Date Prepared : 07/01/2008 SDS No. : Robelle Chlorine Stabilizer & Conditioner Date Revised : 05/06/2016 Revision No : 5

Robelle Chlorine Stabilizer & Conditioner

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Robelle Chlorine Stabilizer & Conditioner **GENERAL USE:** Swimming pool conditioner. **PRODUCT DESCRIPTION:** Chlorine Stabilizer

DISTRIBUTOR

Robelle Industries, Inc. (781) 297-7422 60 Campanelli Dr Braintree, MA 02184

2. HAZARDS IDENTIFICATION

GHS LABEL

GHS-US Classification - Not Classified



SIGNAL WORD: WARNING

HAZARD STATEMENTS

H320: Causes eye irritation. H316: Causes mild skin irritation.

PRECAUTIONARY STATEMENT(S)

General:

8219D4CW: This product is not classified as hazardous according to the Globally Harmonized System.

POTENTIAL HEALTH EFFECTS

EYES: May cause mild eye irritation.

SKIN: May cause slight irritation.

INGESTION: No known effects.

INHALATION: No known effects.

CARCINOGENICITY: None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen.

COMMENTS: Even though this material is not classified as hazardous according to US OSHa's 2012 Hazard Communication Standard, good hygiene and safety practices should be followed. Good hygiene practices include but are not limited to: wearing suitable gloves and or eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing; etc.

3. COMPOSITION / INFORMATION ON INGREDIENTS

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Chemical Name	Wt.%	CAS
Cyanuric Acid	98 - 100	108-80-5

4. FIRST AID MEASURES

EYES: Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately. *Acute symptoms after contact: inflammation/damage to eye tissue. Corrosion of the eye tissue.*

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: No effect expected. IF LARGE AMOUNTS ARE INGESTED, GET MEDICAL ATTENTION.

INHALATION: If adverse effects occur, remove to uncontaminated area. If symptoms of overexposure occur, get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Eye exposure may cause mild irritation of the eye lids and conjuctiva.

SKIN: Exposure to powder or fine particulates of this material may cause slight skin redness, irritation.

INGESTION: No known effects.

INHALATION: Inhaling powder or fine particulates of this material may cause respiratory tract irritation and cough.

CHRONIC EFFECTS: No known effect.

NOTES TO PHYSICIAN: This material causes mild irritation to skin and eyes. Removing the material via irrigation is usually sufficient. There is no antidote. Cyanuric acid is readily removed from the body via the renal system, and is not bioaccumulated. Treatment is supportive care.

ADDITIONAL INFORMATION: Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions such as eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin and respiratory conditions including asthma and other breathing disorders.

Protection of First-Aiders: Avoid contact with skin and eyes. Removing the material via irrigation is usually sufficient. There is no antidote. Cyanuric acid is readily removed from the body via the renal system, and is not bioaccumulated. Treatment is supportive care.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Negligible fire hazard.

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: Cyanic acid, ammonia, oxides of carbon, oxides of nitrogen

FIRE FIGHTING PROCEDURES: Move container from fire if feasible. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Wear NIOSH-approved positive pressure self-contained breathing apparatus.

FIRE FIGHTING EQUIPMENT: Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Collect spilled material in appropriate container for disposal. Avoid generating dust. Keep out of water supplies and sewers. Releases should be reported, if required.

ENVIRONMENTAL PRECAUTIONS

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WATER SPILL: Avoid runoff to waterways and sewers. Releases should be reported, if required, to appropriate agencies.

7. HANDLING AND STORAGE

HANDLING: Use methods to minimize dust. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Wear person protective equipment. (See Section 8.)

STORAGE: Store in a cool, dry, well-ventilated area away from incompatible materials (oxidizing agents).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)						
	EXPOSURE LIMITS					
Chemical Name	Туре		ppm	mg/m ³		
Cyanuric Acid	Supplier OEL	TWA	10 mg/m3 ^[1]	[1]		
Footnotes: 1. (Total Particulate)						

ENGINEERING CONTROLS: General or local exhaust.

PERSONAL PROTECTIVE EQUIPMENT

- **EYES AND FACE:** Wear chemical resistant safety goggles, if eye contact is likely. An emergency eye wash fountain may be provided.
- **SKIN:** As a good hygiene practice, wear protective clothing to minimize skin contact such as standard industrial work clothes, coveralls, safety footwear. Contaminated clothing should be removed and laundered before reuse.

RESPIRATORY: No personal respiratory protective equipment normally required. A NIOSH approved full-face respirator equipped with N95 (dust, fume, mist) cartridges may be permissible under certain cirumstances where airborne concentrations are expected to exceed exposure limits, or when symtoms have been observed that are indicative of overexposure. In dusty or misty atmospheres use an approved partialate respirator. A respiratory protection program that meets 29CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

PROTECTIVE CLOTHING: Wear appropriate clothing. Contaminated clothing should be removed and laundered before reuse.

