



TOKYO CHEMICAL INDUSTRY CO., LTD.

Chloroacetic Acid

Revision 2
number:

Revision date: 03/04/2023

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SAFETY DATA SHEET

1. IDENTIFICATION

Product name: Chloroacetic Acid
Product code: C2123
Company: TOKYO CHEMICAL INDUSTRY CO., LTD.
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Revision number: 2

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

PHYSICAL HAZARDS

Corrosive to metals

Category 1

HEALTH HAZARDS

Acute toxicity (Oral)

Category 3

Acute toxicity (Dermal)

Category 3

Acute toxicity (Inhalation)

Category 2

Skin corrosion/irritation

Category 1B

Serious eye damage/eye irritation

Category 1

Specific target organ toxicity

Nervous system, Cardiovascular system, Kidney

- Single exposure [Category 1]

Specific target organ toxicity

Respiratory tract irritation

- Single exposure [Category 3]

Specific target organ toxicity

Liver, Heart

- Repeated exposure [Category 2]

ENVIRONMENTAL HAZARDS

Acute aquatic hazard

Category 1

Long-term aquatic hazard

Category 1

Label elements

Pictograms or hazard symbols



Signal word

Danger

Hazard statements

May be corrosive to metals

Fatal if inhaled

Toxic if swallowed or in contact with skin.

Causes severe skin burns and eye damage

Causes damage to organs : Nervous system

Cardiovascular system Kidney

May cause damage to organs through prolonged or repeated exposure : Liver Heart

May cause respiratory irritation

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Precautionary statements

[Prevention]

Keep only in original container.

Do not breathe dust, fume, mist, vapors or spray.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

[Response]

Do not eat, drink or smoke when using this product.

Wash hands and face thoroughly after handling.

Wear respiratory protection.

Wear protective gloves, protective clothing, face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

If exposed or concerned: Call a POISON CENTER or doctor.

Absorb spillage to prevent material damage.

Collect spillage.

[Storage]

Store in corrosive resistant container with a resistant inner liner.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

[Disposal]

Dispose of contents and container in accordance with local, regional, national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Components:	Chloroacetic Acid
Percent:	>99.0%(GC)(T)
CAS RN:	79-11-8
Synonyms:	Monochloroacetic Acid
Chemical Formula:	C ₂ H ₃ ClO ₂
Notice Through Official Gazettes Reference Number	
ENCS:	(2)-1145
ISHL:	Official announcement chemistry substance.

4. FIRST-AID MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
Protection of first-aiders:	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Precautions for firefighters:	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
Special protective equipment for firefighters:	When extinguishing fire, be sure to wear personal protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
Environmental precautions:	Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned.
Methods and materials for containment and cleaning up:	Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical measures:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.
Advice on safe handling:	Avoid contact with skin, eyes and clothing. Use corrosive resistant equipment.

Conditions for safe storage, including any incompatibilities

Storage conditions:	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents. Hygroscopic
Packaging material:	Comply with laws. Keep only in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls:	Install a closed system or local exhaust. Also install safety shower and eye bath.
Control parameters:	Not set up
Personal protective equipment	
Respiratory protection:	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):	Solid
Form:	Crystal - Powder
Colour:	White - Very pale yellow
Odour:	Strong Acetic acid-like
Melting point/freezing point:	65°C
Boiling point/range:	189°C
Flammability(solid, gas):	No data available
Flash point:	No data available
Autoignition temperature:	470°C
Flammability or explosive limits:	
Lower:	8%
Upper:	No data available
pH:	<1 (800g/L H ₂ O soln. 20°C)
Kinematic viscosity:	No data available
Vapour pressure:	8.68Pa/25°C
Solubility(ies):	
[Water]	Very soluble
[Other solvents]	
Soluble:	Ether, Alcohols, Many organic solvents
Log Pow:	0.22
Relative density:	No data available
Vapour density:	3.26
Particle characteristics:	No data available

10. STABILITY AND REACTIVITY

Reactivity:	No data available
Chemical stability:	Stable under proper conditions.
Possibility of hazardous reactions:	No special reactivity has been reported.
Conditions to avoid:	No data available
Incompatible materials:	Oxidizing agents, Strong bases, Reducing agents
Hazardous decomposition products:	Carbon monoxide, carbon dioxide etc

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	orl-rat LD50:55 mg/kg skn-rat LDLo:125 mg/kg ihl-rat LC50:180 mg/m ³ scu-rat LD50:5 mg/kg orl-man LDLo:0.89 mL/kg
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Germ cell mutagenicity:	mmo-mus-lym 548 mg/L (+/-S9)
Carcinogenicity:	scu-mus TDLo:100 mg/kg
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	No data available
STOT-single exposure:	No data available
STOT-repeated exposure:	No data available
Aspiration hazard:	No data available
RTECS Number:	AF8575000

12. ECOLOGICAL INFORMATION

Ecotoxicity:	
Fish:	96h LC50:72 mg/L (Oryzias latipes)
Crustacea:	No data available
Algae:	72h EC50:0.16 mg/L (Selenastrum capricornutum) 72h NOEC:0.0058 mg/L (Selenastrum capricornutum)
Persistence / degradability:	65.0 % (by BOD) , 98.8 % (by TOC) , 100 % (by GC) *The substance was determined as "Ready biodegradability" under the Chemical Substances Control Law.
Bioaccumulative potential(BCF):	3.2
Mobility in soil	
Log Pow:	0.22
Soil adsorption (Koc):	31
Henry's Law (PaM ³ /mol):	9.38 x 10 ⁻⁴
Other adverse effects:	No data available

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

UN-No:	1751
Proper shipping name:	Chloroacetic acid, solid
Hazards Class:	6.1: Toxic substance.
Subsidiary risk:	8: Corrosive.
Packing group:	II
Marine pollutant	Y
Specific precautionary transport measures and conditions:	

15. JAPANESE REGULATORY INFORMATION**Poisonous and Deleterious** on Deleterious Substances List.**Substances Control Law:****ISHL(Article 57):**

Dangerous or Harmful Substances Subject to Be Indicated their Names, etc.

ISHL(Article 57-2):

Dangerous or Harmful Substances Subject to Be Notified their Names, etc.

ENCS:

Priority Assessment Chemical Substance

Law for safety of vessels:

Hazardous materials notification, Schedule form No.1 Toxic substance

Pollutant Release and

on Designated Chemical Substances, Class I List (No.98)

Transfer Register Law:**16. OTHER INFORMATION****The reference company name of written contents****Company:**

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This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.