1. IDENTIFICATION

Product name: Cyanuric Chloride
Product code: C0460
Product use: For laboratory research purposes.
Restrictions on use: Not for drug or household use.

Company: TCI America
9211 N. Harborgate Street
Portland, OR 97203 U.S.A.
Telephone: +1-800-423-8616 / +1-503-283-1681
Fax: +1-888-520-1075 / +1-503-283-1987
E-mail: sales-US@TCIchemicals.com
www.TCIchemicals.com

Emergency telephone number:
Chemical Emergencies: TCI America (8:00am - 5:00pm) PST
+1-503-286-7624
Transportation Emergencies: Chemtrec 24-Hour
+1-800-424-9300 (U.S.A.)
+1-703-527-3887 (International)
Responsible department: TCI America
Environmental Health Safety and Security
+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:
WHMIS 2015:
- Acute Toxicity - Oral [Category 3]
- Acute Toxicity - Inhalation [Category 2]
- Skin Corrosion/Irritation [Category 2]
- Eye Damage/Irritation [Category 1]
- Sensitization - Skin [Category 1]
- Germ Cell Mutagenicity [Category 2]
- Toxic to Reproduction [Category 2]
- Specific Target Organ Toxicity (Single Exposure) [Category 1]
- Specific Target Organ Toxicity (Single Exposure) [Category 3]
- Specific Target Organ Toxicity (Repeated Exposure) [Category 1]

Signal word: Danger!
Hazard Statement(s):
- Toxic if swallowed
- Fatal if inhaled
- Causes skin irritation
- Causes serious eye damage
- May cause an allergic skin reaction
- Suspected of causing genetic defects
- Suspected of damaging fertility or the unborn child
- Causes damage to: Respiratory System Nervous System
- May cause drowsiness or dizziness.
- Causes damage to organs through prolonged or repeated exposure: Liver Blood System Respiratory System Kidney Spleen

Pictogram(s) or Symbol(s):

Precautionary Statement(s):
[Prevention]
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust, fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wash hands and face thoroughly after handling. Wear respiratory protection. Wear protective gloves, protective clothing, face protection.

[Response]
If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice or attention. 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.
[Storage] 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 (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified: May be harmful if in contact with skin. Lachrymator

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/mixture:</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components:</td>
<td>Cyanuric Chloride</td>
</tr>
<tr>
<td>Percent:</td>
<td>&gt;98.0%(T)</td>
</tr>
<tr>
<td>CAS RN:</td>
<td>108-77-0</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>184.40</td>
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<tr>
<td>Chemical Formula:</td>
<td>C₃Cl₃N₃</td>
</tr>
<tr>
<td>Synonyms:</td>
<td>2,4,6-Trichloro-1,3,5-triazine</td>
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</tbody>
</table>

4. FIRST-AID MEASURES

Description of 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. 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. Call a POISON CENTER or doctor/physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

Symptoms/effects:


Delayed: May cause heritable genetic damage in humans. May cause skin sensitization.

Indication of any immediate medical attention: Not available.

Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

Hazardous combustion products: These products include: Carbon oxides Nitrogen oxides Halogenated compounds

Other specific hazards: WARNING: Highly toxic HCl gas is produced during combustion.

Advice for firefighters: Wear self-contained breathing apparatus if possible.

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: Prevent product from entering drains.

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: 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. Avoid all contact!

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. Moisture-sensitive

Packaging material: Comply with laws.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Appropriate engineering controls:** Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.

**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 - Almost white

**Odour:** Pungent

**Odour threshold:** No data available

**Solubility(ies):**

- **[Water]**: No data available
- **[Other solvents]**: Acetone, Chloroform, Toluene

**Melting point/freezing point:** 147°C (297°F)

**Boiling point/range:** No data available

**Decomposition temperature:** No data available

**Relative density:** No data available

**Kinematic viscosity:** No data available

**Log Pow:** No data available

**Flash point:** No data available

**Flammability(solid, gas):** No data available

**Autoignition temperature:** 650°C (1202°F)

**Flammability or explosive limits:**

- **Lower:** No data available
- **Upper:** No data available

**pH:** No data available

**Vapour pressure:** No data available

**Vapour density:** 6.36

**Dynamic Viscosity:** No data available

**Evaporation rate(Butyl Acetate=1):** 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.

**Incompatible materials:** Oxidizing agents, Strong acids, Strong bases, Water, Ammonia, Alcohols, Amines

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide etc
11. TOXICOLOGICAL INFORMATION

RTECS Number: XZ1400000

Acute Toxicity:
inh-mus LC50: 10 mg/m³/2H
ivr-mus LD50: 350 mg/kg
ivr-rat LD50: 485 mg/kg

Skin corrosion/irritation:
skn-rbt 500 mg/24H MOD

Serious eye damage/irritation:
eye-rbt 50 µg/24H SEV

Respiratory or skin sensitization:
No data available

Germ cell mutagenicity:
No data available

Carcinogenicity:
mul-rat TDLo: 16 g/kg/73W-I
ivr-rat TDLo: 20 g/kg/73W-I

IARC: No data available
NTP: No data available
OSHA: No data available

Reproductive toxicity:
No data available

Target organ(s):
Causes damage to: Respiratory System Nervous System
May cause drowsiness or dizziness.
Causes damage to organs through prolonged or repeated exposure: Liver Blood System Respiratory System Kidney Spleen

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability: No data available
Bioaccumulative potential (BCF): No data available
Mobility in soil
Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law (Pa M³/mol): No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product: Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container: Dispose of as unused product. Do not re-use empty containers.

Other considerations: Observe all federal, state and local regulations when disposing of the substance.
### 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT (US)</th>
<th>IATA</th>
<th>IMDG</th>
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<td><strong>UN number:</strong> UN2670</td>
<td><strong>UN number:</strong> UN2670</td>
<td><strong>UN number:</strong> UN2670</td>
</tr>
<tr>
<td><strong>Proper Shipping Name:</strong> Cyanuric chloride</td>
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<td><strong>Proper Shipping Name:</strong> Cyanuric chloride</td>
</tr>
<tr>
<td><strong>Class or Division:</strong> 8 Corrosive material</td>
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<td><strong>Class or Division:</strong> 8 Corrosive material</td>
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<tr>
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</tr>
</tbody>
</table>

**EmS number:** F-A, S-B

### 15. REGULATORY INFORMATION

**Toxic Substance Control Act (TSCA 8b.):**
This product is on the EPA Toxic Substances Control Act (TSCA) inventory.

**US Federal Regulations**

**CERCLA Hazardous substance and Reportable Quantity:**
- **SARA 313:** Not Listed
- **SARA 302:** Not Listed

**State Regulations**
**State Right-to-Know**
- **Massachusetts:** Not Listed
- **New Jersey:** Listed
- **Pennsylvania:** Not Listed
- **California Proposition 65:** Not Listed

**Other Information**

**NFPA Rating:**
- **Health:** 4
- **Flammability:** 1
- **Instability:** 0

**HMS Classification:**
- **Health:** 3
- **Flammability:** 1
- **Physical:** 0

**International Inventories**
- **Canada:** DSL, On DSL
- **EC-Number:** 203-614-9

### 16. OTHER INFORMATION

**Revision date:** 07/06/2018

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.