



SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name: LITHO-SHOCK
 Synonym(s): Lithium Hypochlorite
 Recommended Uses: Sanitizer
 SDS Reference: 67

Company Information: ALLCHEM PERFORMANCE PRODUCTS, INC. Distributed By: HACHIK DISTRIBUTORS, INC
 6010 NW FIRST PLACE 100 COMMERCE DRIVE
 GAINESVILLE, FL 32607 ASTON PA 19015
 Tel: 352-378-9696
 24 HOUR EMERGENCY NUMBER: INFOTRAC (TRANSPORTATION): 1-800-535-5053

2. HAZARD(S) IDENTIFICATION

Classification: CORROSIVE TO SKIN AND EYES
 INHALATION HAZARD
 OXIDIZER
 ENVIRONMENTAL HAZARD



Signal Word: DANGER

Hazard Statements: HEALTH HAZARDS:
 Causes severe skin burns - Category 1 (H314)
 Causes serious eye damage - Category 1 (H318)
 Acute Oral Toxicity - Harmful if swallowed (H302) - Category 4
 Acute Inhalation Toxicity - Harmful if inhaled (H332) - Category 4
 PHYSICAL HAZARDS:
 Oxidizer - May intensify fire - Category 3.
 ENVIRONMENTAL HAZARDS:
 Very toxic to aquatic life - Category 1

Precautionary Statements: Keep away from heat. Keep/Store away from clothing/ combustible materials. Take any precaution to avoid mixing with combustibles. Do not breathe dusts or mists. Wash thoroughly after handling. Wear protective gloves/clothing/ and eye/face protection Avoid release to the environment. In case of fire: Use water only for extinction. Do not use dry chemical, CO2 or Halon. Wash contaminated clothing before reuse.

Eye Contact: Causes serious eye damage.
 Skin Contact: Causes severe skin burns.
 Inhalation: Do not breathe dusts or mists.
 Ingestion: Harmful if swallowed.

3. COMPOSITION

Chemical Name:	PERCENT %	CAS #
Lithium Hypochlorite	28 - 35	13840-33-0
Sodium Chloride	29 - 36	7647-14-5
Sodium Sulfate	10.9 - 20.7	7757-82-6
Lithium Chloride	2 - 4	7447-41-8
Lithium Carbonate	1.3 - 3.7	554-13-2
Lithium Chlorate	2.6 - 4.4	36355-96-1
Lithium Hydroxide	1.2 - 2.1	1310-65-2
Water	2 - 7	7732-18-5

4. FIRST AID

If In Eyes: Immediately flush eye with water. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 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 Inhaled: Move person to fresh air. If breathing difficulty or discomfort occurs and persists, see a medical doctor. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.



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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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Note: Lithium hypochlorite is corrosive to eyes, skin and mucous membranes. Consideration should be given to careful endoscopy as stomach or esophageal burns, perforations or strictures may occur. Careful gastric lavage with an endotracheal tube in place should be considered. Observation may be warranted. Treatment is controlled removal of exposure with symptomatic and supportive care.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIREFIGHTING MEASURES

Suitable / Unsuitable: Use water only. Do not use dry chemical, CO2 or Halon. This product is an Oxidizer. Contact with easily oxidizable or combustible materials can cause fire or explosion upon ignition from any source.
Extinguishing Media:
Specific Hazards from Chemical: Oxygen and toxic chlorine vapors.
Special Protective Equipment: Wear full protective clothing and self-contained breathing apparatus (SCBA) approved for fire fighting. This is necessary to protect against the hazards of heat, products of combustion and oxygen deficiency. Do not breathe smoke, gases or vapors generated.
Other Information: Strong oxidizer. Contact with easily oxidizable combustible materials can cause fire or explosion upon ignition from any source.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: When adequate ventilation is not available, wear a NIOSH/MSHA respirator approved for protection against inorganic and hypochlorite dusts. Wear safety glasses or goggles and rubber gloves.
Methods and Materials for cleanup: Keep combustibles (wood, paper, oil etc.) away from spilled material. With clean shovel, place into clean dry container, and cover loosely. Dispose of waste according to local and Federal laws and regulations.

