

Material Safety Data Sheet



LITHIUM SHOCK

SECTION I - IDENTIFICATION

MANUFACTURER'S NAMEHaviland Consumer Products, Inc.
MANUFACTURER'S ADDRESS421 Ann Street N.W., Grand Rapids, MI 49504
PHONE NUMBER..... (616) 361-6691
EMERGENCY PHONE NUMBER.....CHEMTREC (800) 424-9300
EFFECTIVE DATE.....10/8/03
TRADE NAME.....**LITHIUM SHOCK**
CHEMICAL FAMILY.....Alkali Hypochlorite

SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	OSHA PEL	TLV (Units)	CAS NUMBER
Lithium Hypochlorite	Not Established	Not Established	13840-33-0
Sodium Chloride	Not Established	Not Established	7647-14-5
Sodium Sulfate	Not Established	Not Established	7757-82-6
Potassium Sulfate	Not Established	Not Established	7646-93-7
Lithium Chloride	Not Established	Not Established	7447-41-8
Lithium Carbonate	Not Established	Not Established	554-13-2
Lithium Chlorate	Not Established	Not Established	36355-96-1
Lithium Hydroxide	Not Established	Not Established	1310-65-2
Water	Not Established	Not Established	7732-18-5

SECTION III - PHYSICAL DATA

BOILING POINTNot Applicable
FREEZING POINTDecomposes at 135°C (275°F)
VAPOUR PRESSURE.....Not Applicable
VAPOUR DENSITY (air=1)Not Applicable
SOLUBILITY IN H₂O 43% x wt. @ 25°C (77°F)
ODOUR AND APPEARANCE White Granules; Burning Chlorine-like Odor
SPECIFIC GRAVITY 0.9-1g/cc
pH..... 1% Slurry @ 25°C: 11

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASHPOINT AND METHOD OF DETERMINATIONNot Flammable
LOWER EXPLOSIVE LIMIT (% by Volume) Not Applicable
UPPER EXPLOSIVE LIMIT (% by Volume) Not Applicable
MEANS OF EXTINCTION.....Water only; no dry chemical, CO₂ or Halon.
SPECIAL FIRE FIGHTING PROCEDURES.....Wear self-contained breathing apparatus and full fire fighting protective clothing. Don't breathe smoke, gases or vapors generated.
UNUSUAL FIRE HAZARD.....Avoid contact with combustible organic substances. Fire could result. Oxygen and toxic chloride gas may be released when heated, or when contacted with strong acids. May catch fire spontaneously on contact with oxidizable materials.

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SECTION V - HEALTH HAZARD DATA

CARCINOGENICITY, REPRODUCTIVE EFFECTS None
NTP?..... No
IARC MONOGRAPHS?..... No
OVER EXPOSURE EFFECTS Chemical burns of eyes and skin.
PRIMARY ROUTE(S) OF ENTRY Eye and Skin Contact
SPECIFIC FIRST AID PROCEDURES In case of contact: Immediately wash eyes and skin with plenty of water for at least 15 minutes. See doctor immediately. If inhaled: Remove to fresh air. If swallowed: Drink two glasses of water and see a physician. Do not induce vomiting. Note to Physician: Product is an eye irritant and corrosive to the skin. Treatment goal, dilution and removal; decrease potential burn hazard during gastric lavage. Treatment is otherwise symptomatic and supportive.
EXPOSURE AGGRAVATED MEDICAL CONDITIONS None Currently Known

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY Stable
CONDITIONS TO AVOID Contact with combustible materials (wood, paper, oil). Contamination with moisture.
INCOMPATIBLE MATERIALS..... Acids, oxidizable materials, combustible materials.
HAZARDOUS DECOMPOSITION PRODUCTS..... Toxic Chlorine gases.
HAZARDOUS POLYMERIZATION Will Not Occur
POLYMERIZATION AVOID Not Applicable

SECTION VII - SPILL OR LEAK PROCEDURE

LEAK AND SPILL PROCEDURES Sweep up spilled material and place in a plastic or plastic-lined container. Do not wash into streams since it's toxic to fish.
WASTE DISPOSAL..... Return to drum and dispose according to federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION Wear a NIOSH/MSHA approved respirator when adequate ventilation is not available.
VENTILATION Use only with adequate ventilation.
PROTECTIVE GLOVES..... Rubber or other impervious materials.
EYE PROTECTION..... Chemical splash proof goggles.
OTHER PROTECTIVE EQUIPMENT A safety shower and eye bath should be available. For operations where spills or splashing may occur, use an impervious body covering and boots.
HANDLING PROCEDURES AND EQUIPMENT Do not get in eyes, on skin or clothing. Avoid breathing dust. Wash thoroughly after handling. Store away from readily oxidizable materials, strong acids and flammable liquids. Keep container closed.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS OXIDIZER, 5.1, PG III
DOT SHIPPING NAMEOXIDIZING SOLID, N.O.S. (LITHIUM HYPOCHLORITE, MIXTURE)
(11 POUNDS OR LESS MAY BE SHIPPED ORM-D)
UN NUMBER UN1479
REPORTABLE QUANTITY (RQ)..... Not Listed

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REFERENCES

WARNING!! STRONG OXIDING AGENT -
USE CLEAN, DRY UTENSILS - KEEP
AWAY FROM ORGANIC MATERIALS.
HMIS: H-3;F-0;R-1
ZZ1CRSHK
EPA REG. # 57787-14