

# SAFETY DATA SHEET

## 1. IDENTIFICATION

|                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Name:</b> Trichloroisocyanuric acid                                                                                                                              |
| <b>Other Name:</b> TCCA                                                                                                                                                     |
| <b>Suggestion of Use and Use Restriction :</b> Industrial water,swimming pool,restaurant ,hotel,public, family, hospital,egg and prevent fish disease and etc disinfection. |
| <b>Manufacturer/Add/Tel:</b> Henan Tokai Chemical Co., Ltd                                                                                                                  |
| <b>NO 26 DONGQING STREET,ZHENGZHOU,HENAN,CHIN</b>                                                                                                                           |
| <b>Emergency contact phone/Fax:</b> 0086-371-66611979                                                                                                                       |

## 2. HAZARDS IDENTIFICATION

Articles hazard classification and national or regional information:

Oxidizing solids Class 2, Class 4 of the acute toxicity (oral),  
a serious eye damage / eye irritation Category 2A  
specific target organ toxicity - single exposure (respiratory tract irritation)3.  
hazardous to the aquatic environment (acute) class 1  
hazardous to the aquatic environment (chronic) class 1.

GLOBALY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF  
CHEMICAL,INCLUDING OF PRECAUTIONARY:



Signal word: Dangerous  
Hazard Illustration:

May cause burn or explode,Oxidizing material,harmful if swallow,may cause risk of burn to mucous membranes,eyes and skin.

Protective measure:

Take a bathe and change cloth after working.

Wear protective gloves/wear protective clothing/wear protective glasses/wear protective mask.

Avoid inhaling powder/fume/gas/vapor/spray.

Only can be used outside or well-ventilated place./

If swallowed:call a posison center or doctor immediately,gargle.

If skin contact,get off the contaminate cloth immmediatelu,rinse skin with plenty of water /take a bathe.

The contaminated cloth could be used after washing.

If inhaled:Remove the victim to fresh air,keep breathing comfortably,and all the poison contral centre or doctor immidiately;

If eys contacted: Rinse with clean water for a few minutes .remove contact lenses if present and contine rinsing.

Depository must be locked,store in a well ventilated place and keepto the container close.

Depose the container: Bury safely,or return the container to the supplier or bury it in some place.

Does not lead to other risk classification (eg dust explosion hazard) or parts of the GHS covers other hazardous: /

### 3. COMPOSITION/INFORMATION OF INGREDIENT

Pure substance

| Chemical name             | CAS NO. | Composition |
|---------------------------|---------|-------------|
| Trichloroisocyanuric acid | 87-90-1 | 99.5%       |

### 4. EMERGENCY MEASURES

Different measures of emergency

**Inhalation:** Remove to fresh air, If stop breathing, call the emergency centre and give artificial respiration.

**Skin contact:** Get off the cloth and rinse with plenty of water for 15 minutes, and see doctor.

**Eye contact :** Hold eye open and rinse gently and slowly with plenty of water for 10-15 minutes. See a doctor. Remove the contact lenses if present and continue to rinse with clean water. See a doctor.

**Ingestion:** Call the poison center or doctor immediately.

Protection for emergency person: wear breathing apparatus.

Mark out special treatment if seek medical care: If the patient has been unconscious, seek medical treatment immediately.

### 5. FIRE FIGHTER MEASURES

Suitable extinguishing media and unsuitable extinguishing media: Carbon dioxide or sand

Special danger chemical produced: Container may explode in heat of fire. With combustible, organic contact can be inflammable, burning. The case of ammonia, ammonium salts, urea and other nitrogen compounds and water to generate the explosive nitrogen trichloride

Special protective equipment and precaution: Fire fighter should wear breathing apparatus, wear fire protective clothing.

### 6. ACCIDENTAL RELEASE MEASURE

Personal precaution, protection equipment and Emergency procedures: Suggest that the emergency worker should wear a respirator, wear protective overalls, do not contact the material directly.

Environmental precaution: Cut off the source as much as possible, prevent entry into confined place.

