



Safety Data Sheet

According to Regulation (EC) 1907/2006



6631 2-Mercaptoethanol

Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

2-Mercaptoethanol

1.2 Synonym:

2-Hydroxyethylmercaptan, b-Mercaptoethanol

1.3 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.4 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

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(Barcelona) Spain

Tel. (+34) 937 489 400

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Emergencies:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Acute Tox. 3

Acute Tox. 3

Acute Tox. 3

Skin Irrit. 2

Eye Dam. 1

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

Hazard Pictograms



Signal word

Danger

Hazard statements

H331 Toxic if inhaled.

H311 Toxic in contact with skin.

H301 Toxic if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash...thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Classification (67/548/CEE or 1999/45/CE).

	R43
N Dangerous for the environment	R41
T Toxic	R38
	R23/24/25
	R50/53

For the full text of the R-phrases mentioned in this section, see section 16.

Component Composition/Information

Name: 2-Mercaptoethanol

Formula: C₂H₆OS M.= 78,13 CAS [60-24-2]

EC number (EINECS): 200-464-6

First aid

4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Go out into the fresh air. In the event sickness persists, seek medical assistance.

4.3 Contact with the skin:

Wash with plenty of soap and water. Remove contaminated clothing. In the event of irritation, seek medical assistance.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. In the event of irritation, seek medical assistance.

4.5 Swallowing:

Drink large amounts of water. Induce vomiting. Seek medical assistance.

Fire-fighting means

5.1 Suitable fire-extinguishing means:

Water. Carbon dioxide (CO₂). Foam. Dry powder.

5.2 Fire-fighting means which must NOT be used:

5.3 Special risks:

Combustible. Keep away from sources of ignition. In the event of fire, toxic fumes may form: Do not allow extinguishing water into surface or underground water courses. Precipitate fumes formed with water.

5.4 Protective equipment:

Suitable clothing and footwear. Self-contained breathing equipment.

Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

Avoid contact with the skin, eyes or clothing. Ensure adequate ventilation. Do not inhale the fumes.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

Handling and storage

7.1 Handling:

Ensure good ventilation and renewal of the air in the premises.

7.2 Storage:

Well sealed containers. In a cool, dry, well ventilated place. Away from sources of ignition and heat. Atmospheric temperature.

Staff exposure/protection controls

8.1 Technical protective measures:

Ensure good ventilation and renewal of the air in the premises.

8.2 Exposure limit control:**8.3 Respiratory protection:**

In the event of fumes forming/aerosols, use suitable respiratory protection.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Use suitable work clothing. Remove contaminated clothing. Wash hands before breaks and when the job is done. Do not inhale the substance. Do not eat, drink or smoke in the workplace.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

Physical and chemical properties

Appearance: liquid

Colour:

Granulometry:

Odour: Characteristic.

pH: 4,5 - 6

Melting point/freezing point:

Initial boiling point and boiling range: 154 - 161 °C

Flash point: 68 °C

Flammability (solid, gas):

Upper/lower flammability or explosive limits: 18 %(V) / 2,3 %(V)

Vapour pressure: 0,76 hPa

Vapour density:

Relative density: (20/4) 1,12

Solubility: Miscible with water

Partition coefficient: n-octanol/water:

Auto-ignition temperature: 295 °C

Decomposition temperature:

Viscosity:

Stability and reactivity

10.1 Conditions which should be avoided:

High temperatures.

10.2 Matter which should be avoided:

Strong oxidant agents.

10.3 Hazardous decomposition products:

Carbon monoxide. Carbon dioxide. Sulphoxides (in case of fire). Hydrogen sulphide.

10.4 Complementary information:

Toxicological information

- **Acute toxicity:**

LD50 oral rat : 98 - 162 mg/kg

LD50 skn rbt : 112 - 224 mg/kg

LC50 inh rat : 2 mg/l 4h

LC50 Leuciscus idus : 46-100 mg/l

- **Dangerous effects for health:**

Absorption Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

Environmental information

12.1 Mobility:

Repartition: $\log P(\text{oct}) = -0,056$ (25°C)

12.2 Ecotoxicity:

12.1.1 - EC50 test (mg/l):

Fish (Leuciscus Idus) (Na2S) LC50 46-100 mg/l

Classification: Extr. toxic

Crustaceans (Daphnia magna) EC50 0,89 mg/l/48h

12.2.2 - Receptor medium:

Risk for the water environment

Risk for the land environment

12.2.3 - Observations:

Extremely toxic in water environments.

12.3 Degradability:

12.3.1 - Test:

BOD5

12.3.2 - Biotic degradation classification:

BOD5/COD

Biodegradability

12.3.3 - Abiotic degradation depending on pH:

12.3.4 - Observations:

12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk

12.4.3 - Observations:

Bioaccumulable product.

12.5 Other possible effects on the environment:

Water-pollutant product.

Dangerous for drinking water.

Do not allow it to enter soils or water channels.

Do not allow it to enter the sewage system.

Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

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13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

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Information concerning transport

Overland (ADR):

Technical name: THIOGLYCOL

UN 2966 Class: 6.1 Packaging group: II (D/E)

By sea (IMDG):

Technical name: THIOGLYCOL

UN 2966 Class: 6.1 Packaging group: II

By air (ICAI-IATA):

Technical name: Thioglycol

UN 2966 Class: 6.1 Packaging group: II

Packaging instructions: CAO 611 PAX 609

Regulatory information

Other information

Other precautionary statements

P273 Avoid release to the environment.

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

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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.

P310 Immediately call a POISON CENTER or doctor/physician.

P311 Call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P321 Specific treatment (see on this label).

P322 Specific measures (see on this label).

P330 Rinse mouth.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P361 Remove/Take off immediately all contaminated clothing.

P362 Take off contaminated clothing and wash before reuse.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Labelling (65/548/CEE or 1999/45/CE)

R-phrases(s):	<p>R43 May cause sensitisation by skin contact.</p> <p>R41 Risk of serious damage to eyes.</p> <p>R38 Irritating to skin.</p> <p>R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.</p> <p>R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>
S-phrases(s):	<p>S61 Avoid release to the environment. Refer to special instructions/safety data sheets.</p> <p>S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.</p> <p>S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</p>

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

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