Dean, R.R. *et al.*, *Trans. Faraday Soc.*, 1968, **64**, 1409, (*F-19 nmr*)

Green, R.G. *et al.*, *J. Photochem.*, 1977, **6**, 375, (*uv*)

Feiring, A.E., *J. Fluorine Chem.*, 1979, **14**, 7, (*synth*)

*Kirk-Othmer Encycl. Chem. Technol.*, 4th edn., Wiley, 1991, **11**, 506, (*props*)

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