7. HANDLING AND STORAGE

Handling: Do not get in eyes, on skin or clothing. Avoid breathing dust. Wash thoroughly after handling.
Storage: Store away from readily oxidizable materials, strong acids and flammable materials. Protect from moisture. Keep container closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

OSHA permissible exposure limit: TWA (ACGIH)
Particles Not Otherwise Classified (PNOC):
Inhalable particulate: 10 mg/m3
Respirable particulate: 3 mg/m3
Appropriate Engineering Controls: Use local exhaust ventilation to keep airborne concentrations below exposure limits.
Individual Protection Measures: Safety glasses or goggles and rubber gloves. When adequate ventilation is not available, wear a NIOSH/MSHA respirator approved for protection against inorganic and hypochlorite dust. Have a quick-drench eyewash and safety shower nearby.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White Granular Solid
Flammability (solid/gas): Oxidizer. Promotes combustion. Contact with combustible materials may cause fire.
Odor: Burning, chlorine-like odor
Upper/lower Flammability or Exposure limits: No data available
Odor Threshold: No data available
Vapor Pressure: Not Applicable
pH: 11 @ 25°C (1% solution)
Vapor Density: Not Applicable
Melting Point/Freezing Point: Decomposes @ 135°C (275°F)
Density: 0.9 to 1.0 g/cc
Solubility(ies): 43 % by wt. @ 25°C (77°F)
Initial Boiling Point/Boiling Range: Not Applicable
Partition Coefficient: n-octanol/water: Not Applicable
Auto-ignition Temperature: Not Applicable
Flash Point: Not Applicable
Decomposition Temperature: Decomposes @ 275°F (135°C)
Evaporation Rate: Not Applicable
Viscosity: Not Applicable



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10. STABILITY AND REACTIVITY

Stability/Reactivity:	Stable at room temperature.
Possibilities of Hazardous Reactions:	Does not polymerize.
Conditions to Avoid:	Contact with combustible materials (wood, paper, oil). Contamination with moisture.
Incompatible Materials:	Acids, oxidizable materials, combustible materials.
Hazardous Decomposition Materials:	Oxygen, lithium hydroxide, lithium chlorates.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Toxicity based upon EPA Toxicity Data: Oral LD50 (rat): 746 mg/kg for males; 555 mg/kg for females. Inhalation LC50 (rat): 2.0 mg/L. Dermal LD50 (rabbit): 8100 mg/kg Eye irritation (rabbit): Severe irritation. Dermal irritation (rabbit): Severe irritation. Dermal Sensitization: Not a skin sensitizer. This product is severely irritating/corrosive to the eyes (may cause blindness), skin, respiratory tract, and mucous membranes.
Chronic Toxicity:	Continuous inhalation exposure may cause lung damage.
Reproductive Toxicity:	This product was not mutagenic or genotoxic in several in vitro tests.
Carcinogenicity:	Not considered a carcinogen under OSHA.
Mutagenicity:	This product was not mutagenic or genotoxic in several in vitro tests.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:	Bobwhite quail: 5 Day Dietary LC50 >17,240 ppm Rainbow trout: 96 hour LC50 = 0.69 mg/L Bluegill: 96 hour LC50 = 0.97 mg/L Daphnia: 48 hour LC50 = 0.37 µg/L
Avian Toxicity:	Avian Toxicity: Mallard duck: Acute Oral LD50 = 1,960 mg/kg; 5 Day Dietary LC50>17,240 ppm (no deaths at maximum dose)
Environmental Hazards:	This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. 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 EPA.

13. DISPOSAL CONSIDERATIONS

Disposal:	Dispose of waste according to local and Federal laws and regulations. Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.
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14. TRANSPORTATION INFORMATION

Transportation:	Please refer to applicable regulations or call company noted under Section I.
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15. REGULATORY INFORMATION

TSCA:	USA: All components except for Lithium Chlorate, an impurity, are listed in TSCA inventory.
SARA (311, 312):	Immediate (Acute) Health Hazard, Reactive Hazard.
SARA 313:	This product contains lithium carbonate which is subject to the reporting requirements of Section 313 of the Emergency Planning and Right-To-Know Act of 1986. This information must be included in all SDS's that are copied and distributed for this product.
Right To Know Hazardous Substance List:	No data available.
Waste Classification:	If these wastes cannot be disposed of by use according to label instructions, contact your Environmental



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Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. For registered pesticides, contact your State Pesticide Agency.

Workplace Classification: This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

CERCLA Reportable Quantity: Not applicable.

EPA NOTES: This product is not subject to TSCA 12 (b) Export Notification Requirements.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. Following is the hazard information as required on the pesticide label:

SIGNAL WORD: DANGER

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS. DANGER: HIGHLY CORROSIVE: Causes skin and eye damage. May be fatal if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust and fumes. Remove and wash contaminated clothing before reuse. For skin or eye contact, or if dust/fumes are inhaled, immediately follow first aid statements.

PHYSICAL OR CHEMICAL HAZARDS: STRONG OXIDIZING AGENT. Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of 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 will start a chemical reaction and generate heat, hazardous gas, possible fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well ventilated area. Flood area with large volumes of water.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms.

16. OTHER INFORMATION

ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL. Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section 15 of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements. The information in this SDS was obtained from sources, which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

HMIS Rating: Health: 3
Flammability: 0
Reactivity: 1

NFPA Rating: Health: 3
Fire: 0
Reactivity: 1

Revision Date: 5/15/2015

Special Hazard Warning: OX - Oxidizer