[redacted]

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

[redacted]

FOR EMERGENCY TRANSPORTATION INFORMATION, CALL CHEMTREC
1-800-424-9300

SUBSTANCE: LITHIUM HYDROXIDE ANHYDROUS

TRADE NAMES/SYNONYMS: Lithium Hydroxide, Calcinated

PRODUCT USE: Used For a Variety of Industrial and Research Applications.
CHEMICAL FAMILY: Inorganic Base
FORMULA: LiOH

CREATION DATE: 4/11/96 REVISION DATE: 04/27/09 (see Section 16 for revision details)

SECTION 2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. CAUSES SEVERE EYE AND SKIN BURNS. HARMFUL OR FATAL IF INHALED OR INGESTED. White, crystalline, odorless solid. Lithium Hydroxide is caustic and can cause severe irritation and corrosive damage to the skin, eyes, and tissues of the respiratory system. Lithium Hydroxide may generate some heat when in contact with water. Lithium Hydroxide is not flammable. Emergency responders must wear personal protective equipment appropriate to the situation to which they are responding.

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: In terms of anticipated occupational overexposure situations for employees, the main health effect from overexposure would be irritation or burns of contaminated skin, eyes, and tissues of the respiratory system.

INHALATION: Inhalation of airborne dusts of Lithium Hydroxide dusts may severely irritate or damage the tissues of the eyes, nose, and respiratory system. Symptoms can include coughing, sneezing, and a sore throat. Inhalation of relatively large quantities of Lithium Hydroxide may damage the tissues of the respiratory system, which can lead to the development of breathing difficulty, chemical pneumonitis, and pulmonary edema (a potentially life-threatening accumulation of fluid in the lungs). Severe inhalation overexposure may be fatal.

CONTACT WITH SKIN or EYES: Depending on the duration and concentration of overexposure, Lithium Hydroxide can cause severe irritation and corrosive damage to the skin and eyes. Symptoms of skin contact can include redness, irritation, pain, and burns that are slow to heal. Permanent scarring may occur. Repeated skin overexposure may cause dermatitis(dry, red skin). Symptoms of eye contact can include redness, irritation, pain, tearing, and blurred vision. Severe eye overexposure may cause permanent damage or blindness.

SKIN ABSORPTION: Skin absorption is not a significant route of exposure for Lithium Hydroxide.

INGESTION: Ingestion is not anticipated to be a significant route of occupational exposure. If Lithium Hydroxide is swallowed, it can irritate and burn the mouth, throat, and other tissues of the digestive system. Symptoms can include vomiting, diarrhea, and collapse. Vomiting (which can occur after ingestion of Lithium Hydroxide) may lead to aspiration, causing lung damage. In humans, ingestion of 10 grams of Lithium Hydroxide may be fatal. Severe ingestion overexposures can be fatal.

CHRONIC: Repeated skin overexposure may cause dermatitis (dry, red skin). Lithium poisoning may result in kidney and central nervous system effects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing respiratory, skin, central nervous system, and kidney conditions can be aggravated by overexposure to Lithium Hydroxide.

TARGET ORGANS: ACUTE: Eyes, skin, mucous membranes. CHRONIC: Skin, Nervous System, Kidney.

SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS #	% w/w
Lithium Hydroxide Anhydrous	1310-65-2	>99

NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2004 format.

SECTION 4 FIRST-AID MEASURES

RESCUERS SHOULD NOT ATTEMPT TO RETRIEVE VICTIMS OF EXPOSURE TO THIS PRODUCT WITHOUT ADEQUATE PERSONAL PROTECTIVE EQUIPMENT OR BY THEMSELVES. At a

SECTION 4 FIRST-AID MEASURES

minimum, chemical impervious clothing should be worn.

Victims of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention if necessary. Take copy of label and MSDS to physician or health professional with victim.

SKIN EXPOSURE: If Lithium Hydroxide contaminates the skin, immediately begin decontamination with running water. Do not interrupt flushing. Minimum flushing time is 20 minutes. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Victims must seek immediate medical attention if adverse effect occurs.

EYE EXPOSURE: If Lithium Hydroxide contaminates the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 30 minutes. Victims must seek immediate medical attention if any adverse effect occurs.

INHALATION: If Lithium Hydroxide is inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers.

INGESTION: If Lithium Hydroxide is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING, unless directed by medical personnel. If conscious, have victim rinse mouth with water. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

SECTION 5 FIRE-FIGHTING MEASURES

FIRE EXTINGUISHING MATERIALS: Lithium Hydroxide is not flammable. Use fire extinguishing material appropriate for surrounding fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Lithium Hydroxide is corrosive and presents a severe contact hazard to firefighters. When involved in a fire, Lithium Hydroxide may decompose and produce irritating fumes and toxic gases (lithium compounds).

