

## SAFETY DATA SHEET

4,5,5,5-TETRAFLUORO-4-(TRIFLUOROMETHYL)PENTAN-1-OL

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Compilation date: 31/01/2003

Revision date: 29/08/2017

Revision No: 3

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name:** 4,5,5,5-TETRAFLUORO-4-(TRIFLUOROMETHYL)PENTAN-1-OL

**CAS number:** 29819-73-6

**Product code:** PC6932G

**Synonyms:** 3-(PERFLUOROISOPROPYL)PROPAN-1-OL

1-HYDROXY-4,5,5,5-TETRAFLUORO-4-(TRIFLUOROMETHYL)PENTANE

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

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

**Company name:** Apollo Scientific Ltd

Units 3 & 4

Parkway

Denton

Manchester

M34 3SG

UK

**Tel:** 0161 337 9971

**Fax:** 0161 336 6932

**Email:** david.tideswell@apolloscientific.co.uk

#### 1.4. Emergency telephone number

### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**Classification under CLP:** STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

**Most important adverse effects:** Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

#### 2.2. Label elements

**Label elements:**

**Hazard statements:** H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

**Signal words:** Warning

**Hazard pictograms:** GHS07: Exclamation mark



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**Precautionary statements:** P271: Use only outdoors or in a well-ventilated area.  
P261: Avoid breathing vapours.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** 4,5,5,5-TETRAFLUORO-4-(TRIFLUOROMETHYL)PENTAN-1-OL

**CAS number:** 29819-73-6

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.  
Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** Nausea and stomach pain may occur. There may be vomiting. Drowsiness or mental confusion may occur.

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

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Carbon dioxide. Dry chemical powder. Alcohol resistant foam. Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

[cont...]

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### 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Hydrogen fluoride (HF).

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.

### 6.4. Reference to other sections

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.  
Only use in fume hood.

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

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

**Suitable packaging:** Must only be kept in original packaging.

### 7.3. Specific end use(s)

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves.

[cont...]

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**Eye protection:** Safety goggles.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

### Section 9: Physical and chemical properties

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

**State:** Liquid

**Evaporation rate:** No data available.

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** No data available.

**Viscosity:** No data available.

**Boiling point/range °C:** No data available.

**Flammability limits %: lower:** No data available.

**Flash point °C:** No data available.

**Autoflammability °C:** No data available.

**Relative density:** No data available.

**VOC g/l:** No data available.

**Melting point/range °C:** No data available.

**upper:** No data available.

**Part.coeff. n-octanol/water:** No data available.

**Vapour pressure:** No data available.

**pH:** No data available.

#### 9.2. Other information

**Other information:** No data available.

### Section 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

#### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

#### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

#### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Hydrogen fluoride (HF).

### Section 11: Toxicological information

#### 11.1. Information on toxicological effects

[cont...]

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### Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** Nausea and stomach pain may occur. There may be vomiting. Drowsiness or mental confusion may occur.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

### 12.3. Bioaccumulative potential

### 12.4. Mobility in soil

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

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

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

[cont...]

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### Section 16: Other information

#### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.