

## 1: Identification of substance / mixture

## 1. Product Identifier

Substance

Product Name **Octafluorotoluene**  
 Product Code 003271  
 CAS Number 434-64-0  
 Other Names  
 IUPAC  
 MFCD Number MFCD00000375  
 EC/EINECS  
 REACH Number

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

Research and Development

## 3. Details of the supplier of the safety data sheet

Fluorochem Ltd  
 Unit 14, Graphite Way  
 Hadfield  
 Derbyshire  
 SK13 1QH  
 United Kingdom



Telephone: +44(0)1457 892111  
 Fax number: +44(0)1457 892799  
 Email: MSDS@fluorochem.co.uk

## 4. Emergency telephone number

07855 268577

## 2. Hazards Identification

## 1. Classification of the substance or mixture

H225	Flam Liq. 2	R10, R11
H302	Acute Tox. 4	R22
H315	Skin Irrit. 2	R38
H319	Eye Irrit. 2	R36
H335	STOT SE 3a	R37

\* The risk codes have been generated using Annex VII of directive 67/548/EEC. Risk code combinations are not included.

## 2. Label elements

SignalWord **Danger**

## Hazard Statements

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

## Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P241	Use explosion-proof electrical/ventilating/lighting/. equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

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P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 3. Other Hazards

Additional Precautionary Phrases are located throughout the SDS.

## 3. Composition / Information on Ingredients

### 1. Substances

Octafluorotoluene

Assay:100% CAS Number :434-64-0

### 2. Mixtures

Not Relevant

## 4. First Aid Measures

### 1. Description of first aid measures

<i>Skin Contact</i>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/ attention.
<i>Eye Contact</i>	If eye irritation persists: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<i>Ingestion</i>	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
<i>Inhalation</i>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

### 2. Most important symptoms and effects

There may be irritation and redness.

### 3. Indication of any immediate medical attention

No additional measures required

## 5. Firefighting measures

### 1. Extinguishing Media

<i>Suitable</i>	In case of fire: Use CO2 Carbon dioxide. sand Dry chemical powder.
<i>Unsuitable</i>	Do not use water.

### 2. Special Hazards arising from the substance or mixture

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.  
In combustion emits toxic fumes of hydrogen bromide.

### 3. Advice for Fire Fighters

Wear self-contained breathing apparatus.  
Wear protective clothing to prevent contact with skin and eyes.

## 6. Accidental Release Measures

### 1. Personal Precautions

Refer to section 8 of SDS for personal protection details.

## 2.Environmental Precautions

Do not discharge into drains or rivers.

## 3.Methods & Materials

Absorb into dry earth or sand.  
Avoid all incompatible materials in clean-up procedure. See section 10 of SDS.  
Transfer to a closable, labelled salvage container for disposal by an appropriate method.

## 7.Handling and Storage

### 1.Personnal Precautions

<i>Safe Handling</i>	Ensure there is sufficient ventilation of the area. Use non-sparking tools.
<i>Protection against explosions and fires</i>	Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting/. Wash handsoughly after handling.

### 2.Conditions for safe storage, including any incompatibilities

<i>Managing Storage Risks</i>	Store in cool, well ventilated area. Keep container tightly closed. Avoid contact with water or humidity. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition. Refrigerate.
<i>Storage Controls</i>	No special requirements
<i>Maintaining Integrity</i>	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store away from oxidising agents
<i>Other advice</i>	Store in a well-ventilated place. Keep container tightly closed.

### 3.Specific End Uses

The end use(s) have not been fully determined. The substance is supplied for Research and Development purposes by professionals only.

## 8.Exposure Controls/Personal Protection

### 1. Control Parameters

No Data Available

## 2.Exposure Controls

<i>General protective and hygiene measures</i>	Wear protective gloves/protective clothing/eye protection/face protection. . Wash hands during breaks and at the end of handling the material Immediately remove any contaminated clothing
<i>Engineering measures</i>	Use only outdoors or in a well-ventilated area.
<i>Eye / Face Protection</i>	Safety Glasses.
<i>Hand protection</i>	Protective gloves.
<i>Respiratory protection</i>	Do not breathe dust/fume/gas/mist/vapours/spray. . Use breathing protection with high concentrations
<i>Skin protection</i>	Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. Protective clothing.
<i>Other personal protection advice</i>	no data

