

SAFETY DATA SHEET

Version 6.4 Revision Date 03/12/2020 Print Date 08/29/2020

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

1.1 Product identifiers

> Product name 2-Mercaptoethanol

Product Number M6250 Brand Aldrich CAS-No. 60-24-2

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

Identified uses : Laboratory chemicals, Synthesis of substances

Details of the supplier of the safety data sheet

Company Sigma-Aldrich Inc.

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527-3887 CHEMTREC (International) 24

Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Flammable liquids (Category 4), H227

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 2), H310

Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318

Skin sensitisation (Sub-category 1A), H317

Reproductive toxicity (Category 2), H361

Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Heart, H373

Short-term (acute) aquatic hazard (Category 1), H400

Long-term (chronic) aquatic hazard (Category 2), H411

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

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2.3 Hazards not otherwise classified (HNOC) or not covered by GHS Stench.

Stench., Rapidly absorbed through skin.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Thioethylene glycol

2-Hydroxyethylmercaptan

BME

-Mercaptoethanol

Molecular weight : 78.13 g/mol CAS-No. : 60-24-2 EC-No. : 200-464-6

Component	Classification	Concentration
2-Mercaptoethanol		
	Flam. Lig. 4: Acute Tox	. 3:

Acute Tox. 2; Skin Irrit. 2; Eye Dam. 1; Skin Sens.

1A;

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SECTION 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.

Recommended storage temperature 2 - 8 °C

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/ personal protection

8.1 Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control	Basis
			parameters	

2-

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MeRcaptoweithanol



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m) Relative density 1.114 g/cm3 at 25 °C (77 °F)

n) Water solubility solubleo) Partition coefficient: leW*nr2ai

n-octanol/water

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Skin corrosion/irritation

Skin - Rabbit Result: Irritations

(OECD Test Guideline 404)

Serious eye damage/ eye irritation

Eyes - Rabbit

Result: Severe irritations

(Draize Test)

Remarks: (External MSDS) Risk of corneal clouding.

Respiratory or skin sensitisation Maximisation Test - Guinea pig

Result: positive

(OECD Test Guideline 406)

Germ cell mutagenicity OECD Test Guideline 474

Mouse - male and female - Bone marrow

Result: negative

Carcinogenicity

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.

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

Reproductive toxicity

Suspected of damaging the unborn child.

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

No data available

Acute oral toxicity - Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute inhalation toxicity - Possible damages:, mucosal irritations, Cough, Shortness of breath

Specific target organ toxicity - repeated exposure

Ingestion - May cause damage to organs through prolonged or repeated exposure. - Liver, Heart

Oral - Liver, Heart

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 49 d - No observed adverse effect level - 15 mg/kg - Lowest observed adverse effect level - 50 mg/kg

RTECS: KL5600000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Weakness, Unconsciousness, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and

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edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema

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

Systemic effects:

CNS disorders, Nausea, Vomiting, Convulsions, narcosis

The following applies t Tm[Tt2-8(n)me 8r)5(d)-1apt,-3(tTm]-5(g)-3(a ge(s,)5()6(s,)5())15(6(:p)6

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 2966 Class: 6.1 Packing group: II

Proper shipping name: Thioglycol

Reportable Quantity (RQ): Poison Inhalation Hazard: No

IMDG

UN number: 2966 Class: 6.1 Packing group:

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