

Revision Date 16/06/2011
 Revision 1
 Supersedes date 27/07/2011



F2 CHEMICALS LIMITED
SAFETY DATA SHEET
Perfluoro-1,3-dimethylcyclohexane

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Perfluoro-1, 3-dimethylcyclohexane
Synonyms, Trade Names 1, 1, 2, 2, 3, 3, 4, 5, 5, 6-Decafluoro-4, 6-bis(trifluoromethyl)cyclohexane, Perfluoro-1, 3-dimethylcyclohexane
CAS-No. 335-27-3
EC No. 206-386-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Performance Liquid

1.3. Details of the supplier of the safety data sheet

Supplier F2 Chemicals Ltd.
 Lea Lane
 Lea Town
 Preston
 Lancs PR4 0RZ UK
 Tel: +44(0) 1772 775804
 Fax: +44(0) 1772 775809
 e-Mail: safety@f2chemicals.com

1.4. Emergency telephone number

+44(0) 1772 775833 (24 hrs)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Not classified.

Classification (67/548/EEC) Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

EC No. 206-386-9
Label In Accordance With (EC) No. 1272/2008
 Not classified.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name Perfluoro-1, 3-dimethylcyclohexane
CAS-No. 335-27-3
EC No. 206-386-9

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Perfluoro-1,3-dimethylcyclohexane

General information

Non-hazardous substance.

4.2. Most important symptoms and effects, both acute and delayed

General information

Non-hazardous substance.

4.3. Indication of any immediate medical attention and special treatment needed

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Very toxic gases/vapours/fumes of: Hydrogen fluoride (HF).

5.3. Advice for firefighters

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Non-hazardous substance.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Non-hazardous substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage Class

Unspecified storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective equipment

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Perfluoro-1,3-dimethylcyclohexane

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Odourless.
Solubility	Insoluble in water
Initial boiling point and boiling range	102
Melting point (°C)	-70
Relative density	1.828
Vapour density (air=1)	10.1
Vapour pressure	4.8 kPa
Evaporation rate	Very fast
pH-Value, Conc. Solution	
Not applicable.	
Viscosity	1.92 mPas
Decomposition temperature (°C)	>400
Flash point (°C)	
Not applicable.	
Auto Ignition Temperature (°C)	
Not applicable.	
Flammability Limit - Lower(%)	
Not applicable.	
Flammability Limit - Upper(%)	
Not applicable.	
Oxidising properties	
Does not meet the criteria for oxidising.	

9.2. Other information

Particle Size (Micron)

Not applicable.

Mol. Weight 400

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials To Avoid

Alkali metals.

10.6. Hazardous decomposition products

Fire creates: Hydrogen fluoride (HF).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Non-hazardous substance.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Perfluoro-1,3-dimethylcyclohexane

Acute Fish Toxicity

Not considered toxic to fish.

12.2. Persistence and degradability

Degradability

The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

12.4. Mobility in soil

Mobility:

The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Incinerate with provision for removal of effluent gases by scrubber.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Legislation

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date	16/06/2011
Revision	1
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Perfluoro-1,3-dimethylcyclohexane**Risk Phrases In Full**

NC

Not classified.

Hazard Statements In Full**Disclaimer**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.