SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Liqui-Loc Plus

SYNONYMS: 

EPA REGISTRATION NO.: 87708-1-37549

MANUFACTURER: Medline Industries, Inc.
ADDRESS: One Medline Industries, Inc.
Mundelein, IL 60060

PHONE: (800) 351-1512-8704
WEBSITE: www.medline.com

AMERICAN ASSOCIATION OF POISON CONTROL CENTERS: 1(800) 222-1222

CHEMICAL NAME: Sodium dichloro-s-triazinetrione dihydrate
Sodium dichloroisocyanurate dihydrate

CHEMICAL FAMILY: Chlorinate isocyanurates

CHEMICAL FORMULA: NaC3N3O3Cl2•2H2O

PRODUCT USE: Sanitizer
PREPARED BY: Medline Industries, Inc.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENT: Sodium dichloroisocyanurate dihydrate

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<th>mg/m3</th>
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SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER. Corrosive. Causes irreversible eye damage. Causes skin irritation. Harmful if swallowed, inhaled, or absorbed through skin. Do not get in eyes, on skin or on clothing. Wear goggles, face shield or safety glasses and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

ROUTES OF ENTRY: Ingestion, inhalation, eye, and dermal contact.

EYE: Direct contact with granules can cause moderate to severe eye irritation.

SKIN: May produce irritation or drying on prolonged or repeated contact.

INHALATION: Prolonged or repeated inhalation may produce respiratory irritation, headache, nausea, and dizziness. Severe exposure may lead to disorientation, weakness, and collapse with a drop in blood pressure.

INGESTION: Swallowing this product may lead to mouth and stomach irritation accompanied by burning pain, nausea, vomiting and diarrhea.

CARCINOGENICITY – None known.
### SECTION 4: FIRST AID MEASURES

**FIRST AID**

Have the product container or label with you when you call a poison control center or doctor, or when going for treatment.

**IF IN EYES:**
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:**
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:**
- Call poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water, if able to swallow.
- Do not induce vomiting unless told to by poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**IF INHALED:**
- Move person to fresh air.
- If person is not breathing, call 911 or ambulance, then give artificial respiration, preferable mouth to mouth.
- Call poison control center or doctor for further treatment advice.

In case of accidental exposure, call the American Association of Poison Control Centers at 1(800)-222-1222

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

### SECTION 5: FIRE-FIGHTING MEASURES

This product is non-flammable and non-explosive.

**FLAMMABLE LIMITS IN AIR, UPPER:** Not applicable

**FLAMMABLE LIMITS IN AIR, LOWER:** Not applicable

**FLASH POINT:** Not applicable

**AUTOIGNITION TEMPERATURE:** Not applicable

**FLAMMABILITY:** Not applicable

**EXTINGUISHING MEDIA:** Water

**SPECIAL FIRE FIGHTING PROCEDURES:** Evacuate personnel to safe area. Keep personnel removed and upwind of fire. Wear full protective clothing and self-contained breathing apparatus. If water spray is used to fight fire, dike and collect runoff. Prevent the use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition or combustion may produce irritating and possibly toxic products (chlorine, nitrogen, nitrogen trichloride, cyanogens chloride, oxides of carbon, phosgene).

### SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**SECTION 6 NOTES:**

**Small Spill:** Sweep or vacuum up spillage and collect in suitable container for disposal.

**Large Spill:** Prevent further leakage or spillage. Use approved industrial vacuum cleaner for removal. Shovel into suitable container for disposal.
SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store the material in a well ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco product in the storage area. Prevent eating, drinking tobacco use and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and after handling.

OTHER PRECAUTIONS: Do not contaminate water, food, or feed by storage or disposal.

See label for additional handling and storage information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Refer to product label.

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation, packaging and use of this product. For commercial applications and/or on-farm applications consult the product label.

EYE PROTECTION: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

INGESTION: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

SKIN PROTECTION: Long-sleeved shirt, long pants, shoes plus socks. Chemical resistant footwear and overalls. Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile, neoprene rubber, polyvinyl chloride (PVC), or Viton. For overhead exposure, wear chemical resistant headgear.

INHALATION: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P, or HE filter.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

WORK HYGIENIC PRACTICES: Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

EXPOSURE GUIDELINES: Refer to Section 2.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White

ODOR: Chlorine

PHYSICAL STATE: Granular Solid

pH AS SUPPLIED: 6.86

SPECIFIC GRAVITY (H2O = 1): 0.70 g/cm³ @ 24 C

SECTION 10: STABILITY AND REACTIVITY

STABLE

X

UNSTABLE

STABILITY: Stable at normal temperature and pressure.

CONDITIONS TO AVOID (STABILITY): None known.
INCOMPATIBILITY (MATERIAL TO AVOID): This product is an oxidizer. Avoid contact with acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition can lead to the release of chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (Based on technical product – 98-100% sodium dichloroisocyanurate dihydrate):

Oral LD₅₀ (rat)  1823 mg/Kg
Dermal LD₅₀ (rabbit) >5,000 mg/Kg
Inhalation LC₅₀ (rat) >0.27-<1.17 mg/L air  (4-hr)
Eye Contact:  Severe Irritation/Corrosive (Rabbit)
Skin Contact:  Moderately Irritating (Rabbit)

Development toxicity : There are no known or recorded effects in reproductive function or fetal development (based on technical product).

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: This product is toxic to fish and aquatic organisms. Do not discharge into lakes, streams, ponds, or other waters unless in accordance with requirements of a National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the U.S. Environmental Protection Agency.

Summary of effects:  This material is toxic to fish and aquatic organisms.
Eco Acute Toxicity:
Aquatic Toxicity (Based on technical product):
96 hour LC₅₀ – Rainbow trout:  0.13-0.36 mL
48 hour LC₅₀ – Daphnia magna: 0.196 mg/L
Avian Toxicity (Based on technical product):
Acute Dietary (oral) – Mallard Duck: 1916 mg/kg

Eco Chronic Toxicity:  Not available
Environmental fate:  This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Product disposal – Pesticide wastes may be acutely hazardous. Improper disposal is a violation of federal law. Pesticide, mixtures, or equipment rinse water that cannot be chemically reprocessed must be disposed of according to applicable federal, state or local regulations. Contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

Container disposal – Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

RCRA HAZARD CLASS: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION –
Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Sodium dichloroisocyanurate dihydrate)
ID Number: UN 3077
Hazard Class or Division: 9
Packing Group: III
Labeling Requirements: 9
Marine Pollutant: Sodium dichloroisocyanurate dihydrate
SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): The ingredients of this product are listed on the TSCA inventory or are exempt.
CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not regulated
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)
302: Not regulated
311/312 HAZARD CATEGORIES: Acute: Yes
Chronic: No
Fire: Yes
Reactive: Yes
Sudden Release: No
313 REPORTABLE INGREDIENTS: Not regulated
CA PROPOSITION 65: None

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

HAZARD RATINGS          NFPA/HMIS
HEALTH:                   2           0         MINIMAL
FLAMMABILITY:             0           1         SLIGHT
REACTIVITY:               1           2         MODERATE
                             3           HIGH
                             4          SEVERE

PREPARATION INFORMATION:  MSDS DATE 12/16/2010
REVISION DATE 7/18/2011

DISCLAIMER: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied is made. Consult Medline Industries, Inc. for further information.