

SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH)
COMMISSION REGULATION (EU) 2015/830

Version 1
Product Name Trichloroisocyanuric acid

Issue Date 08-Jan-2021
Revision date 08-Jan-2021

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

1.1. Product identifier

Product Name Trichloroisocyanuric acid
CAS No 87-90-1
Another name Trichloro-s-triazinetrione,
Trichlor, 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-trichloro-, Symclosene, TCCA

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

Recommended Use Algaecide, Disinfectant, Sanitizer, Bactericide, Fungicide,
Microbiocide/microbiostat
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier HEBEI JIHENG CHEMICAL CO.,LTD
Address 8 Jiheng Road, New Industrial Zone, Hengshui city, Hebei, CHINA
Postal Code 053000
Phone 0318-5950119
FAX 0318-5950968

1.4. Emergency telephone number

0318-5950119

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Oxidizing solids Category 2 - (H272)
Acute toxicity - Oral Category 4 - (H302)
Serious eye damage/eye irritation Category 2 - (H319)
Specific target organ toxicity (single exposure) Category 3 - (H335)
Acute aquatic toxicity Category 1 - (H400)
Chronic aquatic toxicity Category 1 - (H410)

2.2. Label elements

Symbols/Pictograms



Signal word

Danger

Hazard Statements

H272 - May intensify fire; oxidizer
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 P220 - Keep/Store away from clothing/ combustible materials
 P221 - Take any precaution to avoid mixing with combustibles
 P271 - Use only outdoors or in a well-ventilated area
 P273 - Avoid release to the environment
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/attention
 P405 - Store locked up
 P501 - Dispose of contents/container to industrial incineration plant

EU Specific Hazard Statements EUH031: Contact with acids liberates toxic gas.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substance

Chemical Name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Trichloro-S-triazinetrione	201-782-8	87-90-1	98-100	Acute Tox. 4 (H302) Eye Irrit. 2 (H319) (EUH031) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Ox. Sol. 2 (H272)
Others	-	-	0-2	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Remove contaminated clothing and shoes. If symptoms persist, call a physician.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

Eye contact

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 advice/attention.

Ingestion

Rinse mouth. Get medical attention. Never give anything by mouth to an unconscious person.

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

Harmful if swallowed. Causes serious eye irritation. May cause irritation of respiratory tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

The product causes irritation of eyes, skin and mucous membranes.

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protection recommended in Section 8.

6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

See Section 7 for more information

See section 8 for more information

See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Avoid generation of dust. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Use personal protection recommended in Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.

7.3. Specific end use(s)

Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No information available

Derived No Effect Level (DNEL)

No information available

Predicted No Effect Concentration (PNEC)

No information available

8.2. Exposure controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand Protection	Wear protective gloves.
Skin and body protection	Suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	Solid, Crystals, Granules
Color	White
Odor	Slight chlorine odor
Odor Threshold	Not determined
pH	2.6 - 3.2
Melting point/freezing point	Not determined
Boiling point / boiling range	Not determined
Flash point	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Flammability Limit in Air	Not determined
Vapor Pressure	Not determined
Vapor density	Not determined
Density	2.07 g/cm ³
Relative density	Not determined
Bulk density	850 kg/m ³
Partition coefficient (LogPow)	Not determined
Autoignition temperature	Not determined
Decomposition temperature	225 - 230 °C
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not an explosive
Oxidizing properties	Not determined

9.2. Other information

No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks.

10.5. Incompatible materials

Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.

10.6. Hazardous decomposition products

Nitrogen oxides (NO_x). Chlorine oxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Trichloro-S-triazinetriene (CAS #: 87-90-1)	= 406 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 50 mg/L (Rat) 1 h

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

Causes serious eye irritation.

Sensitization

No sensitization responses were observed.

Germ cell mutagenicity

No information available.

Carcinogenicity

Not classified

Reproductive toxicity

No information available.

STOT - single exposure

May cause respiratory irritation

STOT - repeated exposure

No information available

Aspiration hazard

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Trichloro-S-triazinetriene (CAS #: 87-90-1)	-	0.13 - 0.5: 96 h Lepomis macrochirus mg/L LC50 static 0.06 - 0.11: 96 h Oncorhynchus mykiss mg/L LC50 static	0.21: 48 h Daphnia magna mg/L EC50 0.16 - 0.18: 48 h Daphnia magna mg/L EC50 Static

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14: Transport information

14.1 UN Number 2468
14.2 Proper shipping name TRICHLOROISOCYANURIC ACID, DRY
14.3 Hazard Class 5.1
14.4 Packing Group II
14.5 Environmental hazards Yes, Marine pollutant
14.6 Special precautions No information available
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture European Union

Component	EINECS/ELINCS	SVHC candidates	RESTRICTIONS - REACH TITLE VII
Trichloro-S-triazinetri- one 87-90-1	X	-	-

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

International Inventories

Component	TSCA	DSL/NDSL	ENCS	IECSC	KECL	PICCS	AICS
Trichloro-S-triazinetri- one 87-90-1	X	X	X	X	X	X	X

"-" Not Listed

"X" Listed

15.2. Chemical safety assessment

A Chemical Safety Assessment is not required for this substance

SECTION 16: Other information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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Revision Note Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)

STEL - STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Full text of H-Statements referred to under section 3

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H272 - May intensify fire; oxidizer

EUH031 - Contact with acids liberates toxic gas

Disclaimer

The information provided in this Material 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

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