

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

### 1.1. Product identifier

**Product name:** HEXAFLUOROANTIMONIC ACID HEXAHYDRATE  
**CAS number:** \* 72121-43-8  
**EINECS number:** 241-023-8  
**Product code:** PC4593  
**Synonyms:** \* FLUOROANTIMONIC ACID HEHAXYDRATE

### 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 CHIP:** Xn: R20/22; N: R51/53

**Classification under CLP:** Acute Tox. 4: H302+332; Aquatic Chronic 2: H411

**Most important adverse effects:** Harmful by inhalation and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 2.2. Label elements

#### Label elements under CLP:

**Hazard statements:** H302+332: Harmful if swallowed or if inhaled.  
H411: Toxic to aquatic life with long lasting effects.

**Signal words:** Warning

**Hazard pictograms:** GHS07: Exclamation mark  
GHS09: Environmental

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**Precautionary statements:** P260: Do not breathe vapours.  
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

## Label elements under CHIP:

**Hazard symbols:** \* Dangerous for the environment.  
Harmful.



**Risk phrases:** \* R20/22: Harmful by inhalation and if swallowed.  
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases:** \* S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.  
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S63: In case of accident by inhalation, remove casualty to fresh air and keep at rest.  
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

**Precautionary phrases:** \*

## 2.3. Other hazards

**Other hazards:** Reacts violently with water.

**PBT:** This substance is not identified as a PBT substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** HEXAFLUOROANTIMONIC ACID HEXAHYDRATE

## 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. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

[cont...]

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## 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. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Not applicable.

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

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

**Exposure hazards:** In combustion emits toxic fumes. Hydrogen fluoride (HF). Antimony oxides.

### 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:** Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. 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.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

## Section 7: Handling and storage

[cont...]

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## 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.  
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

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

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Store under Argon.  
**Suitable packaging:** Must only be kept in original packaging.

## 7.3. Specific end use(s)

**Specific end use(s):** No data available.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** Not applicable.

### 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

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

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Odour:** Pungent

**Vapour pressure:** 35hPa@62C

### 9.2. Other information

**Other information:** Not applicable.

## 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.  
Decomposition may occur on exposure to conditions or materials listed below.

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**10.4. Conditions to avoid**

**Conditions to avoid:** Heat.

**10.5. Incompatible materials**

**Materials to avoid:** Strong bases. Alcohols. Metals. Water. Glass

**10.6. Hazardous decomposition products**

**Haz. decomp. products:** In combustion emits toxic fumes.

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Relevant hazards for substance:**

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH ING	Based on test data

**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. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonia, pulmonary edema, burning sensation.

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity values:** Not applicable.

**12.2. Persistence and degradability**

**Persistence and degradability:** Not biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** Bioaccumulation potential.

**12.4. Mobility in soil**

**Mobility:** Readily absorbed into soil.

**12.5. Results of PBT and vPvB assessment**

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

[cont...]

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**12.6. Other adverse effects**

**Other adverse effects:** Toxic to aquatic organisms. Long lasting effects.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Disposal of packaging:** Dispose of as special waste in compliance with local and national regulations Observe all federal, state and local environmental regulations.

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

**Section 14: Transport information**

**14.1. UN number**

**UN number:** UN2922

**14.2. UN proper shipping name**

**Shipping name:** CORROSIVE LIQUID, TOXIC, N.O.S.

**14.3. Transport hazard class(es)**

**Transport class:** 8 (6.1)

**14.4. Packing group**

**Packing group:** II

**14.5. Environmental hazards**

**Environmentally hazardous:** Yes

**Marine pollutant:** No

**14.6. Special precautions for user**

**Special precautions:** No special precautions.

**Tunnel code:** E

**Transport category:** 2

**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.

**Section 16: Other information**

**Other information**

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

[cont...]

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453/2010.

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\* Data predicted using computational software. Toxtree - Toxic Hazard Estimation by decision tree approach. [http://ecb.jrc.ec.europa.eu/qsar/qsar-tools/index.php?](http://ecb.jrc.ec.europa.eu/qsar/qsar-tools/index.php?c=TOXTREE)

c=TOXTREE

~ Data predicted using computational software ACD/ToxSuite v 2.95.1 Copyright 1994-2009 ACD/labs, Copyright 2001-2009 Pharma Algorithms, Inc, Advanced Chemistry Development, Inc (ACD/Labs). [http://www.acdlabs.com/products/pc\\_admet/tox/tox/](http://www.acdlabs.com/products/pc_admet/tox/tox/)

**Phrases used in s.2 and 3:** H302+332: Harmful if swallowed or if inhaled.

H411: Toxic to aquatic life with long lasting effects.

R20/22: Harmful by inhalation and if swallowed.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**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.