Section 01 - Product And Company Identification

Product Identifier
Cyanuric Acid

Other Means of Identification
Isocyanuric acid, tricyanic acid, s-2,4,6-triazin triol, trihydroxy cyanidine, 2,4,6-trihydroxy 1,3,5-triazine, 1,3,5-triazine-2,4,6-triol

Product Use and Restrictions on Use
Chlorine stabilizer, elastomer curative, whitening agent

Initial Supplier Identifier
ClearTech Industries Inc.
1500 Quebec Avenue
Saskatoon, SK. Canada
S7K 1V7

Prepared By
ClearTech Industries Inc. Technical Writer
Phone: 1 (800) 387-7503

24-Hour Emergency Phone
Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification
Not classified as a hazardous substance or mixture.

Section 03 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
<th>Unique Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanuric acid</td>
<td>108-80-5</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Section 04 - First Aid Measures

Inhalation
Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.

Skin Contact / Absorption
Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.

Eye Contact
Contact lenses should never be worn when working with this product. Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek immediate medical attention.

Ingestion
Do not induce vomiting. If vomiting occurs, lean victim forward to prevent breathing in vomitus. Give 1-2 glasses amounts of water. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.

Additional Information
Not Available
Section 05 - Fire Fighting Measures

Suitable Extinguishing Media
For small fires, use dry chemical powder. For large fires, use water spray, fog or foam.

Unsuitable Extinguishing Media
Do not use water jet.

Specific Hazards Arising From the Chemical
Carbon oxides, nitrogen oxides, cyanic acid and cyanide gas.

Special Protective Equipment for Fire-Fighters
Firefighters may enter the area if positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) and full Bunker Gear is worn. Do not enter without wearing specialized equipment suitable for the situation. Firefighter’s normal protective clothing (Bunker Gear) will not provide adequate protection. Chemical protective clothing (e.g. chemical splash suit) and positive pressure self-contained breathing apparatus (NIOSH approved or equivalent) may be necessary.

Further Information
Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures
Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Prevent material from entering sewers. Flush with water to remove any residue.

Environmental Precautions
Prevent material from entering sewers.

Methods and Materials for Containment and Cleaning Up
Small Spills: Contain spill with earth, sand or absorbent material which does not react with spilled material. Shovel into clean, dry, labelled containers and cover. Flush area with water.
Large Spills: Contact fire and emergency services and supplier for advice.

Section 07 - Handling and Storage

Precautions for Safe Handling
Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Keep away from high temperatures. Do not use near welding operations, flames or hot surfaces. Avoid generating mist or dust. Use in areas with adequate ventilation. Use dust-tight containers. Prevent accumulation of dust. Label containers. Keep containers closed when not in use. Empty containers may contain residues which are hazardous.

Conditions for Safe Storage
Store in a cool, dry (hygroscopic chemical), well-ventilated place and away from sources of ignition and incompatible materials. Emptied container retains vapour and product residue. It is good practice to limit quantity of material in storage; restrict access to storage area; post warning signs when appropriate; keep storage area separate from populated work areas

Incompatibilities
Strong oxidizers, ethanol

Section 08 - Exposure Controls and Personal Protection

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Type of Listing</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanuric acid</td>
<td>WEELs</td>
<td>WEEL-TWA</td>
<td>10mg/m³, total; 5mg/m³ respirable</td>
</tr>
</tbody>
</table>
**Engineering Control(s)**

**Ventilation Requirements**
Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

**Other**
Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

**Protective Equipment**

**Eyes/Face**
Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

**Hand Protection**
Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

**Skin and Body Protection**
Body suit, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

**Respiratory Protection**
NIOSH-approved respirator for dust should be worn.

**Thermal Hazards**
Not Available

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**Section 09 - Physical and Chemical Properties**

