

# SAFETY DATA SHEET

THIONYL FLUORIDE

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Issued: 22/11/2007

Revision No: 1

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** THIONYL FLUORIDE

**CAS number:** 7783-42-8

**Product code:** PC6956

**Company name:** Apollo Scientific Ltd  
Bredbury, Stockport, SK6 2QR, Tel 0161 406 0505

## 2. HAZARDS IDENTIFICATION

**Main hazards:** Toxic by inhalation, in contact with skin and if swallowed.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Hazardous ingredients:** THIONYL FLUORIDE >90%

## 4. FIRST AID MEASURES (SYMPTOMS)

**Skin contact:** There may be redness or whiteness of the skin in the area of exposure. Irritation or pain may occur at the site of contact. Absorption through the skin may be fatal.

**Eye contact:** There may be severe pain. The eyes may water profusely.

**Ingestion:** There may be soreness and redness of the mouth and throat. There may be vomiting. Convulsions may occur. There may be loss of consciousness.

**Inhalation:** There may be shortness of breath with a burning sensation in the throat. Absorption through the lungs can occur causing symptoms similar to those of ingestion. Convulsions may occur. There may be loss of consciousness.

## 4. FIRST AID MEASURES (ACTION)

**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:** Wash out mouth with water. 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 conscious, ensure the casualty sits or lies down. If unconscious and breathing is OK, place in the recovery position. If unconscious, check for breathing and apply artificial respiration if necessary. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

[cont...]

## 5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Carbon dioxide. Dry chemical powder.

**Exposure hazards:** Toxic. In combustion emits toxic fumes.

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

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Notify the police and fire brigade immediately. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Do not attempt to take action without suitable protective clothing - see section 8 of SDS.

**Environmental precautions:** Do not discharge into drains or rivers.

**Clean-up procedures:** Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

## 7. HANDLING AND STORAGE

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

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

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

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency. Particle filter class P1 (EN143).

**Hand protection:** Protective gloves.

**Eye protection:** Safety glasses with side-shields. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Gas

**Boiling point/range°C:** -43

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions.

**Conditions to avoid:** Heat.

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

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

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**11. TOXICOLOGICAL INFORMATION**

**Chronic toxicity:** MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.

**Routes of exposure:** Refer to section 4 of SDS for routes of exposure and corresponding symptoms.

**12. ECOLOGICAL INFORMATION**

**Mobility:** Data not yet known

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

**Other adverse effects:** Data not known

**13. DISPOSAL CONSIDERATIONS**

**Disposal operations:** MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

**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.

**14. TRANSPORT INFORMATION**

**ADR / RID**

**UN no:** 3305

**ADR Class:** 2

**Classification code:** 1TFC

**Shipping name:** COMPRESSED GAS, TOXIC, FLAMMABLE, CORROSIVE, N.O.S.

**Labelling:** 2.3+2.1+8

**Hazard ID no:** 263



**IMDG / IMO**

**UN no:** 3305

**Class:** 2.3

**EmS:** F-D,S-U

**Marine pollutant:** .

**Labelling:** 2.3+2.1+8

**IATA / ICAO**

**UN no:** 3305

**Class:** 2

**Subsidiary risk:** 3+8

**Packing instructions:** FORBIDDEN

**Labelling:** 2.3+2.1+8

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**15. REGULATORY INFORMATION****Hazard symbols:** Toxic.

Corrosive.

Flammable.

**Risk phrases:** R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.**Safety phrases:** S36/37: Wear suitable protective clothing and gloves.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

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.

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.**16. OTHER INFORMATION****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.