

Revision Date 16/06/2011

Revision 1

Supersedes date 27/07/2011



**F2 CHEMICALS LIMITED**  
**SAFETY DATA SHEET**  
**FLUTEC PP3**

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

**1.1. Product identifier**

**Product name** FLUTEC PP3  
**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** FLUTEC PP3  
**CAS-No.** 335-27-3  
**EC No.** 206-386-9

**SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures**

## FLUTEC PP3

### 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

## FLUTEC PP3

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Odourless.
<b>Solubility</b>	Insoluble in water
<b>Initial boiling point and boiling range</b>	102
<b>Melting point (°C)</b>	-70
<b>Relative density</b>	1.828
<b>Vapour density (air=1)</b>	10.1
<b>Vapour pressure</b>	4.8 kPa
<b>Evaporation rate</b>	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

## FLUTEC PP3

### 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
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## FLUTEC PP3

Risk Phrases In Full

Hazard Statements In Full

### Disclaimer

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