

# 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-triazinetriene	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, CO<sub>2</sub>, 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 <sup>3</sup>
Relative density	Not determined
Bulk density	850 kg/m <sup>3</sup>
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<sub>x</sub>). 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/NDL	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

**Issue Date** 08-Mar-2016  
**Revision date** 08-Mar-2016  
**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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