SIGMA-ALDRICH

Material Safety Data Sheet

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

1 - Product and Company Information

Product Name Product Number	3-CHLORO-1-PROPANOL, 98% C46403
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
Technical Phone # Fax Emergency Phone #	+61 2 9841 0555 (1800 800 097) +61 2 9841 0500 (1800 800 096) +44 8701906777 (1800 448 465)

2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
3-CHLORO-1-PROPANOL	627-30-5	210-992-9	

Formula C3H7ClO Molecular Weight 94.54 AMU

Synonyms 3-Chlorpropan-1-ol (German) * 3-Chloropropanol *

Trimethylene chlorohydrin

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Harmful if swallowed. Irritating to eyes, respiratory system and skin.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER EYE CONTACT

Assure adequate flushing of the eyes by separating the eyelids with fingers.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam. Water spray.

SPECIAL RISKS

Specific Hazard(s): Combustible liquid. Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not get in eyes, on skin, on clothing. Do not breathe vapor.

STORAGE

Appearance

Conditions of Storage: Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Discard contaminated shoes. Wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Rubber gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Property Value At Temperature or Pressure

Нq N/A48.0 - 50.0 °C 0.2 mmHg

BP/BP Range
MP/MP Range N/AFlash Point 75 °C Method: closed cup

Color: Colorless

Form: Clear liquid

Flammability N/AAutoignition Temp N/A Oxidizing Properties N/A Explosive Properties N/A Explosion Limits N/AVapor Pressure N/A

SG/Density 1.131 g/cm3

Vapor Density N/A Saturated Vapor Conc. N/A Evaporation Rate N/A Bulk Density N/A Decomposition Temp. N/A Solvent Content N/A Water Content N/A Surface Tension N/A Conductivity N/A Miscellaneous Data N/A	Partition Coefficient Viscosity	N/A N/A
Evaporation Rate N/A Bulk Density N/A Decomposition Temp. N/A Solvent Content N/A Water Content N/A Surface Tension N/A Conductivity N/A Miscellaneous Data N/A	Vapor Density	N/A
Bulk Density N/A Decomposition Temp. N/A Solvent Content N/A Water Content N/A Surface Tension N/A Conductivity N/A Miscellaneous Data N/A		N/A
Decomposition Temp. N/A Solvent Content N/A Water Content N/A Surface Tension N/A Conductivity N/A Miscellaneous Data N/A	Evaporation Rate	N/A
Solvent Content N/A Water Content N/A Surface Tension N/A Conductivity N/A Miscellaneous Data N/A	Bulk Density	N/A
Water Content N/A Surface Tension N/A Conductivity N/A Miscellaneous Data N/A	Decomposition Temp.	N/A
Surface Tension N/A Conductivity N/A Miscellaneous Data N/A	Solvent Content	N/A
Conductivity N/A Miscellaneous Data N/A	Water Content	N/A
Miscellaneous Data N/A	Surface Tension	N/A
	Conductivity	N/A
Solubility N/A	Miscellaneous Data	N/A
	Solubility	N/A

10 - Stability and Reactivity

STABILITY

Conditions of Instability: Moisture.

Conditions to Avoid: Moisture.

Materials to Avoid: Strong bases, Strong acids, Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Hydrogen chloride gas.

11 - Toxicological Information

RTECS NUMBER: UA8930000

ACUTE TOXICITY

LD50

Oral

Mouse

2300 mg/kg

Remarks: Behavioral: Muscle contraction or spasticity. Gastrointestinal: Ulceration or bleeding from stomach.

Liver:Other changes.

SIGNS AND SYMPTOMS OF EXPOSURE

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

ROUTE OF EXPOSURE

Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation. Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract.

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

UN#: 2849 Class: 6.1 PG: III

Proper Shipping Name: 3-Chloropropanol-1

IMDG

UN#: 2849 Class: 6.1 PG: III

Proper Shipping Name: 3-Chloropropanol-1

Marine Pollutant: No

Severe Marine Pollutant: No

IATA

UN#: 2849 Class: 6.1 PG: III

Proper Shipping Name: 3-Chloropropanol-1

Inhalation Packing Group I: No

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 22-36/37/38

Harmful if swallowed. Irritating to eyes, respiratory system

and skin.

S-PHRASES: 26-36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective

clothing.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 2 (self-classification)

16 - Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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