Chemical Safety Data Sheet

Section 1 IDENTIFICATION

GHS Product identifier: Trichloroisocyanuric acid.

Other means of identification: 1，3，5-Trichloro-s-triazine-2，4，6(lH，3H,5H)-trione.

Recommended use of the chemical and restrictions on use: This material can be used as antiseptic, bleach of textile industry, wool treating agent, etc.

Supplier's details: / SHANDONG DAMING SCIENCE AND TECHNOLOGY CO., LTD

Emergency phone number; / **0086 0632 5693099**.

Section 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Oxidizing Solid Category 2

Acute toxicity, oral Category 4

Serious eye damage/eye irritation 2A

Specific target organ toxicity, single exposure Category 3 (respiratory tract irritation)

Hazardous to the aquatic environment, acute hazard Category 1

Hazardous to the aquatic environment, long-term hazard Category 1

GHS Label elements, including precautionary statements:

Symbol:

Signal word: Danger

Hazard statement(s): May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from clothing and other combustible materials. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash ...thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response:

In case of fire: Use water spray, dry powder or foam to extinguish. If swallowed: Get medical help. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help. Collect spillage.

Storage:

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

Disposal:

Dispose of contents/container to in accordance with national regulations.

Other hazards which do not result in classification: /

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration
Trichloroisocyanuric acid	87-90-1	99.85%

Section 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: Quickly leave and move to a place with fresh air. Keep the airway unobstructed. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration immediately. Consult a physician.

In case of skin contact: Remove contaminated clothing and rinse with plenty of running water.

In case of eye contact: Rinse thoroughly with plenty of running water for at least 15 minutes and consult a physician.

If ingestion: Rinse mouth with water. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

Section 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Use foam, dry powder, water spray, etc.

Special hazards arising from the chemical: This substance is non-flammable and can help combustion. It decomposes and produces toxic fumes in high temperature and fire.

Special protective actions for fire-fighters: Firefighters must wear air breathing apparatus, fire-fighting suits and protective gloves to extinguish in the upwind direction. Whenever possible, remove the container from the fire to open space and use spray water to cool unopened containers.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: It is recommended that emergency personnel wear protective masks and fire protective overalls. Do not touch the spill directly.

Environmental precautions: Isolate contaminated areas and restrict access.

Methods and materials for containment and cleaning up: Small amount of leakage: Avoid dusting, use a clean shovel to collect in a dry, clean, covered container and transfer to a safe place. Do not allow products to enter restricted areas such as sewers. A large amount of leakage: Cover with plastic sheeting and canvas. Use a non-sparking tool to collect the waste or transport it to a waste disposal site for disposal.

Section 7 HANDLING AND STORAGE

Precautions for safe handling: There should be sufficient local exhaust in workplace. Operators should be trained and strictly follow the operating procedures. Operators are advised to wear protective masks, normal protective clothing and rubber gloves. Operators should load and unload lightly during handling to prevent damage to the package. There should be leakage treatment equipment in workplace. There may be harmful residues in empty containers.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well-ventilated warehouse. Keep away from fire and heat. Protect from direct sunlight. The package should be sealed and not exposed to moisture. It should be stored separately from reducers, amines, flammable materials, etc., and should not be mixed. The storage area should be provided with suitable materials to contain spills.

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:/
Appropriate engineering controls: Close strictly and provide sufficient local exhaust.
Individual protection measures
Eye/face protection: Wear a protective mask.
Skin protection: Wear normal protective clothing.
Respiratory protection: A dust mask (full face mask) must be worn when exposed to dust. Air respirators should be worn during emergency rescue or evacuation.
Thermal hazards: /

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid granule.
Colour	White.
Odour	/
Melting point/freezing point	/
Boiling point or initial boiling point and boiling range	/
Flammability	/
Lower and upper explosion limit/flammability limit	/
Flash point	/
Auto-ignition temperature	/
Decomposition temperature	>225 ℃.
pH	/
Kinematic viscosity	/
Solubility	1.2g/100mL(25°C).
Partition coefficient: n-octanol/water (log value)	0.26.
Vapour pressure	/
Density and/or relative density	2.07.
Relative vapour density	/
Particle characteristics	/

Section 10 STABILITY AND REACTIVITY

Reactivity: /
Chemical stability: This substance is stable in normal temperature.
Possibility of hazardous reactions: Decomposes on heating. This produces toxic fumes. May explode on heating. The substance is a strong oxidant. It reacts with combustible and reducing materials. Reacts violently with ammonia, ammonium salts and amines and sodium carbonate. This generates fire and explosion hazard. Reacts with strong acids. This produces toxic gas chlorine.
Conditions to avoid: Spark, static electricity and high temperature.
Incompatible materials: Reducing agent, amines, flammable materials, etc.
Hazardous decomposition products: Oxycarbides，nitrogen oxide and chlorine hydride.

Section 11 TOXICOLQGICAL INFORMATION

Information on the likely routes of exposure: Ingestion (swallowing), skin/eye exposure and inhalation.
Symptoms related to the physical, chemical and toxicological characteristics: /
Acute health effects:
Ingestion can cause symptoms such as nausea, vomiting and abdominal pain.

Skin contact can cause redness and irritation.
Inhalation can cause cough, throat irritation.
Eyes contact can cause redness and irritation.
Chronic health effects: /
Numerical measures of toxicity (such as acute toxicity estimates):
LD50(oral, rat): 406 mg/kg
LD50(dermal, rabbit): >2000 mg/kg
LC50(inhalation, rat): >12.5 mg/1 4h

Section 12 ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available):

Endpoint	Test Duration (hr)	Species	Value
LC50	96	Fish	0.23mg/L
EC50	48	Crustacea	0.17mg/L
EC50	72	Algae or other aquatic plants	> 100mg/L
NOEC	96	Fish	0.056mg/L

Persistence and degradability: High.
Bioaccumulative potential: Low (BCF=0.5).
Mobility in soil: Low (KOC=48.36).
Other adverse effects: /

Section 13 DISPOSAL CONSIDERATIONS

Disposal methods: Dispose this product by safe burial. Damaged containers are prohibited from being reused and should be buried in the prescribed place.

Section 14 TRANSPORT INFORMATION

UN number: 2468.
UN proper shipping name: TRICHLOROISOCYANURIC ACID, DRY.
Transport hazard class(es): 5.1.
Packing group, if applicable: II.
Environmental hazards: Severe marine pollutant.
Special precautions for user: /
Transport in bulk according to IMO instruments: /

Section 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB/T 16483-2008, GB 13690-2009, GB 18218-2018, GB 15258-2009, GB 6944-2012, GB 190-2009, GB/T 191-2008, GB 12268-2012, GB/T 15098-2008, GBZ 2.1-2019, GBZ 2.2-2007 as well as the following regulations: Railway Dangerous Goods Transport Administrative Regulation, Dangerous Chemicals Safety Administrative Regulation.

Section 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals

Form Date	29-July-2021

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer/supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with 7″ logo.