

# Safety Data Sheet

Creation Date: 2021/11/04	SDS NO.: 1551E
Product Name: chloroacetic acid monochloroacetic acid	Version: V2.1.0.1

## SECTION 1 Identification of the chemical and supplier

**Chemical Name:** chloroacetic acid|monochloroacetic acid

**Synonyms:**

**CAS No.:** 79-11-8

**EC No.:** 201-178-4

**Molecular Formula:** C<sub>2</sub>H<sub>3</sub>ClO<sub>2</sub>

**Recommended Uses:** Please consult manufacturer.

**Restrictions on Use:** Please consult manufacturer.

**Name of the company:** Wuxi High Mountain Hi-tech Development Co.,Ltd.

**Address of the company:** No.1406, Building 3, Calxon Fortune Center, Financial 3rd Street, Wuxi, P. R. of China

**Post code:** 214000

**Fax number:** +86-510-85883515

**Tel number:** +86-510-85881876

**E-mail address:** info@high-mountain.cn

**Emergency phone number:** +86-510-85881876

## SECTION 2 Hazards identification

### | Emergency overview

Solid. Toxic if swallowed. Toxic in contact with skin. Causes skin burns. Risk of serious damage to eyes. Risk of serious damage to eyes. Very toxic by inhalation. Irritating to respiratory system. Very toxic to aquatic organisms, Use appropriate container to avoid environmental contamination.

### | Hazard classification according to GHS

According to series standards of GB 30000-2013: Rules for classification and labelling of chemicals. (Please refer to 16th chapter of SDS), hazard classification as following: Acute Toxicity – Oral, Category 3; Acute Toxicity – Dermal, Category 3; Skin Corrosion/Irritation, Category 1B; Serious Eye Damage/Irritation, Category 1; Acute Toxicity – Inhalation, Category 2; Specific Target Organ Toxicity-Single Exposure : Criteria for respiratory tract irritation, Category 3; Hazardous To The Aquatic Environment – Short-Term (Acute) Hazard, Category 1.

### | Label elements

#### Hazard pictograms



**Signal word:** **Danger**

**Hazard statements:** Toxic if swallowed, Toxic in contact with skin, Causes severe skin burns and eye damage, Causes serious eye damage, Fatal if inhaled, May cause respiratory irritation, Very toxic to aquatic life.

### Precautionary statements

**Prevention:** Do not breathe dust/fume/gas/mist/vapours/spray. Wash face and hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. wear respiratory protection.

**Response:** Call a POISON CENTER/doctor, if you feel unwell. Specific treatment is urgent (see ... on this label). Specific treatment (see ... on this label). Specific treatment (see ... on this label). Rinse mouth. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Collect spillage. IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage:** Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:** Dispose of contents/container in accordance with local/regional/national/ international regulations.

## Hazard description

### Physical and chemical hazards

No information available

### Health hazards

Burning sensation. Cough. Sore throat. Laboured breathing. Vomiting. Convulsions. Unconsciousness. Symptoms may be delayed. Abdominal pain. Burning sensation. Shock or collapse. Convulsions. Unconsciousness. MAY BE ABSORBED! Redness. Pain. Skin burns. Redness. Pain. Severe deep burns.

### Environmental hazards

This product is very toxic to aquatic life. Please refer to 12th chapter of SDS.

## SECTION 3 Composition/information on ingredients

√ Substance Mixture

Component	Concentration/Range	CAS No.
Chloroacetic acid	> = 99	79-11-8

## SECTION 4 First aid measures

### Description of first aid measures

**General advice:** Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.

**Skin contact:** Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.

**Eye contact:** First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

**Inhalation:** Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.

**Advice for protecting the rescuer:** Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material. Remove all sources of ignition and increase ventilation. Avoid contact with skin and eyes. Avoid inhalation of dusts. Use personal protective equipment including respirator.

**Special note to the doctor:** Treat symptomatically. Symptoms may be delayed.

## SECTION 5 Firefighting measures

### | Hazard characteristics

May emit poisonous fumes on fire. Fire may produce irritating, poisonous or corrosive gases. Containers may explode when heated. May expand or decompose explosively when heated or involved in fire.

### | Extinguishing method and media

Suitable extinguishing media: Fog, sand, foam, carbon dioxide.

Unsuitable extinguishing media: High pressure water.

### | Fire precautions and measures

As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. Fight fire from a safe distance, with adequate cover. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6 Accidental release measures

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

Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

### | Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided.

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

Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## SECTION 7 Handling and storage

## | Precautions for handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Avoid contact with skin and eyes. Keep away from heat/sparks/open flames/ hot surfaces.

## | Precautions for storage

Keep containers tightly closed. Keep containers in a dry, cool and well-ventilated place. Keep away from heat/sparks/open flames/hot surfaces. Store away from incompatible materials and foodstuff containers. Storage temperature generally should not be higher than 30 °C, relative humidity generally should not be higher than 80%.