OTHER USE PRECAUTIONS: Protective material types: Butyl rubber; natural rubber; neoprene; nitril; polyvinyl chloride (PVC)

COMMENTS: Even though this material is not classified as hazardous according to US OSHA's 2012 Hazard Communication Standard, good hygiene and safety practices shouls be followed. Good hygiene practices include but are not limited to: wearing suitable gloves and/or eye protection; washing hands and affected skin immediately after handling, before breaks, and at the end of the workday; regularly cleaning work area and clothing, etc.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid ODOR: Odorless APPEARANCE: Off-white granular powder. pH: 4.8 FLASHPOINT AND METHOD: Not Applicable. FLAMMABLE LIMITS: 0 to 0

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VAPOR PRESSURE: 0.000001 Pa @ 25 °C VAPOR DENSITY: Not Applicable. MELTING POINT: Decomposes without melting SOLUBILITY IN WATER: 0.2% @ 25 °C DENSITY: 1.75 g/mL at 25°C Notes: Bulk Density: 50-56 lbs/ft3 (loose) SPECIFIC GRAVITY: 1.768

10. STABILITY AND REACTIVITY

REACTIVITY: Not reactive under normal temperatures and pressures.

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable at normal temperatures and pressures.

CONDITIONS TO AVOID: Avoid contact with incompatible materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Cyanic acid, ammonia, oxides of carbon, oxides of nitrogen

INCOMPATIBLE MATERIALS: Oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

DERMAL LD₅₀: > 5000 mg/kg - Rabbit

ORAL LD₅₀: 3400 mg/kg (mice)

Notes: Oral LD50 7700 (rat)

INHALATION LC₅₀: > 5.25 mg/L (4 hour - rat)

GERM CELL MUTAGENICITY: Not mutagenic in 5 salmonella strains and 1 E. coli strain with or without mammalian microsomal activation.

CARCINOGENICITY

NOTES: Not classified as a carcinogen by NTP, IARC or OSHA.

REPRODUCTIVE TOXICITY: Not known or reported to cause reproductive or developmental toxicity.

GENERAL COMMENTS: This material is believed to be non-toxic by inhalation, dermal exposure and ingestion. Monosodium cyanurate was administered via drinking water to rats for 104 weeks at concentrations of 0, 400, 1200, 2400, and 5375 ppm (solubility limit). No compound-related effects on body weights, clinical signs of toxicity or food or water consumption were noted during study. An increased incidence of gross lesions in the urinary tract, calculi in the kidney and lesions in the heart were observed in males receiving the highest dose level of 5375 ppm (solubility limit). The health effects seen in this study were due to precipitation of the test substance in the urinary tract when the test substance was fed at the solubility limit. Adverse health effects were not seen at lower doses where precipitation did not occur.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Cyanuric acid is toxic to certain plants including barley and rashishes due to acidic nature of material. **AQUATIC TOXICITY (ACUTE):**

Fish Toxicity:

- LC50 Bluegill sunfish: >1000 mg/L (96 hour)
- LC50 Rainbow Trout: >2100 mg/L (96 hour)

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- LC50 Fathead minnow: >2100 mg/L (96hour)
- LC50 Inland silversides: 8000 (96 hour)

Invertebrate Toxicity:

- LC50 Water Flea: >1000 mg/L (48 hour)
- LC50 Mysid shrimp: 4438 mg/L (96 hour)

Algae Toxicity:

- EC50 Green Algae: 655-712 mg/L (96 hour)
- EC50 Navicula pelliculosa: >3780 mg/L (96 hour)

Notes: This material is believed to be non-toxic to aquatic life.

CHEMICAL FATE INFORMATION: Biodegradation: Cyanuric acid biodegrades readily under a wide variety of natural conditions, and particularly well in systems of either low or zero dissolved-oxygen levels.

Persistence: This material is believed not to persist in the environment. Cyanuric acid has an estimated Henry's Law Constant of 1.36 x 10(-18) atm-m3/mol. Atmosphere half-life is estimated to be 102 days. Cyanuric acid will have a high soil mobility based on KOC values ranging from 66 to 124.

Bioconcentration: Aquatic bioconcentration and adsorption are not expected to be important fate processes for cyanuric acid. The BCF for cyanuric acid is <0.5 at 1 mg/L for a 6-week duration.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with applicable local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Not listed.

313 REPORTABLE INGREDIENTS: Not regulated.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not regulated.

CERCLA RQ: No.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients are listed.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: Not regulated.

CALIFORNIA PROPOSITION 65: There are no chemicals present known to the State of California to cause cancer.

OSHA HAZARD COMM. RULE: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

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16. OTHER INFORMATION

Date Revised: 05/06/2016

REVISION SUMMARY: This SDS replaces the 03/30/2015 SDS. Revised: Section 2: .





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