

2-BROMO-3-CHLOROANILINE

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Revision No: 2

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

#### 1.1. Product identifier

Product name: 2-BROMO-3-CHLOROANILINE

**CAS number:** 96558-73-5 **Product code:** OR51860

#### 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

Emergency tel: -

# Section 2: Hazards identification

## 2.1. Classification of the substance or mixture

Classification under CLP: Eye Irrit. 2: H319; STOT RE 2: H373; Acute Tox. 3: H311; Acute Tox. 4: H302+332; Aquatic

Chronic 2: H411; Skin Irrit. 2: H315; STOT SE 3: H335

Most important adverse effects: Harmful if swallowed or if inhaled. Toxic in contact with skin. Causes skin irritation.

Causes serious eye irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting

effects.

### 2.2. Label elements

## Label elements:

Hazard statements: H302+332: Harmful if swallowed or if inhaled.

H311: Toxic in contact with skin. H315: Causes skin irritation.

H319: Causes serious eye irritation.

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H335: May cause respiratory irritation.

H373: May cause damage to organs through prolonged or repeated exposure.

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS06: Skull and crossbones

GHS08: Health hazard GHS09: Environmental







Signal words: Danger

Precautionary statements: P260: Do not breathe dust.

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

P309+311: IF exposed or if you feel unwell: Call a POISON CENTER.

#### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

### Section 3: Composition/information on ingredients

#### 3.1. Substances

Chemical identity: 2-BROMO-3-CHLOROANILINE

CAS number: 96558-73-5

## 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. 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. Consult a

doctor.

# 4.2. Most important symptoms and effects, both acute and delayed

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of

the skin in the area of exposure. Absorption through the skin may be fatal.

Eye contact: There may be pain and redness. The vision may become blurred. The eyes may water

profusely.

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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 shortness of breath with a burning sensation in the throat. Exposure may

cause coughing or wheezing.

**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: Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

## 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: Toxic. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Nitrogen

oxides (NOx). Hydrogen chloride (HCI). Hydrogen bromide (HBr).

## 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.

#### 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

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

## Section 7: Handling and storage

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## 7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid the formation or spread of dust in the air.

Ensure there is sufficient ventilation of the area. Only use in fume hood.

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

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. Light Sensitive. Air

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.

#### Section 8: Exposure controls/personal protection

## 8.1. Control parameters

Workplace exposure limits: No data available.

## **DNEL/PNEC Values**

**DNEL / PNEC** 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

protective device with particle filter.

Hand protection: Protective gloves.

**Eye protection:** Safety glasses with side-shields. 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

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

**Boiling point/range ℃:** No data available. **Melting point/range ℃:** 41-43

Flammability limits %: lower: No data available. upper: No data available.

Flash point °C: 122 Part.coeff. n-octanol/water: No data available.

**Autoflammability ℃:** No data available. **Vapour pressure:** No data available.

Relative density: No data available. pH: No data available.

VOC g/I: No data available.

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#### 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.

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

#### 10.4. Conditions to avoid

Conditions to avoid: Heat. Light. 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. Nitrogen oxides

(NOx). Hydrogen chloride (HCI). Hydrogen bromide gas (HBr).

## **Section 11: Toxicological information**

# 11.1. Information on toxicological effects

#### Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH ING	Hazardous: calculated
Acute toxicity (ac. tox. 3)	DRM	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated
STOT-repeated exposure	-	Hazardous: calculated

## Symptoms / routes of exposure

Skin contact: Irritation or pain may occur at the site of contact. There may be redness or whiteness of

the skin in the area of exposure. Absorption through the skin may be fatal.

Eye contact: There may be pain and redness. The vision may become blurred. 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.

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

cause coughing or wheezing.

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

Other information: Structural alert for genotoxic carcinogenicity. (predicted \*)

### 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 product is not identified as a PBT/vPvB 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.

#### **Section 14: Transport information**

## 14.1. UN number

UN number: UN2735

# 14.2. UN proper shipping name

Shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

## 14.3. Transport hazard class(es)

Transport class: 8

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## 14.4. Packing group

Packing group: III

#### 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: 3

## **Section 15: Regulatory information**

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

## 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 2015/830.

\* Data predicted using computational software. The OECD QSAR-Toolbox for grouping chemicals into categories. Developed by LMC bulgaria.

http://echa.europa.eu/support/oecd-qsar-toolbox

~ 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/

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

H311: Toxic in contact with skin.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H411: Toxic to aquatic life with long lasting effects.

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.