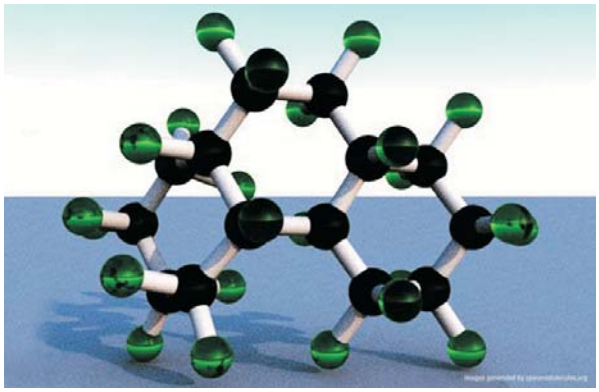
F2 Chemicals Ltd



Perfluoroperhydrophenanthrene

Synonyms: Perfluoroperhydrophenanthrene

CAS Number: 306-91-2

Description & Characteristics

Perfluoroperhydrophenanthrene, C14F24, is a fully-fluorinated, odourless, colourless, non-volatile liquid with the following characteristics:

- Compatibility with most construction materials
- Excellent chemical and thermal stability
- Non-flammability
- Practically non-toxic1

Applications

Perfluoroperhydrophenanthrene finds many applications as a fluid for use in the electronics industries, including vapour phase soldering, condensation inert heating, fluid for testing and direct contact cooling.

Safety, Handling and Storage

Although Perfluoroperhydrophenanthrene is considered biologically and chemically inert, good laboratory practice should be observed when handling. Perfluoroperhydrophenanthrene has an indefinite shelf life if properly stored in its original sealed container. Safety data sheets are available on request.

Typical Physical Properties

Boiling Point °C	215	Critical Temperature, °C	377*
Pour Point °C	-20	Critical Temperature, oK	650*
Molecular Weight	624	Critical Pressure, bar	14.6*
Density, kg/l	2.03	Critical Volume, l/kg	1.58*
Viscosity (kinematic), mm2/s	14	Resistivity ohm.cm	>1013
Viscosity, (dynamic), mPas	28.4	Dielectric Breakdown Strength kV/mm 50Hz	>13
Surface Tension, mN/m	19	Thermal Conductivity, mW/m °C	52.6*
Vapour Pressure, mbar	<1	Expansion Coefficient, °C-1(0°C)	0.00075
Heat of vaporisation at Boiling Point, kj/kg	68*		

* Estimated value

Temperature dependant properties are quoted at 25°C unless otherwise stated. The above typical physical properties, in no way form or represent product specification.