

4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

Page: 1

Compilation date: 22/11/2005

Revision date: 15/08/2013

Revision No: 2

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

## 1.1. Product identifier

Product name: 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

CAS number: 337508-66-4

Product code: OR23228

Synonyms: 5-[4-(CHLOROSULPHONYL)PHENYL]-1,3-OXAZOLE

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; C: R34; Xi: R37
Classification under CLP:	Acute Tox. 4: H302+332; Skin Corr. 1B: H314; STOT SE 3: H335
Most important adverse effects:	Harmful by inhalation and if swallowed. Causes burns. Irritating to respiratory system.

## 2.2. Label elements

Label elements under CLP:	
Hazard statements:	H302+332: Harmful if swallowed or if inhaled.
	H314: Causes severe skin burns and eye damage.
	H335: May cause respiratory irritation.
Signal words:	Danger
Hazard pictograms:	GHS05: Corrosion
	GHS07: Exclamation mark



## 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

		Page: 2
Precautionary statements:	P280: Wear protective gloves/protective clothing/eye protection/face protection.	
	P309+311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor.	
Label elements under CHIP:		
Hazard symbols:	Corrosive.	
Risk phrases:	R20/22: Harmful by inhalation and if swallowed.	
	R34: Causes burns.	
	R37: Irritating to respiratory system.	
Safety phrases:	S22: Do not breathe dust.	
	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).	
2.3. Other hazards		

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

## Section 3: Composition/information on ingredients

### 3.1. Substances

### Chemical identity: 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

## 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.
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.

4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

### 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, foam. Suitable extinguishing media for the surrounding fire should be used.

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

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Sulphur oxides (SOx). Hydrogen chloride (HCl).

#### 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.

### 6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

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

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate

method.

### 6.4. Reference to other sections

### Section 7: Handling and storage

#### 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 dust in the air. Only use in fume hood.

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

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Air sensitive. Moisture sensitive. 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.

### 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

Page: 4

## Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

Workplace exposure limits: 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. Respiratory<br/>protective device with particle filter.Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.Skin protection:Protective clothing.

## Section 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

State: Solid

Colour: beige to brown

Melting point/range °C: 91-101

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. Air. Moist air. Humidity.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

**10.6. Hazardous decomposition products** 

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Hydrogen

chloride (HCl). Sulphur oxides (SOx)

### Section 11: Toxicological information

### 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

## 11.1. Information on toxicological effects

## Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH ING	Based on test data
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data
STOT-single exposure	INH	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.

## Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

## 12.2. Persistence and degradability

Persistence and degradability: No data available.

## 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

## 12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Other adverse effects: No data available.

## Section 13: Disposal considerations

13.1. Waste treatment methods

**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.

## 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

		Page:	6
ection 14: Transport informat	lion		
14.1. UN number			
UN number:	LIN2261		
			_
14.2. UN proper shipping name			
	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.		
14.3. Transport hazard class(es	s)		
Transport class:	8		
14.4. Packing group			
Packing group:			
14.5. Environmental hazards			
Environmentally hazardous:	No Marine pollutant: No		
14.6. Special precautions for u			_
Tunnel code:			
Transport category:			
Section 15: Regulatory information	ation		
15.1. Safety, health and enviror	nmental regulations/legislation specific for the substance or mixture		
15.2. Chemical Safety Assessm	nent		
	A chemical safety assessment has not been carried out for the substance or the mixture		
Chemical salety assessment.	by the supplier.		
Section 16: Other information			
Section 16: Other information			
Other information			
Other information:	This safety data sheet is prepared in accordance with Commission Regulation (EU) No		
	453/2010.		
	* Data predicted using computational software. Toxtree - Toxic Hazard Estimation by		
	decision tree approach. http://ecb.jrc.ec.europa.eu/qsar/qsar-tools/index.php?		
	c=TOXTREE		
	~ Data predicted using computatioanl 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/		
Phrases used in s.2 and 3:	H302+332: Harmful if swallowed or if inhaled.		
	H314: Causes severe skin burns and eye damage.		
	H335: May cause respiratory irritation.		
	R20/22: Harmful by inhalation and if swallowed.		
	R34: Causes burns.		

R37: Irritating to respiratory system.

### 4-(1,3-OXAZOL-5-YL)BENZENESULFONYL CHLORIDE

Legal disclaimer: The material is intended for research purposes only and should be handled exclusively by those who have been fully trained in safety, laboratory and chemical handling procedures. The above information is believed to be correct to the best of our knowledge. The above information is believed to be correct to the best of our knowledge at the date of its publication, but should not be considered to be all inclusive. It should be used only as a guide for safe handling, storage, transportation and disposal. We cannot guarantee that the hazards detailed in this document are the only hazards that exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.

### Page: 7