

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name Chloroacetic Acid Crystals  
CAS number 79-11-8  
Synonyms MCA

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals

#### 1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC  
12501 Pauls Valley Road  
Austin, Texas 78737  
U.S.A.  
Telephone 512-668-9918  
Fax 512-886-4008

#### 1.4 Emergency telephone

Emergency Phone # US & Canada: 1-800-535-5053 INFOTRAC  
International 1-352-323-3500 INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1)  
Acute oral toxicity (Category 3)  
Acute dermal toxicity (Category 3)  
Acute Inhalation Toxicity - Dusts and Mists (Category 3)  
Skin Corrosion/Irritation (Category 1B)  
Serious Eye Damage/Irritation (Category 1)  
Specific target organ toxicity (single exposure) (Category 3)  
Target Organs - Respiratory system.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

### Hazard statements

Toxic if swallowed, in contact with skin or if inhaled  
Toxic if swallowed, in contact with skin or if inhaled  
Toxic in contact with skin or if inhaled.  
Toxic in contact with skin  
Causes severe skin burns and eye damage  
Causes serious eye damage  
Fatal if inhaled  
Toxic if inhaled  
May cause respiratory irritation  
Very toxic to aquatic life  
Very toxic to aquatic life with long lasting effects.

### Precautionary statements

Prevention Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product.  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep only in original container

Response Immediately call a POISON CENTER or doctor/physician

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Wash contaminated clothing before reuse.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Eyes IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion Rinse mouth  
Do NOT induce vomiting

Spills Absorb spillage to prevent material damage

Storage Store locked up  
Store in a well-ventilated place. Keep container tightly closed  
Store in corrosive resistant polypropylene container with a resistant inliner  
Store in a dry place

Disposal Disposal of contents/container to an approved waste disposal plant

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long lasting effects

## SECTION 3: Composition/information on ingredients

### 3.1 Components

| Chemical name     | Common name and synonyms | CAS number | Concentration |
|-------------------|--------------------------|------------|---------------|
| Chloroacetic acid | MCA                      | 79-11-8    | >100%         |

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

|                                |  |
|--------------------------------|--|
| <b>If inhaled</b>              | Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| <b>In case of skin contact</b> | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.  |
| <b>In case of eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.   |
| <b>If swallowed</b>            | Do NOT induce vomiting. Call a physician or poison control center immediately.   |

### 4.2 Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: treat symptomatically

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam

**Unsuitable extinguishing media** No information available

### 5.2 Specific hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

### 5.4 Further information

**Flash Point** 126 °C

**Autoignition Temperature** 470 °C / 878 °F

#### Explosion limits

**Upper** No information available

**Lower** No information available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

#### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 4      | 1            | 1           | N/A              |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid dust formation.

### 6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### 6.4 Reference to other sections

See section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe (dust, vapor, mist, gas). Avoid dust formation.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Store under an inert atmosphere. Protect from moisture. Incompatible materials.

### Incompatibilities

Strong oxidizing agents. Strong bases. Strong reducing agents. Amines. Alcohols.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. ACGIH Threshold Limit Values

| Component         | Type | Value   |
|-------------------|------|---------|
| Chloroacetic acid | TWA  | 0.5 ppm |

### 8.2 Exposure controls

#### Appropriate engineering controls

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

##### Eye/face protection

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 protection

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

##### Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure

##### Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

##### Control of environmental exposure

No information available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |                              |
|--|------------------------------|
| Physical State                         | Solid                        |
| Appearance                             | White                        |
| Odor                                   | Pungent                      |
| Odor Threshold                         | No information available     |
| pH                                     | < 1 (800 g/l @ 20°C)         |
| Melting Point/Range                    | 61 - 63 °C / 141.8 - 145.4 F |
| Boiling Point/Range                    | 189 °C                       |
| Evaporation Rate                       | 126 °C                       |
| Flammability (solid)                   | No information available     |
| Flammability or explosive limit        |                              |
| Upper                                  | No information available     |
| Lower                                  | 8.00%                        |
| Vapor Pressure                         | 0.75 mmHg                    |
| Vapor Density                          | Not applicable               |
| Density                                | 1.58                         |
| Solubility                             | No information available     |
| Partition coefficient; n-octanol/water | No data available            |
| Autoignition Temp                      | 470 °C / 878 °F              |
| Decomposition Temp                     | No information available     |
| Viscosity                              | Not applicable               |
| Molecular Formula                      | C2 H3 Cl O2                  |
| Molecular Weight                       | 94.5                         |
| VOC Content(%)                         | No information available     |
| Oxidizing properties                   | No information available     |

