

Material Safety Data Sheet

3-Mercaptopropionic acid, 99+%

Section 1 - Chemical Product and Company Identification

MSDS Name: 3-Mercaptopropionic acid, 99+%

Synonyms: beta-Mercaptopropanoic acid; 3-Thiopropionic acid.

Company Identification:

RORYCHEMICAL LTD

For information in China, call:0086-21-50702305

Section 2 Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity swallow(Category 3)

Skin irritation (Category 1B)

Serious Eye irritation (Category 1)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]



Signal word Warning

Hazard statement(s)

H301 Toxicity if swallow

H314 Serious eye irritation and skin irritation

Precautionary statement(s)

P264 Clean thorough after operation

P270 Do not eat drink or smoke when use this

P280 Wear appropriate protective gloves, clothing and protective glasses

Statements

P301+P310 If swallowing call medicine care

| | |
|----------------|--|
| P301+P330+P331 | If in mouth, wash at once |
| P303+P361+P353 | if on hair or skin take off all the polluted cloth then shower |
| P304+P340 | take to other place with flesh air when inhale |
| P304+P351+P338 | wash by clean water for a few minutes when in eye |
| P310 | call medicine care |
| P363 | the polluted cloth must cleaned then reuse |

2.3 Other hazards

stench

Section 3 - - Composition, Information on Ingredients

Formula C3H6O2S

Molecular weight: 106.14g/mol

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|----------|--------------------------|---------|---------------|
| 107-96-0 | 3-Mercaptopropionic acid | >99 | 203-537-0 |

Section 4 - EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 93 deg C.

Danger! Causes eye and skin burns. Causes digestive and respiratory tract burns. Harmful if swallowed. Stench.

Target Organs: Eyes, skin, mucous membranes.

Potential Health Effects

Eye: Causes eye burns.

Skin: Causes skin burns.

Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns. May cause perforation of the digestive tract.

Inhalation: May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract.

Chronic: No information found.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustible liquid and vapor.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: 93 deg C (199.40 deg F)

Autoignition Temperature: 350 deg C (662.00 deg F)

Explosion Limits, Lower: 1.60 vol %

Upper: .00 vol %

NFPA Rating: (estimated) Health: ; Flammability: 2; Instability:

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood.



Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|--------------------------|-------------|-------------|-------------------|
| 3-Mercaptopropionic acid | none listed | none listed | none listed |

OSHA Vacated PELs: 3-Mercaptopropionic acid: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: 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.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: stench

pH: Not available.

Vapor Pressure: .04 mm Hg @ 20

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 110 - 111 deg C @ 15.00mm Hg

Freezing/Melting Point: 17 - 19 deg C

Decomposition Temperature: Not available.

Solubility: soluble in water.

Specific Gravity/Density: 1.2180g/cm³

Molecular Formula: C₃H₆O₂S

Molecular Weight: 106.14

Section 10 - Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: None reported.

Incompatibilities with Other Materials: Bases - oxidizing agents - reducing agents.

Hazardous Decomposition Products: Carbon monoxide, oxides of sulfur, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 107-96-0: UF5270000

LD50/LC50:

CAS# 107-96-0:

Oral, rat: LD50 = 96 mg/kg;

Carcinogenicity:

CAS# 107-96-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

| | US DOT | Canada TDG |
|-----------------------|----------------------------------|--|
| Shipping Name: | CORROSIVE LIQUIDS, TOXIC, N.O.S. | TOXIC LIQUID ORGANIC NOS (MERCAPTOPROPIONIC ACID) |
| Hazard Class: | 8 | 6.1 |
| UN Number: | UN2922 | UN2810 |
| Packing Group: | II | II |

14.1 UN Number 2922

14.2

European land transport IMDG: CORROSIVE LIQUID TOXIC N.O.S

IMDG International Maritime: CORROSIVE LIQUID TOXIC N.O.S

International air transport IMDG: CORROSIVE LIQUID TOXIC N.O.S

14.3 Transport of Dangerous Category

European land transport IMDG:8(6.1)

IMDG International Maritime: 8(6.1)

International air transport IMDG: 8(6.1)

14.4 Package

European land transport IMDG: II

IMDG International Maritime: II

International air transport IMDG: II

14.5 Environmental risk

European land transport IMDG: no

IMDG International Maritime: no

International air transport IMDG: no

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 107-96-0 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 107-96-0: immediate.

Section 313 No chemicals are reportable under Section 313.



Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 107-96-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

T

Risk Phrases:

R 25 Toxic if swallowed.

R 34 Causes burns.

Safety Phrases:

S 25 Avoid contact with eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28A After contact with skin, wash immediately with plenty of water

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WGK (Water Danger/Protection)

CAS# 107-96-0: 3

Canada - DSL/NDSL

CAS# 107-96-0 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B3.

This product has been classified in accordance with the hazard criteria of the



Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 12/07/2012