Measures and materials for clean up: If small amount leakage, avoid dust, and use clean vacuum to collect material to dry, clean and covered container, also could water the material down and put it into waste water system. If large amount leakage, collect and recycling or ship to waste treatment facility for processing.

### 7. HANDLING AND STORAGE

Safe handling precaution and protective measures: Closed operation, enhanced ventilation, and strictly abide by the rules. It is recommended that operators wear gas masks to wear the appropriate clothing, with anti-chemical gloves and wear protective glasses, masks, no smoking in work place.

Safe storage condition: Store in a cool, dry, well ventilated warehouse, keep far away from fire, heat and avoid sunlight; pack sealed, do not damp. It should be separated with oil, acid and other incompatible substances, do not mix. There should be proper container to collect the leaked material.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                                                                                                                                                          |          |     |       |      |       |      |       |      |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|-------|------|-------|------|-------|------|-------|
| Control parameter: /                                                                                                                                                     |          |     |       |      |       |      |       |      |       |
| Source                                                                                                                                                                   | material | TWA | TWA   | STEL | STEL  | peak | peak  | TWA  | Notes |
|                                                                                                                                                                          |          | Ppm | mg/m3 | ppm  | mg/m3 | ppm  | mg/m3 | F/CC |       |
| Occupational health standards                                                                                                                                            | TCCA     | 0.5 | 1.5   | 1    | 2.9   |      |       |      |       |
| (Hongkong)                                                                                                                                                               |          |     |       |      |       |      |       |      |       |
| Workplace Hazardous                                                                                                                                                      | TCCA     |     |       | 1    |       |      |       |      |       |
| Occupational Exposure Limits                                                                                                                                             |          |     |       |      |       |      |       |      |       |
| Engineering controls: Strikly sealed,and provid adequate local ventilation                                                                                               |          |     |       |      |       |      |       |      |       |
| Personal protective equipment: /                                                                                                                                         |          |     |       |      |       |      |       |      |       |
| Personal protective equipment:                                                                                                                                           |          |     |       |      |       |      |       |      |       |
| Protective eyeshade/masks: Respiratory system has been protective                                                                                                        |          |     |       |      |       |      |       |      |       |
| Skin and body protection: Wear integral type protective clothing                                                                                                         |          |     |       |      |       |      |       |      |       |
| Respiratory system protection: if any possible to contact with the powder,must wear the full-protective mask.,Emergency rescue or evacuation,should wear air ventilator. |          |     |       |      |       |      |       |      |       |

## 9. THE PHYSICAL AND CHEMICAL PROPERTIES

|                                                        |                              |
|--------------------------------------------------------|------------------------------|
| Appearance(physical state,color and so on):            | White powder/granular/tablet |
| Smell:                                                 | Chlorine                     |
| Smell value                                            | /                            |
| PH:                                                    | /                            |
| Melting point / freezing point:                        | >225℃ decompose              |
| Initial boiling point and boiling point range:         | /                            |
| Flash point                                            | /                            |
| Evaporation rate:                                      | /                            |
| Flammability(solid ,gas)                               | /                            |
| A upper and lower flammable limits or explosion limit: | /                            |
| Vapor presure:                                         | /                            |
| Vapor density:                                         | /                            |
| Relative density:                                      | 2.07g/cm3                    |
| Solubility:                                            | 25℃ 1.2g/100ml               |
| Classification coefficient:n-octyl alcohol/water       | 0.26                         |
| Auto-ignition temperature                              | /                            |
| Decomposition temperature                              | >225℃                        |
| Viscosity                                              | /                            |

## 10. STABILITY AND REACTIVITY

|                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactive: /                                                                                                                                                                                                    |
| Chemical stability: /                                                                                                                                                                                          |
| Possibility of hazardous reaction:/                                                                                                                                                                            |
| Condition to avoid: /High fever, fire, moist air. Water                                                                                                                                                        |
| Incompatible substances and materials:Reducing agent , acid , moist air , Conflict with them the nature of flammable and explosive gases, liquids, reducing agent, ammonium salt, etc..Hazardous decomposition |
| products: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride.                                                                                                                                 |