## SECTION 8 Exposure controls/personal protection

### | Control parameters

#### Occupational Exposure limit values

COMPONENT	STANDARD	TYPE	STANDARD VALUE	REMARK
Chloroacetic acid	GBZ 2.1-2019	PC-TWA	-	Skin
		PC-STEL	-	
Skin—directly exposed to the skin, mucous membranes, and the eyes of the vapor, liquid and solid, causing the systemic effect to be absorbed through the skin.				

#### Biological limit values

No information available.

#### Monitoring methods

EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air ( Series standard ) .

### | Engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Set up emergency exit and necessary risk-elimination area.

### | Respiratory protection

If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

### | Eye protection

Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US)).

### | Skin and body protection

Wear fire/flame resistant/retardant clothing and antistatic boots.

**| Hand protection**

Wear protective gloves ( such as butyl rubber ) , passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard.

**| Other protection**

Smoking, eating and drinking water is forbidden in the workplace. After work, shower and change clothes. To maintain good health habits.

**SECTION 9 Physical and chemical properties**

<b>Appearance:</b> Colorless or white crystal	
<b>pH (Specified the concentration) :</b> < 1 ( 20°C, 800g/L )	<b>Odor:</b> Pungent odor
<b>Initial boiling point and boiling range(°C):</b> 189	<b>Melting point/freezing point(°C):</b> 50
<b>Vapor density(Air = 1):</b> 3.26	<b>Density:</b> No information available
<b>Saturated vapor pressure (kPa):</b> 8.68Pa	<b>Relative density(Water=1):</b> 1.58
<b>Evaporation rate:</b> Not applicable	<b>Viscosity(mm<sup>2</sup>/s):</b> Not applicable
<b>Flash point(°C):</b> 126	<b>N-octanol/water partition coefficient:</b> 0.34
<b>Decomposition temperature(°C):</b> No information available	<b>Auto-ignition temperature(°C):</b> 470
<b>Upper/lower explosive limits[%(v/v)]:</b> Upper limit : No information available ; Lower limit : 8	
<b>Solubility:</b> 4210g/L ( 20°C )	<b>Flammability:</b> No information available

**SECTION 10 Stability and reactivity****| Stability**

Stable under proper operation and storage conditions.

**| Incompatible materials**

No information available

**| 应 Conditions to avoid**

Incompatible materials, heat, flame and spark.

**| Hazardous reactions**

No information available

**| Decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11 Toxicological information**

**| Acute toxicity**

COMPONENT	CAS NO.	LD <sub>50</sub> (ORAL)	LD <sub>50</sub> (DERMAL)	LC <sub>50</sub> (INHALATION)-4H
Chloroacetic acid	79-11-8	650mg/kg(Rat)	No information available	No information available

**| Carcinogenicity**

ID	CAS NO.	COMPONENT	IARC	NTP
1	79-11-8	Chloroacetic acid	Not Listed	Not Listed

**| Skin irritation/corrosion**

Causes severe skin burns and eye damage(Category 1B)

**| Eye irritation/corrosion**

Causes serious eye damage(Category 1)

**| Skin sensitization**

No information available

**| Respiratory sensitization**

No information available

**| Germ cell mutagenicity**

No information available

**| Reproductive toxicity**

No information available

**| STOT-single exposure**

May cause respiratory irritation(Category 3)

**| STOT-repeated exposure**

No information available

**| Aspiration hazard**

No information available

**SECTION 12 Ecological information****| Acute aquatic toxicity**

COMPONENT	CAS NO.	FISH	CRUSTACEANS	ALGAE
Chloroacetic acid	79-11-8	LC <sub>50</sub> : 72mg/L (96h)(Fish)	EC <sub>50</sub> : 77mg/L (48h)(Crustaceans)	ErC <sub>50</sub> : 0.16mg/L (72h)(Algae)

**| Chronic aquatic toxicity**

COMPONENT	CAS NO.	FISH	CRUSTACEANS	ALGAE
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Chloroacetic acid	79-11-8	No information available	No information available	NOEC : 0.033mg/L(Algae)
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### | Persistence and degradability

No information available

### | Bioaccumulative potential

No information available

### | Mobility in soil

No information available

### | Other deleterious effect

No information available.

## SECTION 13 Disposal considerations

### | Disposal methods

Product: Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated packaging: Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.

### | Disposal considerations

Refer to section 13.1and 13.2.

