

## Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Issue date: 11/02/2025 Revision date: 11/02/2025 Supersedes version of: 02/03/2023 Version: 4.3

	ubstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: FLUTEC PP2
IUPAC name	: 1,1,2,2,3,3,4,4,5,5,6-Undecafluoro-6-(trifluoromethyl)cyclohexane
EC-No.	: 206-573-5
CAS-No.	: 355-02-2
REACH registration No	: 01-2120766640-53, UK-01-8047013365-5
Formula	: C7F14
r officia	. 6/114
1.2. Relevant identified uses of the su	ubstance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Industrial use, Professional use
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safe	ety data sheet
F2 Chemicals Ltd	
Lea Lane Lea Town	
PR4 0RZ Preston - UK	
T +44 (0) 1772 775800	
safety@f2chemicals.com	
1.4. Emergency telephone number	
Emergency number	: +44 (0) 1772 775833 (24 hr)
	. '44 (0) 1172 113033 (24 11)
SECTION 2: Hazards identification	1 1
<b>SECTION 2: Hazards identification</b> 2.1. Classification of the substance o	n mixture
SECTION 2: Hazards identification	n mixture
SECTION 2: Hazards identification 2.1. Classification of the substance o Classification according to Regulation (EC	n mixture
SECTION 2: Hazards identification 2.1. Classification of the substance o Classification according to Regulation (EC	1 or mixture C) No. 1272/2008 [CLP]
SECTION 2: Hazards identification 2.1. Classification of the substance o Classification according to Regulation (EC Not classified Adverse physicochemical, human health a	1 or mixture C) No. 1272/2008 [CLP]
SECTION 2: Hazards identification 2.1. Classification of the substance o Classification according to Regulation (EC Not classified Adverse physicochemical, human health a To our knowledge, this product does not prese	n r mixture C) No. 1272/2008 [CLP] and environmental effects
SECTION 2: Hazards identification   2.1. Classification of the substance of   Classification according to Regulation (EC)   Not classified   Adverse physicochemical, human health a   To our knowledge, this product does not preservative.   2.2. Label elements	n r mixture c) No. 1272/2008 [CLP] and environmental effects nent any particular risk, provided it is handled in accordance with good occupational hygiene and safety
SECTION 2: Hazards identification 2.1. Classification of the substance of Classification according to Regulation (EC Not classified Adverse physicochemical, human health a To our knowledge, this product does not prese practice.	n r mixture c) No. 1272/2008 [CLP] and environmental effects nent any particular risk, provided it is handled in accordance with good occupational hygiene and safety
SECTION 2: Hazards identification   2.1. Classification of the substance of   Classification according to Regulation (EC)   Not classified   Adverse physicochemical, human health a   To our knowledge, this product does not preservative.   2.2. Label elements	n r mixture c) No. 1272/2008 [CLP] and environmental effects nent any particular risk, provided it is handled in accordance with good occupational hygiene and safety
SECTION 2: Hazards identification 2.1. Classification of the substance of Classification according to Regulation (EC Not classified Adverse physicochemical, human health a To our knowledge, this product does not prese practice. 2.2. Label elements Labelling according to Regulation (EC) No	n pr mixture c) No. 1272/2008 [CLP] and environmental effects pent any particular risk, provided it is handled in accordance with good occupational hygiene and safety p. 1272/2008 [CLP]
SECTION 2: Hazards identification   2.1. Classification of the substance of   Classification according to Regulation (EC)   Not classified   Adverse physicochemical, human health a   To our knowledge, this product does not preservative.   2.2. Label elements	n pr mixture c) No. 1272/2008 [CLP] and environmental effects pent any particular risk, provided it is handled in accordance with good occupational hygiene and safety p. 1272/2008 [CLP]
SECTION 2: Hazards identification 2.1. Classification of the substance of Classification according to Regulation (EC Not classified Adverse physicochemical, human health a To our knowledge, this product does not prese practice. 2.2. Label elements Labelling according to Regulation (EC) No	n pr mixture c) No. 1272/2008 [CLP] and environmental effects pent any particular risk, provided it is handled in accordance with good occupational hygiene and safety p. 1272/2008 [CLP]
SECTION 2: Hazards identification 2.1. Classification of the substance of Classification according to Regulation (EC Not classified Adverse physicochemical, human health a To our knowledge, this product does not prese practice. 2.2. Label elements Labelling according to Regulation (EC) No	n pr mixture c) No. 1272/2008 [CLP] and environmental effects pent any particular risk, provided it is handled in accordance with good occupational hygiene and safety p. 1272/2008 [CLP]
SECTION 2: Hazards identification   2.1. Classification of the substance of   Classification according to Regulation (EC)   Not classified   Adverse physicochemical, human health at   To our knowledge, this product does not preservatice.   2.2. Label elements   Labelling according to Regulation (EC) No   Labelling according to Directive 67/548/EE	n pr mixture c) No. 1272/2008 [CLP] and environmental effects pent any particular risk, provided it is handled in accordance with good occupational hygiene and safety p. 1272/2008 [CLP]
SECTION 2: Hazards identification   2.1. Classification of the substance of   Classification according to Regulation (EC)   Not classified   Adverse physicochemical, human health a   To our knowledge, this product does not preservatice.   2.2. Label elements   Labelling according to Regulation (EC) No	n pr mixture c) No. 1272/2008 [CLP] and environmental effects pent any particular risk, provided it is handled in accordance with good occupational hygiene and safety p. 1272/2008 [CLP]

