HAIHANG INDUSTRY CO., LTD

Material Safety Data Sheet

Mercaptoacetic acid

Section 1 - Chemical Product and Company Identification

MSDS Name: Mercaptoacetic acid

Synonyms: Thioglycolic acid.

Company Identification:

Haihang Industry Co.,Ltd

For information, call: 86 531 85821093

Emergency Number: 86 531 85821096

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
68-11-1	Mercaptoacetic acid	≥99%	200-677-4
	Fe	≤10PPM	

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless clear liquid.

Danger! Toxic if swallowed, inhaled or absorbed through the skin. Causes burns by all exposure routes.

Target Organs: Respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects

Eye: Causes severe eye burns. May cause irreversible eye injury. Solutions as dilute as 3% cause irritation.
Skin: Causes skin burns. Toxic in contact with skin. Application of thioglycolic acid as a single dermal-application patch test resulted in necrosis in 5 minutes. The LD50 in rabbits through percutaneous absorption applying a 10% solution was 848 mg/kg (Documentation of the TLV). Limited animal and human information suggests that thioglycolic acid does not cause skin sensitization.
Ingestion: Causes gastrointestinal tract burns. Toxic if swallowed.
Inhalation: May be fatal if inhaled. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract.
Chronic: No information found. Thioglycolic acid is not likely to accumulate in the body based on its chemical

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.
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. Get medical aid immediately. Call a poison control center.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
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. Combustion generates toxic fumes. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air. May decompose explosively when heated or involved in a fire. Vapors from liquefied gas are initially heavier than air and spread along ground.
Extinguishing Media: Water or foam may cause frothing. Use water spray, dry chemical, or carbon dioxide.
Flash Point: 126 deg C (258.80 deg F)

Autoignition Temperature: 350 deg C (662.00 deg F)
Explosion Limits, Lower:5.9%
Upper: Not available.
NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 0

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. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.
Storage: Keep away from heat, sparks, and flame. Store in a tightly closed container. Store in a dry area. Corrosives area. Keep refrigerated. Do not store in metal containers.

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 only under a chemical fume hood.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Mercaptoacetic acid	1 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous r oute	1 ppm TWA; 4 mg/m3 TWA	none listed

OSHA Vacated PELs: Mercaptoacetic acid: 1 ppm TWA; 4 mg/m3 TWA
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 to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid
Appearance: colorless
Odor: stench
pH: 1.5 (1% aq. solution)
Vapor Pressure: 0.1 hPa @ 20 deg C
Vapor Density: 3.18 (air=1)
Evaporation Rate: Not available.
Viscosity: 6.55 Pa.s @ 20 deg C
Boiling Point: 220 deg C @ 760 mmHg
Freezing/Melting Point:-16 deg C
Decomposition Temperature: Not available.
Solubility: Soluble.
Specific Gravity/Density:1.325
Molecular Formula:C2H4O2S
Molecular Weight:92.11

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases, metals.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, sulfur oxides

(SOx), including sulfur oxide and sulfur dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:
CAS# 68-11-1: AI5950000
LD50/LC50:
CAS# 68-11-1:
Inhalation, rat: LC50 = 210 mg/m3/4H;
Oral, mouse: LD50 = 242 mg/kg;
Oral, rabbit: LD50 = 119 mg/kg;
Oral, rat: LD50 = 114 mg/kg;
.

Carcinogenicity:
CAS# 68-11-1: 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

Ecotoxicity: No data available. No information available.
Environmental: No information available.
Physical: No information available.
Other: Do not empty into drains.

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:	THIOGLYCOLIC ACID	THIOGLYCOLIC ACID
Hazard Class:	8	8
UN Number:	UN1940	UN1940
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 68-11-1 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 # 68-11-1: 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 depletors.

This material does not contain any Class 2 Ozone depletors.

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# 68-11-1 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

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 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 34 Causes burns.

Safety Phrases:

S 25 Avoid contact with eyes.

S 27 Take off immediately all contaminated clothing.

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

S 28C After contact with skin, wash immediately with a sodium borate solution.

WGK (Water Danger/Protection)

CAS# 68-11-1: 1

Canada - DSL/NDSL

CAS# 68-11-1 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D1A, E.

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

CAS# 68-11-1 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 8/23/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.