

2-THIOBENZENE-1,4-DIOL

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

#### 1.1. Product identifier

Product name: 2-THIOBENZENE-1,4-DIOL

**CAS number:** 2889-61-4

Product code: OR4655

Synonyms: 2-MERCAPTOBENZENE-1,4-DIOL

2,5-DIHYDROXYTHIOPHENOL

2-SULPHANYLBENZENE-1,4-DIOL

#### 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: Xi: R36/37/38
Classification under CLP: STOT SE 3: H335; Acute Tox. 4: H302+312+332; Eye Irrit. 2: H319; Skin Irrit. 2: H315
Most important adverse effects: Irritating to eyes, respiratory system and skin.

2.2. Label elements

Label elements under CLP:

Hazard statements: H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H302+312+332: Harmful if swallowed, in contact with skin or if inhaled.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark

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Precautionary statements: P260: Do not breathe dust.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Label elements under CHIP:

Hazard symbols: Irritant.



Risk phrases: R36/37/38: Irritating to eyes, respiratory system and skin.

#### 2.3. Other hazards

Other hazards: Stench.

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

#### Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: 2-THIOBENZENE-1,4-DIOL

#### 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. Wash immediately with plenty of soap and water.

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

**Ingestion:** Wash out mouth with water. 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.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

#### 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.

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5.2. Special hazards arising fro	om the substance or mixture	
Exposure hazards:	In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Sulphur oxides (SOx).	
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 r	·	
6.1. Personal precautions, prot	tective 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. Do not	
	create dust.	
6.2. Environmental precautions	5	
Environmental precautions:	Do not discharge into drains or rivers.	
6.3. Methods and material for c	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 section	S	
Outline and store		
Section 7: Handling and storage	ge	
7.1. Precautions for safe handl	ing	
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	e, including any incompatibilities	
Storage conditions:	Store in cool, well ventilated area. Keep container tightly closed. Air sensitive. Store	
Siviaye conditions.	under Argon. Recommended storage temp 2-8 $^{\circ}$ C.	
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/p	personal protection	
8.1. Control parameters		

Workplace exposure limits: No data available.

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#### 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 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: Powder

Odour: STENCH

#### 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.

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. Sulphur oxides

(SOx)

#### Section 11: Toxicological information

## 11.1. Information on toxicological effects

#### Relevant hazards for substance:

Hazard	Route	Basis
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Acute toxicity (ac. tox. 4)	INH DRM 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.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest. Exposure may
	cause coughing or wheezing.
Other information:	High hazard Class III chemical : assigned according to Cramer decision tree with
	extensions (predicted *)

## Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

## 12.2. Persistence and degradability

Persistence and degradability: Easily biodegradable (predicted \*)

#### 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:	Transfer to a suitable container and arrange for collection by specialised disposal	
	company. 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.	

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#### Section 14: Transport information

14.1. UN number

UN number: UNnone

14.2. UN proper shipping name

Shipping name: NOT CLASSIFIED AS DANGEROUS IN THE MEANING OF TRANSPORT REGULATIONS.

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

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 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+312+332: Harmful if swallowed, in contact with skin or if inhaled.
	H315: Causes skin irritation.
	H319: Causes serious eye irritation.
	H335: May cause respiratory irritation.
	R36/37/38: Irritating to eyes, respiratory system and skin.
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

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# 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.

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