

2-(BROMOACETYL)-1,3-BENZOTHIAZOLE

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Compilation date: 14/02/2008

Revision date: 23/01/2013

Revision No: 2

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

#### 1.1. Product identifier

Product name: 2-(BROMOACETYL)-1,3-BENZOTHIAZOLE

**CAS number:** 54223-20-0 **Product code:** OR23089

Synonyms: 1-(1,3-BENZOTHIAZOL-2-YL)-2-BROMOETHAN-1-ONE

# 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

**Tel:** 0161 337 9971 **Fax:** 0161 336 6932

UK

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: C: R34

Classification under CLP: Skin Corr. 1B: H314

Most important adverse effects: Causes burns.

#### 2.2. Label elements

Label elements under CLP:

Hazard statements: H314: Causes severe skin burns and eye damage.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion



**Precautionary statements:** P280: Wear protective gloves/protective clothing/eye protection/face protection.

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Label elements under CHIP:

Hazard symbols: Corrosive.



Risk phrases: R34: Causes burns.

Safety phrases: S22: Do not breathe dust.

S24/25: Avoid contact with skin and eyes.

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: 2-(BROMOACETYL)-1,3-BENZOTHIAZOLE

#### 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: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10

minutes. 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 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: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be

bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may

cause coughing or wheezing.

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## 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. Use water spray to cool containers.

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

Exposure hazards: Corrosive. In combustion emits toxic fumes. Carbon oxides. Hydrogen bromide (HBr).

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 measures

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

Personal precautions: Notify the police and fire brigade immediately. 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 attempt to take action without suitable protective

clothing - see section 8 of SDS. Do not create dust.

## 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: 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.

#### 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. Light Sensitive.

Recommended storage temp 2-8 ℃.

Suitable packaging: Must only be kept in original packaging.

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## 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.

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: Tightly fitting safety goggles. 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

Melting point/range °C: 86-87

#### 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.

## 10.4. Conditions to avoid

Conditions to avoid: Heat.

## 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

bromide gas (HBr). Sulphur oxides (SOx)

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## **Section 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Based on test data
Serious eye damage/irritation	OPT	Based on test data

# Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

**Ingestion:** Corrosive burns may appear around the lips. Blood may be vomited. There may be

bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may

cause coughing or wheezing.

# Section 12: Ecological information

## 12.1. Toxicity

Ecotoxicity values: Not applicable.

# 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.

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## **Section 14: Transport information**

#### 14.1. UN number

UN number: UN1759

#### 14.2. UN proper shipping name

Shipping name: CORROSIVE SOLID, N.O.S.

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

Transport class: 8

#### 14.4. Packing group

Packing group: III

#### 14.5. Environmental hazards

Environmentally hazardous: No Marine pollutant: No

## 14.6. Special precautions for user

Tunnel code: E

# Transport category: 3

# 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: H314: Causes severe skin burns and eye damage.

R34: Causes burns.

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

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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.