### 9.2 Other safety information

No information available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

None known, based on information available

### 10.2 Chemical stability

Hygroscopic

### 10.3 Possibility of hazardous reactions

None under normal processing

### 10.4 Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water

### 10.5 Incompatible materials

Strong oxidizing agents, Strong bases, Strong reducing agents, Amines, Alcohols.

## 10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Hydrogen chloride gas

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Product Information, Component Information

#### Acute toxicity

| Component         | LD50 Oral | LD50 Dermal | LC50 Inhalation            |
|-------------------|-----------|-------------|----------------------------|
| Chloroacetic acid | 55 mg/kg  | 250 mg/kg   | 180 mg/m <sup>3</sup> - 4h |

#### Skin corrosion/irritation

Causes burns by all exposure routes

#### Serious eye damage/eye irritation

No information available

#### Respiratory or skin sensitization

No information available

#### Germ cell mutagenicity

Not mutagenic in AMES test

#### Carcinogenicity

| Component         | CAS     | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|-------------------|---------|------------|------------|------------|------------|------------|
| Chloroacetic acid | 79-11-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

#### Specific target organ toxicity - single exposure

Respiratory system

#### Specific target organ toxicity - repeated exposure

None known

#### Reproductive toxicity

No information available

#### Chronic effects

No information available

## 11.2 Additional Information

The toxicological properties have not been fully investigated.

# SECTION 12: Ecological information

## 12.1 Toxicity

| Product           |      | Species          | Test Results    |
|-------------------|------|------------------|-----------------|
| Chloroacetic acid | EC50 | Freshwater Algae | 1.8 mg/L, 72h   |
|                   | EC50 | Freshwater Algae | 0.025 mg/L, 72h |
|                   | LC50 | Freshwater Fish  | 145 mg/L, 96h   |
|                   | EC50 | Water Flea       | 71-85 mg/L, 48h |
|                   | EC50 | Water Flea       | 77 mg/L, 48h    |

## 12.2 Persistence and degradability

Persistence is unlikely

## 12.3 Bio accumulative potential

No information available

## 12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

## 12.5 Results of PBT and vPvB assessment

No information available

## 12.6 Endocrine disrupting properties

No information available

## 12.7 Other adverse effects

No information available

## SECTION 13: Disposal considerations

### 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### DOT (US)

|                         |                          |
|-------------------------|--------------------------|
| UN-no.                  | UN1751                   |
| Proper shipping name    | CHLOROACETIC ACID, SOLID |
| Hazard class            | 6.1                      |
| Subsidiary hazard class | 8                        |
| Packing group           | II                       |

### IMDG

|                         |                          |
|-------------------------|--------------------------|
| UN-no.                  | UN1751                   |
| Proper shipping name    | CHLOROACETIC ACID, SOLID |
| Hazard class            | 6.1                      |
| Subsidiary hazard class | 8                        |



Packing group II

**IATA**

UN-no. UN1751  
Proper shipping name CHLOROACETIC ACID, SOLID  
Hazard class 6.1  
Subsidiary hazard class 8  
Packing group II

**SECTION 15: Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not applicable

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Listed; Chloroacetic acid RQ: 100 lb

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**  
Not applicable

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**  
**SARA 302 Extremely hazardous substance**  
Not listed.

**SARA 311/312 Hazardous**  
See section 2 for more information

**SARA 313 (TRI reporting)**  
Listed

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**  
Not regulated.

**Safe Drinking Water Act**  
Not regulated

**US state regulations**

**US. Massachusetts RTK - Substance List**  
Listed

**US. New Jersey Worker and Community Right-to-Know Act**  
Listed

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed

**California Proposition 65**

Not listed

**SECTION 16: Other information**

Issue date: 07/10/2024

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.