

MATERIAL SAFETY DATA SHEET

Monochloroacetic Acid

Section 1 - Chemical Product and Company Identification

MSDS Name:	Monochloroacetic acid 99%
Synonyms:	Chloroacetic acid, MCA
Company Identification: (INDIA)	Veritas House, 70 Mint Road, Fort, Mumbai - 400 001. INDIA
For information in the INDIA, call:	Tel: +91 - 22 - 2275 5555 / 6184 0000, Fax: +91 - 22 - 2275 5556 / 6184 0001

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
79-11-8	Monochloroacetic acid	99%	201-178-4

Hazard Symbols:	T N
	
Risk Phrases:	25 34 50

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Toxic if swallowed. Causes burns. Very toxic to aquatic organisms. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:	Causes severe eye burns. Causes redness and pain.
Skin:	Harmful if absorbed through the skin. Causes skin burns. Causes redness and pain.
Ingestion:	Poison by ingestion.
Inhalation:	May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Chronic:	

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.
Skin:	Get medical aid. 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. Wash mouth out with water.
Inhalation:	If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

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.
Extinguishing Media:	Water or foam may cause frothing. Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 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.

Section 7 - Handling and Storage

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.
Storage:	Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

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.
Exposure Limits	CAS# 79-11-8: United Kingdom, WEL - TWA: 0.3 ppm TWA; 1.2 mg/m ³ TWA United Kingdom, WEL - STEL: 0.9 ppm STEL; 3.6 mg/m ³ STEL Germany: 1 ppm TWA; 4 mg/m ³ TWA Germany: skin notation Netherlands: 1 ppm MAC; 4 mg/m ³ MAC
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 minimize contact with skin.
Respirators:	A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

Section 9 - Physical and Chemical Properties

Physical State:	Crystal
Color:	white
Odor:	Not available
pH:	Not available
Vapor Pressure:	0.22 mbar @ 20 C
Viscosity:	Not available
Boiling Point:	189 deg C @ 760.00mm Hg (372.20°F)
Freezing/Melting Point:	61 - 63 deg C
Autoignition Temperature:	470 deg C (878.00 deg F)
Flash Point:	126 deg C (258.80 deg F)

Explosion Limits: Lower:	8.00 vol %
Explosion Limits: Upper:	.00 vol %
Decomposition Temperature:	Not available
Solubility in water:	SOLUBLE IN WATER: 4210 g/l (20°C)
Specific Gravity/Density:	1.5800 g/cc
Molecular Formula:	CICH ₂ CO ₂ H
Molecular Weight:	94.50

Section 10 - Stability and Reactivity

Chemical Stability:	Stable under normal temperatures and pressures.
Conditions to Avoid:	Incompatible materials, exposure to moist air or water.
Incompatibilities with Other Materials	Metals, strong oxidizing agents, strong reducing agents, strong bases, amines.
Hazardous Decomposition Products	Hydrogen chloride, carbon monoxide, carbon dioxide.
Hazardous Polymerization	Will not occur.

Section 11 - Toxicological Information

RTECS#:	CAS# 79-11-8: AF8575000
LD50/LC50:	RTECS: CAS# 79-11-8: Inhalation, rat: LC50 = 180 mg/m ³ ; Oral, rat: LD50 = 55 mg/kg; Other: Oral, mus: LD50 = 165 mg/kg Skin, rat: LD50 = 305 mg/kg
Carcinogenicity:	Chloroacetic acid, flakes-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:	Not available
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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:	CHLOROACETIC ACID, SOLID	CHLOROACETIC ACID, SOLID	CHLOROACETIC ACID, SOLID
Hazard Class:	6.1 (8)	6.1 (8)	6.1 (8)
UN Number:	1751	1751	1751
Packing Group:	II	II	II

USA RQ: CAS# 79-11-8: 100 lb final RQ; 45.4 kg final RQ

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: T N
Risk Phrases:

➤ R 25 Toxic if swallowed.
➤ R 34 Causes burns.
➤ R 50 Very toxic to aquatic organisms.
Safety Phrases:
➤ S 23 Do not inhale gas/fumes/vapour/spray.
➤ S 37 Wear suitable gloves.
➤ 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# 79-11-8: 2
Canada
➤ CAS# 79-11-8 is listed on Canada's DSL List
US Federal
➤ TSCA
➤ CAS# 79-11-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date:	July 22, 2015
Revision #0 Date	

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