## SECTION 14 Transport information

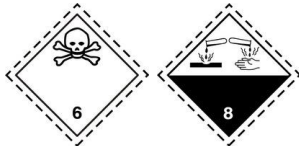
| UN number: 1751

| UN proper shipping name: CHLOROACETIC ACID, SOLID

| Transport hazard class: 6.1+8

| Packing group: II

### | Label



| Marine pollutant (Yes/No): 是



### | Methods of packing

Ampoule outside the ordinary wooden box. Threaded glass, metal cover pressure bottles, plastic bottles or metal (cans) outside the ordinary wooden box etc. Threaded glass, metal cover pressure bottles, plastic

bottles or metal (cans) outside the ordinary wooden box. Frosted glass bottle or threaded glass outside the ordinary wooden box. thread mouth glass bottles, plastic bottles or tinsplate barrels (LP), full floor grille boxes, fibreboard or plywood box etc. Story brown paper bags or plastic bags outside fiber drums, barrels plywood, hard cardboard, plastic outer plastic bucket. Packaging as recommended by manufacturer.

### | Precautions for transport

Transit should be anti-exposure, rain, high temperature. Strictly prohibited shipping or transportation with acids, alkalis, oxidants, food and food additives etc. Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

## SECTION 15 Regulatory information

### | Regulatory information

COMPONENT	A	B	C	D	E	F	G	H
Chloroacetic acid	Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

【A】 Catalog of Hazardous Chemicals(2015 Edition), Notice 5th 2015, China State Administration of Work Safety.

【B】 Catalog of Priority Hazardous Chemicals for Environment Management, Notice 33th 2014, Ministry of Environmental Protection of PRC.

【C】 List of Toxic Chemicals Restricted to be Imported/Exported in China, Notice 85th 2013, Ministry of Environmental Protection of PRC.

【D】 Catalog of Stupeficient and Psychotropic Substances(2013Edition), Notice 230th 2013, China Food and Drug Administration.

【E】 Catalog of Hazardous Chemicals for Priority Management( First and Second batches ), Notice 95th, 2011, Notice 12th 2013, China State Administration of Work Safety.

【F】 List of Ozone Depletion Chemicals Controlled to be Imported/Exported in China ( First to Sixth batches ), Notice from 2000 to 2012 Ministry of Environmental Protection of PRC.

【G】 Dangerous Chemicals Directory Used to Manufacture Exploder(2011 Edition), Notice 25th Nov. 2011, Ministry of Public Security of PRC1.

【H】 Catalog of Highly Toxic Chemicals, Notice 142th 2003, China Ministry of Health.

## SECTION 16 Others

**Latest Revision Date:** 2021/11/04

### | Revision explanation

This Safety Data Sheet (SDS) was prepared according to standards of 《Safety data sheet for chemical products—Content and order of sections》 ( GB/T 16483-2008 ) and 《Guidance on the compilation of safety data sheet for chemical products》( GB/T 17519-2013 ). The result of GHS classification according to 《Guidance on the Catalog of Hazardous Chemicals(2015 Edition) (trial)》 and series standards of 《Rules for classification and labelling of chemicals》 (GB 30000.2-2013~GB 30000.29-2013).

### | Reference

【1】 IPCS: The International Chemical Safety Cards (ICSC) ,website: <http://www.ilo.org/dyn/icsc/showcard.home>.

【2】 IARC , website: <http://www.iarc.fr/>.



- 【3】 OECD: The Global Portal to Information on Chemical Substances, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en).
- 【4】 CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- 【5】 NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- 【6】 EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- 【7】 U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- 【8】 Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

## Abbreviations and acronyms

<b>CAS</b> –Chemical Abstracts Service	<b>CMR</b> - Carcinogens, mutagens or substances toxic to reproduction
<b>PC-STEL</b> - Short term exposure limit	<b>PC-TWA</b> - Time Weighted Average
<b>DNEL</b> - Derived No Effect Level	<b>IARC</b> - International Agency for Research on Cancer
<b>RPE</b> - Respiratory Protective Equipment	<b>PNEC</b> –Predicted No Effect Concentration
<b>LC<sub>50</sub></b> - Lethal Concentration 50%	<b>LD<sub>50</sub></b> - Lethal Dose 50%
<b>NOEC</b> -No Observed Effect Concentration	<b>EC<sub>50</sub></b> - Effective Concentration 50%
<b>PBT</b> - Persistent, Bioaccumulative, Toxic	<b>POW</b> - Partition coefficient Octanol:Water
<b>BCF</b> - Bioconcentration factor (BCF)	<b>vPvB</b> - very Persistent, very Bioaccumulative
<b>IMDG</b> -International Maritime Dangerous Goods	<b>ICAO/IATA</b> -International Civil Aviation Organization/International Air Transportation Association
<b>UN</b> -The United Nations	<b>ACGIH</b> -American Conference of Governmental Industrial Hygienists
<b>NFPA</b> -National Fire Protection Association	<b>OECD</b> -Organization for Economic Co-operation and Development

## Disclaimer

This Safety Data Sheet (SDS) was prepared according to GB/T16483 and GB/T17519. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user' s reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.