

MATERIAL SAFETY DATA SHEET (MSDS)

BROMOACETIC ACID

1. Product Identification

MSDS Name: Bromoacetic acid 99%

Synonym: Monobromoacetic acid; MBAA.

Urgent contact: Shanghai Sunivo Supply Chain Management Co., Ltd.

Tel: +86 21 3393 3299

Fax: +86 21 5830 7878

URL: www.sunivo.com

Address: Room 502, Building 5, Lane 289 Bisheng Rd., Pudong District, Shanghai, 201204 - P.R. of China

2. Composition/Information on Ingredients

CAS#	Chemical Name	content	EINECS#
79-08-3	Bromoacetic acid	99	201-175-8

Hazard Symbols: T C N

Risk Phrases: 23/24/25 35 50

3. Hazards Identification

EMERGENCY OVERVIEW

Toxic by inhalation, in contact with skin and if swallowed. Causes severe burns. Very toxic to aquatic organisms. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:

Causes eye burns. Lachrymator (substance which increases the flow of tears).

Skin:

May be fatal if absorbed through the skin. Causes skin burns.

Ingestion:

Harmful if swallowed. Causes gastrointestinal tract burns.

Inhalation:

Harmful if inhaled. Causes chemical burns to the respiratory tract.

Chronic:

May cause liver and kidney damage. Chronic exposure may cause degenerative muscle and myocardium changes.

4. First Aid Measures

Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid immediately. Wash clothing before reuse.

Ingestion:

If swallowed, do NOT induce vomiting. Get medical aid immediately.

If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

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. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use water spray, dry chemical, or carbon dioxide.

6. Accidental Release Measures

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

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

7. Handling and Storage

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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 ventilation to keep airborne concentrations low.

Exposure Limits CAS# 79-08-3: 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:

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.

9. Physical and Chemical Properties

Physical State: Solid

Color: white to light yellow

Odor: None reported.

pH: Not available.

Vapor Pressure: 1 mm Hg @ 55C

Viscosity: Not available.

Boiling Point: 208 deg C @ 760 mmHg

Freezing/Melting Point: 50 deg C

Autoignition Temperature: Not available.

Flash Point: > 110 deg C (> 230.00 deg F)

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature:

Solubility in water: soluble

Specific Gravity/Density: 1.93 g/cm³

Molecular Formula: C₂H₃BrO₂

Molecular Weight: 138.95

10. Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Dust generation, moisture, high humidity.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Has not been reported.

11. Toxicological Information

RTECS#:

CAS# 79-08-3: AF5950000 LD50/LC50:

CAS# 79-08-3: Oral, mouse: LD50 = 100 mg/kg; Oral, rat: LD50 = 50 mg/kg; Oral, rat: LD50 = 177 mg/kg; Skin, rabbit: LD50 = 59900 ug/kg; Skin, rat: LD50 = 100 mg/kg.

Oral, rat: LD50 = <50mg/kg, 87.8 mg/kg mg/kg Carcinogenicity:

Bromoacetic acid - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

12. Ecological Information

Nothing.

13. Disposal Considerations

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

14. Transport Information

IATA

Shipping Name: BROMOACETIC ACID

Hazard Class: 8

UN Number: 1938

Packing Group: II

IMO

Shipping Name: BROMOACETIC ACID, SOLID

Hazard Class: 8

UN Number: 1938

Packing Group: II

RID/ADR

Shipping Name: BROMOACETIC ACID

Hazard Class: 8

UN Number: 1938

Packing group: II

15. Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T C N

Risk Phrases:

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

R 35 Causes severe burns.

R 50 Very toxic to aquatic organisms.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately
with plenty of water and seek medical advice.

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 61 Avoid release to the environment. Refer to
special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 79-08-3: 2

Canada

CAS# 79-08-3 is listed on Canada's NDSL List.

CAS# 79-08-3 is listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 79-08-3 is listed on the TSCA inventory.

16. Other Information

Disclaimer:

SUNIVO provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.