## 11. TOXICOLOGICAL INFORMATION

|                                                                                                                                                                                                                            |                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Exposure measure: Ingestion,percutaneous absorption,eye contact                                                                                                                                                            |                        |
| Relative symptoms of physical,chemical and toxicological characteristics:                                                                                                                                                  |                        |
| Acute toxic effects: inhalation cause sore throat,coughing,Skin contact can cause skin redness,pain and eye contact will cause redness,pain.Ingestion causes headache,dizziness,vomiting,abdomnal pain and other symptoms. |                        |
| Chronic toxicity or long term toxic dffects:                                                                                                                                                                               |                        |
| Numerical measure of toxicity(such as acute toxicity estimates:                                                                                                                                                            |                        |
| Danger                                                                                                                                                                                                                     | Irritating             |
| According mouthLDLo(Lethal dose):3570mg/kg                                                                                                                                                                                 | Skin 500mg/24hr-middle |
| According skin LD50(Lethal dose): 406 mg/kg                                                                                                                                                                                | Skin 500mg--Serious    |
| Oral(Rabbit) LD:1900mg/kg                                                                                                                                                                                                  | Eye 50ug/24hr Serious  |
| According mouth LD50(Lethal dose):3570 mg/kg                                                                                                                                                                               | Eye 3125 mg- middle    |

## 12. ECOLOGICAL INFORMATION

|                                                                                                 |
|-------------------------------------------------------------------------------------------------|
| Ecotoxicity: The material is harmful to the enviroment,do not let the material into enviroment. |
| Persistence and degradability: high                                                             |
| Bioaccumulative: slight                                                                         |
| Mobility in the soil: high                                                                      |
| Other adverse effects: /                                                                        |

## 13. DESPOSAL CONSIDERSTIONS

|                                                                                                                                                                                                                      |
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| Description of waste and disposal methods of waste(including the disposal of contaminated package):Security act,buried in france disposal.damaged container to prohibit the re-use,to be buried in a specified place |
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## 14. TRANSPORT INFORMATION

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| Un NO.: 2468                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Transport name: Trichloroisocyanuric acid,Dry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Risk Class:5.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Packing Group : II                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Marine pollutant (Yes/No): YES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Special pretective methods of user:<br>Rail transport should be strictly in accordance with dangerous goods in theMinistry of Railway Transport of Dangerous Goods Rules equipped withtable assembly. Separate shipment, during shipment to ensure that thecontainer does not leak, did not fall, do not fall, do not damage during transportation; transport vehicles should be equipped with appropriate types and quantities of fire-fighting equipment; strict with alkali, ammonium salts, flammable mix of organic compounds, reducing agents, spontaneous combustion, flammable wetlands goods and vehicles; transport speedshould not be too fast, should not be forced to overtake; accordance with the provisions of road transport routes. Before and after the loading and unloading of transport vehicles should be thoroughly cleaned, washed, is strictly prohibited mixed with organic material, combustibles and other magazines. |

**15. REGULATORY INFORMATION**

Domestic chemical safety regulations: Yhe chemical safety Date sheet to comply with the following national standards:  
GB16483-2008,GB13690-2009,GB6944-2005,GB/T15098-2008.GB18218-2009,GB15258-2009,GB6944-2005, GB190-2009,GB191-2009,GB12268-2008,GA57-1993,GB/T15098-2008,GBZ2-2007 and related laws and regulations:” Railway Dangerous Goods Transport Management Rules”,”Safety of Dangerous Chemical Regulations”,”The United Nations Recommendation on the Transport of Dangerous goods

**16. OTHER INFORMATION**

|           |                                                                                                                                             |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Reference | UN”RECOMMENDATION ON THE TRANSPORT OF DANGEROUS GOODS.MODEL REGULATION<br>UN”GLOBAL CHEMICALS HARMONIZED CLASSIFICATION AND LABELING SYSTEM |
| Date      | 2024-05-08                                                                                                                                  |