



F2 CHEMICALS LTD

Octafluoropropane

Synonyms: Perfluoropropane, C₃F₈, Flutec PP30
CAS Number : 76-19-7

Description & Characteristics

Octafluoropropane, C₃F₈ is a fully-fluorinated, odourless, colourless compressed gas.

* Compatibility with most construction materials
* Practically non-toxic¹

* Non flammability

Applications

Octafluoropropane is used in semiconductor manufacture for CVD Chamber cleaning and etching. It is also used in contrast imaging applications and as an evaporative cooling fluid.

Safety & Handling

Although Octafluoropropane is considered biologically and chemically inert, good laboratory practice should be observed when handling. Safety data sheets are available on request

Typical Physical Properties

Molecular Weight.....	188
Boiling Point.....	-37°C
Freezing Point.....	-183°C
Vapour Pressure @ 21.1°C.....	792kPa
Absolute Density, Gas @ 101.325 kPa, 20°C.....	8.004 kg/m ³
Relative Density, Gas @ 101.325 kPa, 20°C.....	6.69
Density Liquid @ Saturation Pressure, 20°C.....	1.352 kg/l
Critical Temperature.....	71.9°C
Critical Pressure.....	2.680 MPa
Critical Volume.....	1.590 dm ³ /kg
Critical Compressability Factor.....	0.279
Viscosity, Gas @ 101.325 kPa, 25°C.....	0.01454 mPa s

Typical Thermophysical Properties

Molar Specific Heat, Gas @ 101.325 kPa.....	145.1 J/(mol.K)
@10°C	
	156.0 J/(mol.K) @50°C
Thermal Conductivity, Gas @ 101.325 kPa;25°C.....	0.0138 W/(m.K)
Latent Heat of Vapourisation.....	19.7 kJ/mol @ -36.7°C
	16.8 kJ/mol @ 0.0°C
Heat Capacity, Ideal Gas @ 25°C.....	147.7 J/(mol.K)

The above typical physical properties, in no way form or represent product specification.