

MATERIAL SAFETY DATA SHEET
Mercaptoacetic acid

Section 1 - Chemical Product and Company Identification

MSDS Name:	Mercaptoacetic acid
Catalog Numbers:	12543-0000, 12543-0010, 12543-0100, 12543-2500
Synonyms:	Thioglycolic acid
Company Identification:	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
Company Identification: (USA)	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
For information in the US, call:	800-ACROS-01
For information in Europe, call:	+32 14 57 52 11
Emergency Number, Europe:	+32 14 57 52 99
Emergency Number US:	201-796-7100
CHEMTREC Phone Number, US:	800-424-9300
CHEMTREC Phone Number, Europe:	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
68-11-1	Mercaptoacetic acid	98%	200-677-4

Hazard Symbols: T+



Risk Phrases: 24/25 26 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Very toxic by inhalation. Causes burns. Toxic in contact with skin and if swallowed.

Potential Health Effects

Eye:	Causes severe eye burns. May cause irreversible eye injury.
Skin:	Causes skin burns. Toxic in contact with skin.
Ingestion:	Poison by ingestion. Causes gastrointestinal tract burns. Toxic if swallowed.
Inhalation:	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. Toxic if inhaled.
Chronic:	No information found.

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 immediately. Do NOT allow victim to rub eyes or keep eyes closed. Gently lift eyelids and flush continuously with water. Extensive irrigation with water is required (at least 30 minutes).
- Skin:** Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. 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. Never give anything by mouth to an unconscious person. Possible aspiration hazard. 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. Combustion generates toxic fumes. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air.
- Extinguishing Media:** Use foam, dry chemical, or carbon dioxide.

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Do not let this chemical enter the environment.

Section 7 - Handling and Storage

- Handling:** Wash thoroughly after handling. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood. Keep from contact with clothing and other combustible materials. Discard contaminated shoes.
- Storage:** Keep away from heat and flame. Store in a cool, dry place. Store in a tightly closed container. Keep away from metals. Corrosives area. 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 adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use substance with extreme caution and designate regulated areas for use.

Exposure Limits

CAS# 68-11-1:

United Kingdom, WEL - TWA: 1 ppm TWA; 3.8 mg/m³ TWA United Kingdom, WEL - STEL: 3 ppm STEL; 11.4 mg/m³ STEL

Belgium - TWA: 1 ppm VLE; 3.9 mg/m³ VLE

France - VME: 1 ppm VME; 5 mg/m³ VME

Germany: 4 mg/m³ TWA Germany: skin notation

Malaysia: 1 ppm TWA; 3.8 mg/m³ TWA
Netherlands: 2 ppm STEL; 8 mg/m³ STEL Netherlands: 1 ppm MAC; 4 mg/m³ MAC
Spain: 1 ppm VLA-ED; 3.8 mg/m³ VLA-ED

Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves 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: Clear liquid

Color: colorless

Odor: stench

pH: 1.5 (1% aq. solution)

Vapor Pressure: 0.1hPa @20 deg C

Viscosity: 6.55 Pa.s @20 deg C

Boiling Point: 220 deg C @760mmHg (428.00°F)

Freezing/Melting Point: -16 deg C (3.20°F)

Autoignition Temperature: 350 deg C (662.00 deg F)

Flash Point: 126 deg C (258.80 deg F)

Explosion Limits: Lower: 5.9 Vol %

Explosion Limits: Upper: Not available

Decomposition Temperature: Not available

Solubility in water: 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, heat.

Incompatibilities with Other Materials Metals, strong oxidizing agents, strong acids, strong bases, steel.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide, sulfur oxides (SO_x), including sulfur oxide and sulfur dioxide.

Hazardous Polymerization Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 68-11-1: AI5950000

LD50/LC50: RTECS:
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: Mercaptoacetic acid - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Ecotoxicity: Fish: Leuciscus idus: LC50: 103 mg/L; 96h; .
Fish: Fathead Minnow: LC50: 30 mg/L; 96h; .

Other: Do not empty into drains.
Log Pow: 0.059

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S.*	CORROSIVE LIQUID, TOXIC, N.O.S.	CORROSIVE LIQUID, TOXIC, N.O.S.
Hazard Class:	8 (6.1)	8 (6.1)	8 (6.1)
UN Number:	2922	2922	2922
Packing Group:	II	II	II

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Risk Phrases:

R 24/25 Toxic in contact with skin and if swallowed.

R 26 Very toxic by inhalation.

R 34 Causes burns.

Safety Phrases:

S 23 Do not inhale gas/fumes/vapour/spray.

S 25 Avoid contact with eyes.

S 27 Take off immediately all contaminated clothing.

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

S 36/37 Wear suitable protective clothing and gloves.

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

WGK (Water Danger/Protection)

CAS# 68-11-1: 1

Canada

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

US Federal

TSCA

CAS# 68-11-1 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996

Revision #1 Date 1/06/2005

Revisions were made in Sections: General revision.

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