## 9.Physical and Chemical Properties

### 1. Physical and Chemical Properties

Appearance	liquid
Odour	N/A
Odour threshold	N/A
PH	N/A
Melting point / Freezing point	-66°
Initial boiling point and boiling range	103-105°
Flash point	20°
Evaporation rate	N/A
Flammability(solid,gas)	N/A
Upper/lower flammability or explosive limits	N/A
Vapour pressure	N/A
Vapour density	N/A
Relative density	1.668
Solubility(ies):	N/A
Partition coefficient: n-octanol/water	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A
Viscosity	N/A
Explosive properties	N/A
Oxidising properties	N/A

### 2.Other Information

No additional information available

## 10.Stability and Reactivity

### 1.Reactivity

no unusual reactivity

## 2.Stability

Stable under normal conditions.

## 3.Possibility of Hazardous Reactions

no hazardous reactions known

## 4.Conditions to Avoid

Heat.

## 5.Incompatible Materials

Bases.  
Oxidising agents.

## 6.Hazardous Decomposition Products

In combustion emits toxic fumes of carbon dioxide / carbon monoxide.  
In combustion emits toxic fumes of hydrogen bromide.

## 11.Toxicology information

### 1.Information

<i>Acute Toxicity</i>	Oral LD50 (Rat) 500-2000mg/kg Dermal LD50 (Rat) >2000mg/kg
<i>Skin corrosion/irritation</i>	irritant for skin and mucous membranes
<i>Serious eye Damage/irritation</i>	irritant effect
<i>Respiratory or skin sensitisation</i>	No sensitizing effect known
<i>Germ Cell mutagenicity</i>	not known
<i>Carcinogenicity</i>	not known
<i>Reproductive toxicity</i>	not known
<i>STOT-single exposure</i>	not known
<i>STOT-repeated exposure</i>	not known
<i>Aspiration hazard</i>	not known

### 2.Additional

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.  
No classification data on carcinogenic properties of this material is available from the EPA, IARC,NTP,OSHA or ACGIH

## 12.Ecological Information

### 1.Toxicity

not known

### 2.Persistence and degradability

not known

### 3. Bio-Accumulative Potential

not known

### 4. Mobility and Soil

not known

### 5. Results of PBT & vPvB assessment

not known

### 6. Other adverse effects

not known

## 13. Exposure Controls/Personal Protection

### No Resource File

*Disposal Operations*            Hand over to authorised disposal company as hazardous waste.

*Disposal of Packaging*        Disposal must be made according to official regulations.

## 14. Transport Information

### Air (ICAO)

1.                            **UN Number:** 1992
2.                            **UN proper shipping name:** Flammable liquid, toxic, n.o.s. \*
3.                            **Transport hazard class(es):** Class: 3      Sub Class : 6.1



4.                            **Packing group:** III
5.                            **Environmental hazards:**
6.                            **Special Precautions for user:**
7.                            **Transport in bulk:**

### Road (ADR)

1.                            **UN Number:** 1992
2.                            **UN proper shipping name:** FLAMMABLE LIQUID, TOXIC, N.O.S.
3.                            **Transport hazard class(es):** Class: 3      Sub Class :



4.                            **Packing group:** III
5.                            **Environmental hazards:**
6.                            **Special Precautions for user:**
7.                            **Transport in bulk:**

### Sea (IMDG)

1.                            **UN Number:** 1992
2.                            **UN proper shipping name:** Flammable liquid, toxic, n.o.s. \*

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3. **Transport hazard class(es):** Class: 3 Sub Class : 6.1



4. **Packing group:** III

5. **Environmental hazards:**

6. **Special Precautions for user:**

7. **Transport in bulk:** IBCINS: IBC03

UNTANKINS: T7  
TANKPROV: TP1 TP28

## 15. Safety, health and environmental regulations

### 1. Safety, health and environmental regulations:

product is not subject to any additional regulations or provisions

### 2. Safety Assessment

No Chemical Safety Assessment

## 16. Other Information

### 1. Other Information:

ADR: Accord Europeen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by road)

RID: Reglement International concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the International Air Transport Association

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the ICAO

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service

### 2. Associated risk phrases according to european directive

#### 67/548/EEC

R10	Flammable
R11	Highly flammable
R22	Harmful if swallowed
R36	Irritating to eyes
R37	Irritating to respiratory system
R38	Irritating to skin

### 3. Disclaimer

The product listed is for research and development purposes only and not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user.