

Leslie's Swimming Pool Supplies

Material Safety Data Sheet

Date Prepared: February 18, 1998

MSDS No.: 12066OXY

Material Name: Dichloroisocyanuric acid, dihydrate (55%)

Telephone No. (818) 993-4212

24 HOUR EMERGENCY PHONE: CHEMTREC 800-424-9300

SECTION I - GENERAL INFORMATION

Manufacturer's Name: Occidental Chemical Corp.
Manufacturer's Address: Occidental Tower, Dallas, TX 75380
Manufacturer's Phone (Information): 800-752-5151
Manufacturer's Phone (Emergency): 800-733-3665 or 716-278-7021
Trade/Product Name: Leslie's Chlor Brite III; Leslie's Spa Chlor Brite III, Leslie's Chlor Brite 55
Synonyms: Dichlor; sodium dichloro-s-triazinetriene, dihydrate;
Chemical Name: 1,3,5-Triazine-2,4,6 (1H, 3H, 5H)-trione, 1,3-dichloro, trisodium salt dihydrate
Chemical Formula: $C_3N_3O_3Cl_2Na \cdot H_2O$
CAS No.: 51580-86-0
DOT Proper Shipping Name: Dichloroisocyanuric acid, dry
DOT Hazard Class: None - not regulated
DOT Information: Not Regulated
SARA/Title III Hazard Categories:
Immediate (Acute) Health: Yes
Delayed (Chronic) Health: No
Fire Hazard: Yes
Reactive Hazard: No
Sudden Release of Pressure: No

HMIS Hazard Ratings:



Based on the National Paint & Coating Association
 HMIS rating system

FIRE: Materials that must be preheated before ignition can occur. Water may cause frothing if it gets below the surface of the liquid and turns to steam. However, water fog gently applied to the surface will cause a frothing that will extinguish the fire.

HEALTH: Materials extremely hazardous to health but areas may be entered with extreme care. Full protective clothing, including self-contained breathing apparatus, coat, pants, gloves, boots, and bands around legs, arms, and waist should be provided. No skin surface should be exposed.

REACTIVITY: Materials that (in themselves) are normally stable but which may become unstable at elevated temperatures and pressures or which may react with water with some release of energy but not violently. Caution must be used in approaching the fire and applying water.

SPECIAL:

SECTION II - IMPORTANT COMPONENTS

CAS NO.	INGREDIENT	WT. %	EXPOSURE LIMITS
51580-86-0	1,3,5-Triazine-2,4,6-(1H, 3H, 5H)-trione, 1,3,5-dichloro-, sodium salt, dihydrate	98 - 100	OSHA TLV: Not established OSHA PEL: Not established
7647145	Sodium chloride	0.1 - 1.0	OSHA TLV: Not established OSHA PEL: Not established

Listed in these states: PA Requirement - 3% or greater; NJ Requirement - 1% or greater.

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SECTION II - IMPORTANT COMPONENTS - CONTINUED

Since hydrated materials could not be reported on the Inventory of Chemical Substances published by the U.S. Environmental Protection Agency (EPA) under authority of the Toxic Substances Control Act (TSCA), the anhydrous chlorinating composition was reported with the CAS No. 2893-78-9.

SECTION III - HEALTH HAZARD INFORMATION

EYES: OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY THEN SEEK MEDICAL ATTENTION. IMMEDIATELY flush eyes with large amounts of water for at least 15 minutes forcibly holding lids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes within one (1) minute is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY.

SKIN: Immediately brush off excess chemical and flush with plenty of soap and water. Remove contaminated clothing before reuse. GET MEDICAL ATTENTION if irritation persists.

INHALATION: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, give mouth-to-mouth resuscitation. GET MEDICAL ATTENTION.

INGESTION: NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. (if available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

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

ROUTES OF EXPOSURE

INHALATION: Breathing dust or fumes is expected to be a primary route of exposure and may produce throat and respiratory tract irritation.

SKIN: Dermal contact is expected to be a primary route of exposure and can cause skin irritation which may result in corrosion if not promptly removed. Not considered a sensitizing agent.

EYE CONTACT: May result in corrosion to the eyes. Dust or vapors may cause irritation and tearing.

INGESTION: Will result in burning of mouth, throat and esophagus, abdominal distress and severe irritation, possible corrosion of the digestive tract.

EFFECTS OF OVEREXPOSURE

ACUTE: On contact with moisture, this material readily hydrolyzes to hypochlorous acid and cyanuric acid. The tissue damage resulting from contact is considered to result, in part, from its hypochlorous acid decomposition products. May cause gastrointestinal and respiratory tract irritation. May be severely irritating or corrosive to eyes and skin.

CHRONIC: No known chronic effects.