SECTION 3: Composition/information on ingredients 3.1. Substances

Substance type

: Mono-constituent

### Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
FLUTEC PP2	(CAS-No.) 355-02-2 (EC-No.) 206-573-5 (REACH-no) 01-2120766640-53, UK-01- 8047013365-5	100	Not classified

#### 3.2. Mixtures

Not applicable

. tot opp.		
SECTI	ON 4: First aid measures	
4.1.	Description of first aid measures	
4.2.	Most important symptoms and effec	ts, both acute and delayed
4.3.	Indication of any immediate medical	attention and special treatment needed
Treat sy	nptomatically.	
SECTI	ON 5: Firefighting measures	
5.1.	Extinguishing media	
	extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2.	Special hazards arising from the sub	ostance or mixture
	us decomposition products in case of	: Toxic fumes may be released.
fire		,
5.3.	Advice for firefighters	
Protectio	n during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing
		apparatus. Complete protective clothing.
SECTI	ON 6: Accidental release meas	sures
6.1.	Personal precautions, protective equ	uipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emerger	ncy procedures	: Ventilate spillage area.
6.1.2.	For omorgonov responders	
0.1.2.	For emergency responders	
6.2.	Environmental precautions ease to the environment.	
6.3.	Methods and material for containme	
Methods Other inf	for cleaning up	: Take up liquid spill into absorbent material.
-		: Dispose of materials or solid residues at an authorized site.
6.4.	Reference to other sections	
	er information refer to section 13.	
SECTI	ON 7: Handling and storage	
7.1.	Precautions for safe handling	
Hygiene	measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2.	Conditions for safe storage, including	ng any incompatibilities
Storage	conditions	: Keep container tightly closed.
7.3.	Specific end use(s)	
No addit	ional information available	
<b>SECTI</b>	ON 8: Exposure controls/perso	onal protection

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

#### 8.2. Exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

<b>SECTION 9: Physical and chemical p</b>	properties
9.1. Information on basic physical and cl	hemical properties
Physical state	: Liquid
Appearance	: Clear, colorless liquid.
Molecular mass	: ≈ 350 g/mol
Colour	: Colourless.
Odour	: Odourless.
Odour threshold	: Not applicable
рН	: Not applicable.
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: ≈ -37 °C
Boiling point	: ≈76 °C
Flash point	: No data available
Critical temperature	: ≈ 212.9 °C
Auto-ignition temperature	: Not applicable
Decomposition temperature	: ≈ 400 °C
Flammability	: Not applicable
Vapour pressure	: ≈ 14 kPa
Critical pressure	: ≈ 20.2 bar
Relative vapour density at 20 °C	: No data available
Relative density	: ≈ 1.788
Solubility	: Soluble in aliphatic hydrocarbons. Soluble in chlorinated hydrocarbons. Insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: ≈ 0.87 mm²/s
Viscosity, dynamic	: ≈ 1.561 mPa·s
Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: No data available
9.2. Other information	
Specific conductivity	: ≈ 0.001 pS/m
Refractive index	: ≈ 1.2781
Other properties	: Not flammable.
SECTION 10: Stability and reactivity	
10.1. Reactivity	
The product is non-reactive under normal condition	ons of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions of use.	
<b>10.3.</b> Possibility of hazardous reactions Stable under normal conditions of use.	
10.4. Conditions to avoid	
None under recommended storage and handling	conditions (see section 7).
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
	ardous decomposition products should not be produced.
ender normal conditions of storage and use, flaz	

Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

SECTION 11: Toxicological info	rmation
11.1. Information on toxicological e	ffects
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
	pH: Not applicable.
Serious eye damage/irritation	: Not classified
	pH: Not applicable.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
FLUTEC PP2 (355-02-2)	
Viscosity, kinematic	≈ 0.87 mm²/s

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long- term (chronic)	: Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessmen	it in the second se
No additional information available	
12.6. Other adverse effects	
SECTION 13: Disposal consideration	S
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID ADR IMDG ΙΑΤΑ ADN RID 14.1. **UN number** Not regulated Not regulated Not regulated Not regulated Not regulated 14.2. UN proper shipping name Not regulated Not regulated Not regulated Not regulated Not regulated 14.3. Transport hazard class(es) Not regulated Not regulated Not regulated Not regulated Not regulated 14.4. Packing group Not regulated Not regulated Not regulated Not regulated Not regulated

### Product Safety Information Sheet

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

ADR	IMDG	ΙΑΤΑ	ADN	RID
	ental hazards			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
		No supplementary informati	on available	
14.6. Special pro	ecautions for user			
- Overland transport	•			
Not regulated	L			
Not regulated				
- Transport by sea				
Not regulated				
- Air transport				
Not regulated				
lotrogulatou				
- Inland waterway tr	ansport			
Not regulated				
- Rail transport				
Not regulated				
-	in hulls an ending to Annou-	II of Morrisol and the IDC Code		
14.7. Transport	in bulk according to Annex	II of Marpol and the IBC Code	9	
SECTION 15: Re	egulatory information			
15.1. Safety, hea	alth and environmental regu	lations/legislation specific fo	r the substance or mixture	
15.1.1. EU-Regula	tions			

No REACH Annex XVII restrictions FLUTEC PP2 is not on the REACH Candidate List FLUTEC PP2 is not on the REACH Annex XIV List

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

F2 template (no freezing point)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.