**Appearance**

**Physical State**
Solid

**Colour**
White crystals

**Odour**
Odourless

**Odour Threshold**
Not Applicable

**Property**

**pH**
4.8-5.2 (10% solution)

**Melting Point/Freezing Point**
360°C

**Initial Boiling Point and Boiling Range**
Sublimes and dissociates to isocyanuric acid

**Flash Point**
Not Available

**Evaporation Rate**
Negligible

**Flammability**
May be combustible at high temperature.

**Upper Flammable Limit**
Not Available

**Lower Flammable Limit**
Not Available

**Vapour Pressure (mm Hg, 20°C)**
Not Applicable
Vapour Density (Air=1) Not Available
Relative Density Not Available
Solubility(ies) 2000mg/L at 25°C in water
Partition Coefficient: n-octanol/water Log P ow = 1.95 (estimated)
Auto-ignition Temperature Not Available
Decomposition Temperature 320-330°C
Viscosity Not Applicable
Explosive Properties Reported violent reaction with ethanol and with chlorine to form a spontaneously combustible material.
Specific Gravity (Water=1) 1.75 at 25°C (anhydrous)
% Volatiles by Volume Not Available
Formula C₃H₃N₃O₃
Molecular Weight 129.08

Section 10 - Stability and Reactivity

Reactivity Ammonia-chlorine mixtures are explosive if warmed or if chlorine is in excess, owing to formation of nitrogen trichloride. Hydrazine, hydroxylamine and calcium nitride ignite in chlorine, and nitrogen triiodide may explode on contact with chlorine.
Stability Stable under normal conditions
Possibility of Hazardous Reactions None known
Conditions to Avoid Temperatures above 300°C
Incompatible Materials Strong oxidizers, ethanol
Hazardous Decomposition Products Carbon oxides, nitrogen oxides, cyanic acid and cyanide gas

Section 11 - Toxicological Information

Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD₅₀</th>
<th>Dermal LD₅₀</th>
<th>LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanuric acid</td>
<td>3400mg/kg (mouse)</td>
<td>&gt;5000mg/kg (rabbit)</td>
<td>Not Available</td>
</tr>
<tr>
<td></td>
<td>&gt;5000mg/kg (rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chronic Toxicity – Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanuric Acid</td>
<td>This product is not known to be carcinogenic.</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation Mildly irritating to eyes.
Serious Eye Damage/Irritation  May cause slight irritation.

Ingestion  May be mildly toxic by ingestion.

Inhalation  May cause slight respiratory tract irritation. Symptoms include a burning sensation, coughing, wheezing, laryngitis, shortness of breath, nausea, and vomiting.

Respiratory or Skin Sensitization  Not reported as a human respiratory sensitizer.

Germ Cell Mutagenicity  The available evidence does not indicate that cyanuric acid is mutagenic.

Reproductive Toxicity  The limited evidence available does not indicate that cyanuric acid causes reproductive toxicity.

STOT-Single Exposure  Not Available

STOT-Repeated Exposure  Potential chronic effects include repeated digestion affecting the kidneys and metabolism. Repeated or prolonged exposure is not known to aggravate medical condition.

Aspiration Hazard  Not Available

Synergistic Materials  Not Available

Section 12 - Ecological Information

Ecotoxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Daphnia and Other Aquatic Invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanuric Acid</td>
<td>EC_{50}(Selenastrum capricornutum, 72hr): 620mg/L</td>
<td>LC_{50}(Lepomis macrochirus, 96hr): &gt;1000mg/L</td>
<td>EC_{50}(Daphnia magna, 21d): 65.9mg/L</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC_{50}(Pimephales promelas, 96hr): &gt;2100mg/L</td>
<td></td>
</tr>
</tbody>
</table>

Biodegradability  The product itself and its products of degradation are not toxic. Hazardous short term degradation products are not likely. However, long term degradation products may arise.

Bioaccumulation  Not Available

Mobility  If released to soil, cyanuric acid is expected to have high mobility based upon an estimated Koc of 58.

Other Adverse Effects  Not Available

Section 13 - Disposal Considerations

Waste From Residues/Unused Products  Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Contaminated Packaging  Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 - Transport Information

UN Number  Not Regulated

UN Proper Shipping Name  Not Regulated

Transport Hazard Class(es)  Not Regulated

Packaging Group  Not Regulated
Environmental Hazards
Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.

Special Precautions
Not Available

Transport in Bulk
Not Available

TDG
Other
Secure containers (full and/or empty) with suitable hold down devises during shipment and ensure all caps, valves, or closures are secured in the closed position.

PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 16 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 - Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 - Other Information

Preparation Date
August 6, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center or technical service department.

References:
1) CHEMINFO
2) eChemPortal
3) TOXNET
4) Transport Canada
5) HSDB
6) ECHA

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