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SECTION III - HEALTH HAZARD INFORMATION - CONTINUED

TOXICOLOGY DATA

Data from studies and from the scientific literature on sodium dichloroisocyanurate dihydrate acid and similar potassium salt of dichloroisocyanuric acid indicate the following:

Oral LD50 (Rat): 620 mg/Kg, Slightly Toxic

Dermal LD50 (rabbit): 11,000 mg/Kg, Practically Non-Toxic

Primary Eye Irritation (Rabbit 24 hr.): Corrosive

Primary Skin Irritation (Rabbit 24 hr.): Corrosive

DOT Skin Corrosion (Rabbit, 4 hr.): Not Corrosive

Following repeated exposures (8 weeks) to sodium dichloroisocyanurate dihydrate in their drinking water (adjusted to pH 7.2 to 7.6), clinical signs of toxicity, decreases in body weight gain and drinking water consumption, and changes in urine composition at dosages which produced some deaths were noted in rats. In a 90-day feeding study with rats, the two highest dose levels of 6,000 and 12,000 ppm caused increases of the relative kidney and liver weights. Signs of eye and nose irritation and changes in body weight, liver weight and blood cell composition were noted following repeated inhalation (4 weeks) of sodium dichloroisocyanurate dihydrate by rats. No birth defects were noted in rats given sodium dichloroisocyanurate dihydrate orally during pregnancy, even at amounts which produced adverse effects on the mothers.

Potassium dichloroisocyanurate dihydrate

No skin allergy was observed in 50 human volunteers following repeated skin exposure to potassium dichloroisocyanurate dihydrate.

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT: NA

AUTO IGNITION TEMPERATURE: NA

FLAMMABLE LIMITS IN AIR, % BY VOLUME - UPPER: NA

LOWER: NA

This product if heated by an outside source to temperatures above 240°C (480°F), will undergo vigorous self-sustaining decomposition with the evolution of heat and dense noxious gases. In addition, when contact with another combustible material, this product will increase the burning rate of the combustible material. When ignited, will burn with the evolution of noxious chlorine-containing gases.

Extinguishing Media: In case of fire or smoke call the fire department. Do not attempt to extinguish the fire without a self-contained breathing apparatus (SCBA). Do not let the fire burn. Flood with copious amounts of water. Do not use ABC or other dry chemical extinguishers because there is the potential for violent reaction.

Special Firefighting Procedures: Firefighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Using a 10% solution of sodium carbonate, thoroughly decontaminate fire fighting equipment including all fire fighting apparel after the incident.

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SECTION IV - FIRE AND EXPLOSION DATA

Unusual Fire and Explosion Hazard: Nitrogen trichloride (NCl_3) can be generated slowly by the reaction of small quantities of water with a high concentration of this product. Nitrogen trichloride can present an explosion hazard.

Immediately after a fire has been extinguished, check for wet or damp material. Any spilled material from burned or broken containers should be assumed contaminated. Neutralize to a non-oxidizing material for safe disposal. Do not attempt to re-close broken drums, even for movement to the disposal area. They should be left open to disperse any nitrogen trichloride that may form.

Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. If the plastic liner of a drum is damaged or the material is damp, the material should be neutralized to a non-toxic material for safe disposal.

Bulging containers require extreme care. Contact the fire department.

Sensitivity To Mechanical Impact: Not sensitive.

Sensitivity To Static Discharge: Not sensitive.

SECTION V - SPECIAL PROTECTION

VENTILATION REQUIREMENTS: General room ventilation plus local exhaust at points of emission to maintain exposure below TLV(s).

Specific Personal Protective Equipment

RESPIRATORY: NIOSH/MSHA approved respirator, following manufacturer's recommendations, should be used as a precautionary measure where airborne contaminants may occur. (OSHA 1910.134)

EYE: Wear chemical safety goggles (ANSI Z87.1).

GLOVES: Wear chemical resistant gloves.

OTHER CLOTHING AND EQUIPMENT: Emergency shower and eyewash facilities should be in close proximity. (ANSI Z358.1). Launder contaminated clothing and clean protective equipment before reuse.

SECTION VI - PHYSICAL DATA

MELTING POINT: 240-250°C (464-480°F) (decomposes)

SOLUBILITY @ 25°C: 25 g/100 g H_2O

APPEARANCE AND ODOR: White crystalline solid, slight chlorine odor.

ODOR THRESHOLD (ppm): No data

pH (1% solution @ 25°C): 6 - 7

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SECTION VI - PHYSICAL DATA - CONTINUED

LOOSE BULK DENSITY (lbs./ft³): 56 - 60

COEFFICIENT WATER/OIL DISTRIBUTION: No data.

Comments: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

SECTION VII - REACTIVITY DATA

INCOMPATIBILITY: This material is a strong oxidizing agent. The preparation of concentrated solutions or slurries (10% or greater) is not recommended. Avoid contact with water or concentrated material in the container. Also avoid contact with easily oxidizable organic material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine-containing gases can be produced.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: Does not occur.

