



>>Entry Name: Tetradecafluorohexane

Synonym(s): Perfluorohexane. **Perflexane**, INN, USAN. Flutec PP1

CAS Registry Number: 355-42-0

$\text{F}_3\text{C}(\text{CF}_2)_4\text{CF}_3$

Molecular Formula: C_6F_{14}

Molecular Weight: 338.044

Accurate Mass: 337.977642

Percentage Composition: C 21.32%; F 78.68%

Use/Importance: Working fluid for refrigerators and heat pumps. Dielectric coolant component, artificial blood substitute, component of fire extinguishers. Shows anaesthetic props.

Biological Use/Importance: Diagnostic agent

Melting Point: Mp -86°

Boiling Point: Bp₇₄₇ 56.1°

Density: d_4^{25} 1.677

Refractive Index: n_D^{22} 1.2514 n_D^{25} 1.2518

Other Data: Perflexane is a component of Imagent[®] (AF0150), an echopharmaceutical for contrast enhancement during ultrasound studies

Aldrich: 28104-2

Fluka: 77273

References:

- Stiles, V.E. *et al.*, *J.A.C.S.*, 1952, **74**, 3771, (*synth. props*)
Kirshenbaum, A.D. *et al.*, *J.A.C.S.*, 1953, **75**, 3141, (*synth*)
Dunlap, R.D. *et al.*, *J.A.C.S.*, 1958, **80**, 83, (*props*)
Reed, T.M., *J. Chromatogr.*, 1962, **9**, 419, (*chromatog*)
Fainberg, A.H. *et al.*, *J.O.C.*, 1965, **30**, 864, (*props*)
Belanger, G. *et al.*, *Chem. Phys. Lett.*, 1969, **3**, 649, (*uv*)
Dudley, F.B. *et al.*, *Org. Mass Spectrom.*, 1971, **5**, 953, (*ms*)
Ovenall, D.W. *et al.*, *J. Magn. Reson.*, 1977, **25**, 361, (*cmr*)
Lawson, D.D. *et al.*, *J. Fluorine Chem.*, 1978, **12**, 221, (*pharmacol*)
Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **10**, 857, (*props*)
Campos-Vallette, M. *et al.*, *J. Mol. Struct.*, 1984, **118**, 245, (*ir, Raman*)
Starkweather, H.W., *Macromolecules*, 1986, **19**, 1131, (*props*)
Kestner, T.A., *J. Fluorine Chem.*, 1987, **36**, 77, (*F-19 nmr*)
Mattrey, R.F. *et al.*, *Invest. Radiol.*, Suppl 1, 1991, **26**, S65-S66, (*Imagent*)
Pereira, S.M. *et al.*, *Synth. Commun.*, 1995, **25**, 1023, (*use*)