

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

Identification of the substance or mixture

Product code 21985023
Product name 2-MERCAPTOETHANOL (1000X)

Company/undertaking identification

Life Technologies
 5791 Van Allen Way
 PO Box 6482
 Carlsbad, CA 92008
 +1 760 603 7200

Life Technologies
 5250 Mainway Drive
 Burlington, ONT
 CANADA L7L 6A4
 800/263-6236

24 hour Emergency Response: 866-536-0631
 301-431-8585
 Outside of the U.S. +1-301-431-8585

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

SECTION 2: Hazards identification

GHS - Classification

Signal Word
 WARNING



Health hazards

Skin sensitization	Category 1
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Physical hazards

Not Hazardous

Hazard Statements

H317 - May cause an allergic skin reaction
 H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P273 - Avoid release to the environment

Principle Routes of Exposure

Potential Health Effects

eyes May cause eye irritation with susceptible persons.
Skin May cause sensitization by skin contact.
inhalation May cause irritation of respiratory tract.
Ingestion May be harmful if swallowed.

Specific effects

Carcinogenic effects None
Mutagenic effects None
Reproductive toxicity None
Sensitization May cause an allergic skin reaction

Target Organ Effects No known effects under normal use conditions

HMIS

Health	1
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
2-mercaptoethanol	60-24-2	200-464-6	<0.5

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact Wash off immediately with plenty of water. If symptoms persist, call a physician.
Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion Never give anything by mouth to an unconscious person. Consult a physician if necessary.
inhalation Remove to fresh air. Consult a physician if necessary.
Notes to Physician Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media Dry chemical.

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Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions Use personal protection equipment.
Methods for cleaning up Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling Always wear recommended Personal Protective Equipment.
Storage Keep in properly labeled containers.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
2-mercaptoethanol	None	None	None	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Lightweight protective clothing.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains.

SECTION 9: Physical and chemical properties

General information

Form Liquid
Appearance No information available
Odor No information available
Boiling point / boiling range °C No data available °F No data available
Melting point / melting range °C No data available °F No data available
flash point °C No data available °F No data available
Autoignition Temperature °C No data available °F No data available

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Oxidizing properties No information available
Water solubility soluble

SECTION 10: Stability and reactivity

Stability Stable under normal conditions.
Materials to avoid No information available.
Hazardous decomposition products No information available.
polymerization Hazardous polymerization does not occur.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
2-mercaptoethanol	244 mg/kg Oral LD50	No data available	250 ppm/8h

Principle Routes of Exposure

Potential Health Effects

eyes May cause eye irritation with susceptible persons
Skin May cause sensitization by skin contact
inhalation May cause irritation of respiratory tract
Ingestion May be harmful if swallowed

Carcinogenic effects None
Mutagenic effects None
Reproductive toxicity None
Sensitization May cause an allergic skin reaction

Target Organ Effects No known effects under normal use conditions

SECTION 12: Ecological information

Ecotoxicity Daphnia magna
Chronic aquatic toxicity Category 3
Mobility see log Pow
Biodegradation No information available
Bioaccumulation No information available

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
2-mercaptoethanol	Desmodesmus subspicatus EC50=12 mg/L (72 h)	Daphnia magna EC50=1.52 mg/L (48 h)			logPow-0.056

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

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SECTION 14: Transport information

IATA

Proper shipping name No dangerous good in sense of these transport regulations.
Hazard Class None
Subsidiary class None
Packing group None
UN-No none

SECTION 15: Regulatory information

Component	TSCA
2-mercaptoethanol 60-24-2 (<0.5)	Listed

US Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

US State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
2-mercaptoethanol	Listed	-	Listed	-	-

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2B - Toxic materials



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

Reason for revision SDS sections updated.

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End of Safety Data Sheet