SECTION VIII - HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS:

Do not get into eyes, on skin, on clothing.

Wear goggles or face shield and rubber gloves when handling.

Avoid breathing dust or fumes.

Wash thoroughly with soap and water after handling.

Remove and wash contaminated clothing before reuse.

Mix only with water. Use clean dry utensils. DO NOT add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter, or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible generation of fire or explosion.

Vapor space in a closed container may contain a slight amount of chlorine gas and other chlorine-containing compounds from decomposition of the product. Exposure to chlorine gas may cause burning of the eyes with tearing; burning of the nose and mouth with runny nose; and irritation of the linings of the entire respiratory tract with coughing, a choking sensation, substernal pain, vomiting, nausea, headache, dizziness and fainting. The onset of severe respiratory symptoms following exposure to chlorine, including pulmonary edema and pneumonitis, may be delayed.

STORAGE: Store in original container and in a dry area where temperatures do not exceed 125°F (52°C) for 24 hours. Retie polyethylene liner after each use and keep container tightly closed. Do not allow water to get into container. Keep container off wet floors. Do not contaminate water, food or feed by storage or disposal.

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SECTION VIII - HANDLING AND STORAGE

DIRECTIONS FOR USE: It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

FOR INDUSTRIAL USE ONLY, FOR REPACKAGING OR FORMULATION AS A DISINFECTANT, SANITIZER, BACTERICIDE, FUNGICIDE OR ALGAECIDE. Repackagers or formulators must obtain their own EPA Registration Number to legally market this product for these uses.

SECTION IX - ENVIRONMENTAL PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Follow protective measures indicated in the Special Protection Section of this MSDS.

Contain spilled material. Any spillage should be cleaned up as soon as possible. DO NOT add water to spilled material. Using clean, dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean, dry containers for disposal. DO NOT use floor sweeping compounds to clean up spills. DO NOT close drums containing wet or damp material. They should be left open to disperse any nitrogen trichloride that may form. DO NOT transport wet or damp material.

Keep product out of sewers, watersheds and water systems. Do not contaminate water, food, or feed by storage or disposal.

WASTE DISPOSAL METHOD: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Wastes representative at the nearest EPA Regional Office for guidance.

Product Disposal: Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction and fire. Do not transport damp or wet material. Neutralize materials to a non-oxidizing state for safe disposal.

Container Disposal:

FIBER DRUM: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill, or by incineration as allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

Dispose of in accordance with all applicable local, state and federal regulations.

METAL CONTAINER: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

PLASTIC BAGS: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

ENVIRONMENTAL EFFECTS:

96-hr LC50	Bluegill Sunfish	0.43 mg/L, Highly Toxic
96-hr LC50	Rainbow Trout	0.37 mg/L, Highly Toxic
Oral LD50	Mallard Duck	1916 mg/Kg, Slightly Toxic
8-Day Dietary LC50	Mallard Duck	>10,000 ppm, Practically Toxic
8-Day Dietary LC50	Bobwhite Quail	>10,000 ppm, Practically Non-Toxic

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SECTION IX - SPILL OR LEAK PROCEDURES - CONTINUED

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES Permit. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

SECTION X - ADDITIONAL INFORMATION

OSHA Standard 29CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safety Data Sheet available to your employees.

To aid consumers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section I. If the word "YES" appears next to any category, this product may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

SECTION XI - PREPARATION INFORMATION

For additional Non-Emergency health, safety or environmental information, call or write the following manufacturer or distributor:

Occidental Chemical Corporation
Product Stewardship Department
Suite 400
360 Rainbow Blvd., South
Niagara Falls, NY 14302
Non-Emergency Phone: 716-286-3081
24 Hour Emergency Phone: 1-800-733-3665

For additional, **non-emergency** information about this product or its use, please contact:

Leslie's Swimming Pool Supplies
Technical Assistance
20630 Plummer Street
Chatsworth, CA 91311
Phone 818-993-4212

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SECTION XI - PREPARATION INFORMATION

The above information is based upon information Leslie's Swimming Pool Supplies believes to be reliable and is supplied for informational purposes only. Leslie's Swimming Pool Supplies disclaims any liability for damage which results from the use of the above information and nothing contained therein shall constitute a guarantee, warranty (including fitness for a particular purpose) or representation by Leslie's Swimming Pool Supplies with respect to the accuracy or completeness of the data, the product described or their use for any specific purpose even if that purpose is known to Leslie's Swimming Pool Supplies. The final determination of the suitability of the information, the manner of use of the information or product and potential infringement is the sole responsibility of the user.

This MSDS replaces MSDS No. 12066OXY dated 4/23/94.