

Revision Date 10-Nov-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: 1-Propanethiol
Cat No. 131430000; 131430500; 131435000
Synonyms n-Propyl mercaptan

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01
 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
 CHEMTREC Phone Number, Europe: 001-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4 ***
Acute dermal toxicity	Category 4
Skin Corrosion / irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2 ***
Specific target organ systemic toxicity (single exposure)	Category 3
Acute aquatic toxicity	Category 1
Flammable liquids.	Category 2

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R phrases mentioned in this Section, see Section 16

Symbol(s) F - Highly flammable
 Xn - Harmful
 N - Dangerous for the environment

R -phrase(s) R11 - Highly flammable
 R50 - Very toxic to aquatic organisms

Risk Combination Phrases R21/22 - Harmful in contact with skin and if swallowed
 R36/37/38 - Irritating to eyes, respiratory system and skin

1-Propanethiol

Revision Date 10-Nov-2010

2. HAZARDS IDENTIFICATION

Label Elements



Signal Word

Danger

Hazard Statements

- H312 - Harmful in contact with skin
- H315 - Causes skin irritation
- H335 - May cause respiratory irritation
- H319 - Causes serious eye irritation
- H400 - Very toxic to aquatic life
- H302 - Harmful if swallowed***
- H225 - Highly flammable liquid and vapor***

Precautionary Statements - EU (§28, 1272/2008)

- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water***
- P261 - Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
- P273 - Avoid release to the environment
- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P240 - Ground/Bond container and receiving equipment
- P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing***

Other Hazards

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	EC No.	Weight %	CAS-No	Classification	GHSCLAS	REACH Reg. No.
-----------	--------	----------	--------	----------------	---------	----------------

1-Propanethiol

Revision Date 10-Nov-2010

3. COMPOSITION/INFORMATION ON INGREDIENTS

1-Propanethiol 107-03-9	EEC No. 203- 455-5	98	107-03-9	F; R11 Xn; R21/22 Xi; R36/37/38 N; R50;	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Aquatic Acute 1 (H400) Flam Liq. 2 (H225) ***	-
----------------------------	-----------------------	----	----------	--	---	---

For the full text of the R phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes Obtain medical attention
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes Obtain medical attention
Ingestion	Clean mouth with water Get medical attention
Inhalation	Remove from exposure, lie down Move to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration Obtain medical attention
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Carbon dioxide (CO₂) Dry chemical Use water spray to cool unopened containers chemical foam

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable Vapors may travel to source of ignition and flash back

Advice for fire-fighters

1-Propanethiol

Revision Date 10-Nov-2010

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Environmental precautions

Prevent further leakage or spillage if safe to do so

Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid contact with skin and eyes Do not breathe dust Do not breathe vapors or spray mist Take precautionary measures against static discharges Do not ingest Use explosion-proof equipment Use only non-sparking tools Contents may develop pressure upon prolonged storage

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place Keep container tightly closed Keep away from heat and sources of ignition Flammables area

Specific End Uses

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection

Goggles

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

Respiratory Protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced

1-Propanethiol

Revision Date 10-Nov-2010

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Colorless
odor	Stench
pH	No information available.
Vapor Pressure	162 hPa @ 20 °C
Vapor Density	2.63
Boiling Point/Range	67 - 68°C / 152.6 - 154.4°F @ 760 mmHg
Melting Point/Range	-113°C / -171.4°F
Flash Point	-20°C / -4°F
Water Solubility	immiscible
Specific Gravity	0.840
Molecular Formula	C3 H8 S
Molecular Weight	76.15

10. STABILITY AND REACTIVITY**Reactivity****Chemical Stability**

Stable under normal conditions.

Possibility of Hazardous Reactions**Hazardous Polymerization**

Hazardous polymerization does not occur.

Hazardous Reactions .

No information available.

Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition, Incompatible products.

Incompatible Materials

Bases, Metals, Reducing agents.

Hazardous Decomposition ProductsCarbon monoxide (CO). Carbon dioxide (CO₂). Sulfur oxides. Sulfides.**11. TOXICOLOGICAL INFORMATION****Information on Toxicological Effects****Acute Toxicity****Product Information**

No acute toxicity information is available for this product

1-Propanethiol

Revision Date 10-Nov-2010

11. TOXICOLOGICAL INFORMATION

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
1-Propanethiol	1790 mg/kg (Rat)		7300 ppm (Rat) 4 h

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.
Mutagenic Effects No information available
Reproductive Effects No information available.
Developmental Effects No information available.
Target Organs No information available.
Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information
Endocrine Disruptor Information None known

12. ECOLOGICAL INFORMATION

Toxicity
Ecotoxicity effects Do not empty into drains

Persistence and degradability
 Readily biodegradable

Bioaccumulative potential
 No information available.

Mobility in soil
 No information available.

Results of PBT and vPvB assessment
Other adverse effects
 No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste from Residues / Unused Products Dispose of in accordance with local regulations

1-Propanethiol

Revision Date 10-Nov-2010

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

IMDG/IMO

UN-No 2402
Hazard Class 3
Packing Group II
Proper Shipping Name PROPANETHIOLS

ADR

UN-No 2402
Hazard Class 3
Packing Group II
Proper Shipping Name PROPANETHIOLS

IATA

UN-No 2402
Hazard Class 3
Packing Group II
Proper Shipping Name PROPANETHIOLS

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	CHINA	AICS	KECL
1-Propanethiol	203-455-5	-		X	X	-	X	X	X	X	KE-29294 X

Legend

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- EINECS/ELINCS** - European Inventory Lists
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- CHINA** - China Inventory of Existing Chemical Substances
- AICS** - Inventory of Chemical Substances
- KECL** - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

1-Propanethiol

Revision Date 10-Nov-2010

16. OTHER INFORMATION**Text of R phrases mentioned in Section 2-3**

R11 - Highly flammable

R50 - Very toxic to aquatic organisms

R21/22 - Harmful in contact with skin and if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

Revision Date 10-Nov-2010

Revision Summary Not applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

End of Safety Data Sheet