

Revision Date 02/10/2015

Revision 1



**F2 CHEMICALS LIMITED**  
**SAFETY DATA SHEET**  
**FLUTEC TG i-PPCH**

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

**1.1. Product identifier**

**Product name** FLUTEC TG i-PPCH  
**Synonyms, Trade Names** 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, 6-Undecafluoro-6-(1', 2', 2', 2'-tetrafluoro-1'-trifluoromethylethyl)cyclohexane,  
 Perfluoro-iso-propylcyclohexane  
**CAS-No.** 423-02-9

**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  
 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****Label In Accordance With (EC) No. 1272/2008**

No pictogram required.

**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 TG i-PPCH  
**CAS-No.** 423-02-9

**SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures****General information**

Non-hazardous substance.

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### 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

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**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 (°C)</b>	130
<b>Melting point (°C)</b>	-43
<b>Relative density</b>	1.894
<b>Vapour pressure</b>	1.7 kPa
<b>pH-Value, Conc. Solution</b>	Not applicable.
<b>Viscosity</b>	3.22 mPas
<b>Decomposition temperature (°C)</b>	>400
<b>Flash point (°C)</b>	Not applicable.
<b>Auto Ignition Temperature (°C)</b>	Not applicable.
<b>Flammability Limit - Lower(%)</b>	Not applicable.
<b>Flammability Limit - Upper(%)</b>	Not applicable.
<b>Oxidising properties</b>	Does not meet the criteria for oxidising.

**9.2. Other information**

<b>Particle Size (Micron)</b>	Not applicable.
<b>Mol. Weight</b>	450

## 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

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### 11.1. Information on toxicological effects

#### Toxicological information

Non-hazardous substance.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 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

This material is believed to have a global warming potential (GWP) of greater than 1000, but less than 5000.

## 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

#### General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 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

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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** 02/10/2015

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#### **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.