



Material Safety Data Sheet  
Chloroacetic acid

MSDS# 95538

Section 1 - Chemical Product and Company Identification

MSDS Name: Chloroacetic acid

Catalog Numbers: AC108510000, AC108510010, AC108510025, AC108510040, AC220320000, AC220320010  
AC220320010, AC220321000, 10851-2500, A176-500

Synonyms: Chloroethanoic acid; Monochloroacetic acid; Monochloroethanoic acid; MCA; MCAA; alpha-Chloroacetic acid.

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

Company Identification: (USA) Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

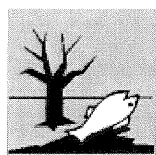
For information in the US, call: 800-ACROS-01  
For information in Europe, call: +32 14 57 52 11  
Emergency Number, Europe: +32 14 57 52 99  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300  
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

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

T N



Risk Phrases:

23/24/25 34 50

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! May be fatal if absorbed through the skin. Hygroscopic (absorbs moisture from the air). Poison! Causes burns by all exposure routes. Harmful if inhaled or swallowed. Corrosive to metal. Before using this product, make sure that personal protective equipment and engineering controls are used and operating, and also that first aid treatments and procedures are available and understood. Target Organs: Kidneys, heart, central nervous system, liver, lungs, respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye burns.

Skin: May be fatal if absorbed through the skin. Causes skin burns. Substance is rapidly absorbed through the skin. Not expected to cause an allergic skin reaction.

Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns.

Inhalation: Harmful if inhaled. May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation. Can produce delayed pulmonary edema.

Chronic: May cause liver and kidney damage. Effects may be delayed. May cause lung damage.

#### Section 4 - First Aid Measures

Eyes: Get medical aid immediately. Extensive irrigation with water is required (at least 30 minutes).  
POISON material. In case of contact, get medical aid immediately. Immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Skin: 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.

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

Inhalation: Chloroacetic acid causes competitive inhibition of acetate oxidation and acetylates sulfhydryl residues in the liver and kidney.

Notes to Physician: Timely administration of intravenous sodium dichloroacetate (SDCA) may be life saving in cases of serious monochloroacetate intoxication. SDCA is not approved for medical use in the United States. Treatment is symptomatic and supportive without it.

Antidote:

#### Section 5 - Fire Fighting Measures

General Information: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Contact with metals may evolve flammable hydrogen gas.

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

Autoignition Temperature: 470 deg C ( 878.00 deg F)

Flash Point: 126 deg C ( 258.80 deg F)

Explosion Limits: Lower: 8.0.

Explosion Limits: Upper: Not available

NFPA Rating: 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: Vacuum or sweep up material and place into a suitable disposal container. Avoid runoff into storm sewers and ditches which lead to waterways. Avoid generating dusty conditions. Provide ventilation. Evacuate unnecessary personnel. Carefully neutralize the dilute spill with lime slurry, soda ash, limestone, caustic soda or other alkaline material. Ensure clean-up is conducted by trained personnel only.

#### Section 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 breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Container should be opened by a technically qualified person. Discard contaminated shoes.

Storage: Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Poison room locked. Do not store in metal containers. Do not store near alkaline substances. Store protected from moisture.

#### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Chloroacetic acid	10.5 ppm (inhalable fraction and vapor); Skin -	none listed	none listed

	potential			
	significant			
	contribution to			
	overall exposure			
	by the cutaneous			
	r oute			

OSHA Vacated PELs: Chloroacetic acid: None listed

Engineering Controls:

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

Exposure Limits

Personal Protective Equipment

- Eyes: Wear chemical splash goggles and face shield.
- 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: Solid
- Color: colorless or white
- Odor: pungent odor
- pH: 1.90 (1% solution)
- Vapor Pressure: 0.065 mm Hg @ 25 deg C
- Vapor Density: 3.2 (air=1)
- Evaporation Rate: Not available
- Viscosity: Not available
- Boiling Point: 189 deg C ( 372.20°F)
- Freezing/Melting Point: 61-63 deg C
- Decomposition Temperature:
- Solubility in water: Soluble
- Specific Gravity/Density: 1.58 @ 20°C
- Molecular Formula: C2H3ClO2
- Molecular Weight: 94.5

Section 10 - Stability and Reactivity

- Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions. Deliquescent (tending to absorb atmospheric water vapor and become liquid).
- Conditions to Avoid: Dust generation, moisture, excess heat.
- Incompatibilities with Other Materials: Metals, strong oxidizing agents, strong bases, alcohols, amines.
- Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, carbon dioxide, formaldehyde.
- Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

- RTECS#: CAS# 79-11-8: AF8575000
- RTECS: CAS# 79-11-8: Inhalation, rat: LC50 = 180 mg/m3;
- LD50/LC50: Oral, rat: LD50 = 55 mg/kg;
- Other: Dermal LD50 rat: 145 mg/kg (ACGIH). Dermal LD50 rabbit: 177.8 mg/kg (Dow Chemical)

Company).

Carcinogenicity: Chloroacetic 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: Daphnia: Daphnia: 88 mg/l; 48h; EC50

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT

Shipping Name: CHLOROACETIC ACID, SOLID

Hazard Class: 6.1

UN Number: UN1751

Packing Group: II

Canada TDG

Shipping Name: CHLOROACETIC ACID, SOLID

Hazard Class: 6.108

UN Number: UN1751

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

R 34 Causes 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 60 This material and its container must be disposed of as hazardous waste.

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

S 63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.

WGK (Water Danger/Protection)

CAS# 79-11-8: 2

Canada

CAS# 79-11-8 is listed on Canada's DSL List

Canadian WHMIS Classifications: 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.

CAS# 79-11-8 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 79-11-8 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 2/09/1999

Revision #7 Date 7/20/2009

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 the company 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 the company has been advised of the possibility of such damages.

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**REVIEWED**

DATE: July 27/2012

*Chuteford*