SAFETY DATA SHEET

Version 5.3 Revision Date 07/01/2014 Print Date 11/11/2018

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : 1,3-Dibromo-2-propanol

Product Number : 372404
Brand : Aldrich

CAS-No. : 96-21-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226 Acute toxicity, Oral (Category 3), H301 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.
H315 Causes skin irritation.
H319 Causes serious avo irr

H319 Causes serious eye irritation. H335 May cause respiratory irritation. H351 Suspected of causing cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

Aldrich - 372404 Page 1 of 8

	understood.	
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.	
P233	Keep container tightly closed.	
P240	Ground/bond container and receiving equipment.	
P241 P242	Use explosion-proof electrical/ ventilating/ lighting/ equipment.	
P243	Use only non-sparking tools.	
P243 P261	Take precautionary measures against static discharge.	
P264	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.	
P270	Wash skin thoroughly after handling.	
P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.		
P280	Wear protective gloves/ protective clothing/ eye protection/ face	
F200	protection.	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/	
	physician.	
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated	
	clothing. Rinse skin with water/ shower.	
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position	
	comfortable for breathing.	
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove	
	contact lenses, if present and easy to do. Continue rinsing.	
P308 + P313	IF exposed or concerned: Get medical advice/ attention.	
P321	Specific treatment (see supplemental first aid instructions on this label).	
P330 Rinse mouth.		
P332 + P313 If skin irritation occurs: Get medical advice/ attention.		
P337 + P313	If eye irritation persists: Get medical advice/ attention.	
P362	Take off contaminated clothing and wash before reuse.	
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for	
	extinction.	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.	
P403 + P235	Store in a well-ventilated place. Keep cool.	
P405	Store locked up.	
P501	Dispose of contents/ container to an approved waste disposal plant.	

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Hazardous components

Component	Classification	Concentration	
1,3-Dibromopropan-2-ol			
	Flam. Liq. 3; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; H226, H301, H315, H319, H335, H351	90 - 100 %	

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Aldrich - 372404 Page 2 of 8

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen bromide gas

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Aldrich - 372404 Page 3 of 8

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 **Exposure controls**

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: brown

b) Odour no data available c) Odour Threshold no data available no data available d) рH Melting point/freezing no data available

point

Initial boiling point and

boiling range

82 - 83 °C (180 - 181 °F) at 9 hPa (7 mmHg) - lit.

g) Flash point 47 °C (117 °F) - closed cup

h) Evapouration rate no data available Flammability (solid, gas) no data available

Upper/lower flammability or explosive limits no data available

k) Vapour pressure no data available Vapour density no data available I)

m) Relative density 2.136 g/cm3 at 25 °C (77 °F)

Aldrich - 372404 Page 4 of 8 n) Water solubility no data available Partition coefficient: nno data available

octanol/water

no data available

p) Auto-ignition temperature

q) Decomposition no data available temperature

r) Viscosity no data available s) Explosive properties no data available no data available Oxidizing properties

9.2 Other safety information

no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agentsStrong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

no data available

Inhalation: no data available Dermal: no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

Limited evidence of carcinogenicity in animal studies

Aldrich - 372404 Page 5 of 8 IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: UB0200000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1992 Class: 3 (6.1) Packing group: III

Proper shipping name: Flammable liquids, toxic, n.o.s. (1,3-Dibromopropan-2-ol)

Aldrich - 372404 Page 6 of 8

Reportable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 1992 Class: 3 (6.1) Packing group: III EMS-No: F-E, S-D

Proper shipping name: FLAMMABLE LIQUID, TOXIC, N.O.S. (1,3-Dibromopropan-2-ol)

Marine pollutant: No

IATA

UN number: 1992 Class: 3 (6.1) Packing group: III

Proper shipping name: Flammable liquid, toxic, n.o.s. (1,3-Dibromopropan-2-ol)

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

CAS-No. Revision Date

1,3-Dibromopropan-2-ol 96-21-9

New Jersey Right To Know Components

CAS-No. Revision Date

1,3-Dibromopropan-2-ol 96-21-9

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity
Carc. Carcinogenicity
Eye Irrit. Eye irritation
Flam. Liq. Flammable liquids

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H351 Suspected of causing cancer.

Skin Irrit. Skin irritation

HMIS Rating

Health hazard: 2
Chronic Health Hazard:
Flammability: 2
Physical Hazard 0

NFPA Rating

Health hazard: 2

Aldrich - 372404 Page 7 of 8

Fire Hazard: 2 Reactivity Hazard: 0

Further information

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Preparation Information

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 5.3 Revision Date: 07/01/2014 Print Date: 11/11/2018

Aldrich - 372404 Page 8 of 8