



Safety Data Sheet

Section 01 - Identification

Product Identifier	Cyanuric Acid
Other Means of Identification	Isocyanuric acid, tricyanic acid, s-2,4,6-triazinetriol, trihydroxycyanidine, 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

This product has been assessed in accordance with the Hazardous Products Regulations and is not classified as a hazardous substance or mixture.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Cyanuric acid	108-80-5	100%	

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	Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. If irritation persists, seek medical attention.
Ingestion	Never give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth with water. If discomfort occurs, seek 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.
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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	Wear NIOSH-approved self-contained breathing apparatus and protective gear.
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

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Cyanuric acid	WEELs	WEEL-TWA	10mg/m ³ , total; 5mg/m ³ respirable

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	No specific requirements, but it is good practice to wear chemical safety goggles.
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Hand Protection	No specific requirements, but it is good practice to prevent skin contact by wearing impervious gloves of chemical resistance.
Skin and Body Protection	No specific requirements, but it is good practice to prevent skin contact by wearing body suits, aprons and/or coveralls. 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

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} = 0.61
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

Component	Oral LD ₅₀	Dermal LD ₅₀	LC ₅₀
Cyanuric acid	3400mg/kg (mouse)	>5000mg/kg (rabbit)	Not Available

Chronic Toxicity – Carcinogenicity

Component	IARC
Cyanuric Acid	This product is not known to be carcinogenic.

Skin Corrosion/Irritation May cause slight irritation.

Serious Eye Damage/Irritation Mildly irritating to eyes.

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

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Cyanuric Acid	EC ₅₀ (Selenastrum capricornutum, 72hr): 620mg/L	LC ₅₀ (Lepomis macrochirus, 96hr): >1000mg/L	EC ₅₀ (Daphnia magna, 21d): 65.9mg/L
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 K _{oc} 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 devices during shipment and ensure all caps, valves, or closures are secured in the closed position.
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TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 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.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA

ClearTech Industries Inc. - Locations

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