Explosion Sensitivity to Mechanical Impact: Not sensitive.

Explosion Sensitivity to Static Discharge: Not sensitive.

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move containers from fire area if it can be done without risk to personnel. If possible, firefighters should control runoff water to prevent environmental contamination.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a spill, clear the affected area and protect people. The minimum Personal Protective Equipment recommended for response to non-incidental releases should be **Level C: double-gloves (nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and air-purifying respirator with high-efficiency particulate filter. Self-Contained Breathing Apparatus would be worn in situations where the oxygen level is below 19.5 % or is unknown.** Sweep up or vacuum spilled Lithium Hydroxide carefully, avoiding the generation of dusts. Decontaminate the area thoroughly. If necessary, neutralize area with citric acid. Test area with litmus paper to insure neutralization is complete. Place all spill residue in a suitable container and seal. Dispose of in accordance with U.S. Federal, State, and local or Canadian solid waste disposal regulations (see Section 13, Disposal Considerations).

SECTION 7 HANDLING AND STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting Lithium Hydroxide ON YOU or IN YOU. Wash thoroughly after handling Lithium Hydroxide. Do not eat, drink, or smoke while handling this product. Remove contaminated clothing immediately. Use ventilation and other engineering controls to minimize potential exposure to Lithium Hydroxide.

STORAGE AND HANDLING PRACTICES: All employees who handle Lithium Hydroxide should be trained to handle it safely. Ensure containers of Lithium Hydroxide are properly labeled. Open containers slowly on a stable surface. Store containers in a cool, dry location, away from direct sunlight or sources of intense heat. Keep container tightly closed after use. Store away from incompatible materials (see Section 10, Stability and Reactivity). Inspect containers of Lithium Hydroxide for leaks or damage. Read instructions provided with the product prior to use. Empty containers may contain residual material; therefore, empty containers must be handled with care.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely, as applicable. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

Component	Exposure Limits in Air				
	ACGIH-TLVs		OSHA-PELs		OTHER
	TWA mg/m^3	STEL mg/m^3	TWA mg/m^3	STEL mg/m^3	mg/m^3
Lithium Hydroxide Anhydrous (exposure limit is for Lithium Oxide, a compound with similar hazard properties)	NE	NE	NE	NE	1 Ceiling AIHA WEEL

NE = Not Established See Section 16 for Definition of other terms and acronyms used.

The information presented is based only on Lithium Hydroxide. The Exposure Controls and Personal Protection required will be dependent on the conditions present in the workplace, including the presence of other chemicals. PPE should be based on a Hazard Assessment as required in 29CFR1910.132.

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation, to ensure exposures are below the occupational exposure limits provided above. Mechanical exhaust may be needed.
RESPIRATORY PROTECTION: If ventilation is inadequate, an approved dust/mist respirator may be required. For higher exposures or in potentially oxygen deficient atmospheres, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2, CSA Standard Z94.4-02 and good Industrial Hygiene practice.
EYE PROTECTION: Splash goggles and face shield. If necessary, refer to U.S. OSHA 29 CFR 1910.133, and appropriate Canadian Standards.
HAND PROTECTION: Wear neoprene gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR 1910.138 and appropriate Standards of Canada.
BODY PROTECTION: Use body protection appropriate for task (e.g., Apron or Protective suit). If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, wear foot protection, as described in U.S. OSHA 29 CFR 1910.136.

Emergency eye-wash/safety showers: where there is any possibility that an employee's eyes or skin may be exposed to this substance, the employer should provide an eye-wash fountain/safety shower within the immediate work area for emergency use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

EVAPORATION RATE (nBuAc = 1): Not applicable. ODOR THRESHOLD: Not available.
SPECIFIC GRAVITY (water = 1): 1.5 FREEZING/MELTING POINT: 450-470°C (842-879°F)
SOLUBILITY IN WATER @ 20°C: 13 g/100 cc BOILING POINT: Decomposes @ 924°C (1695°F)
VAPOR PRESSURE, mm Hg @ 20°C: Not applicable. pH: 14 (1.0 N Solution)
RELATIVE VAPOR DENSITY (air = 1): Not applicable.

FLASH POINT: Not flammable. AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABLE LIMITS (in air by volume): Not applicable.

COEFFICIENT OF OIL/WATER DISTRIBUTION (PARTITION COEFFICIENT): Not available.

APPEARANCE, ODOR AND COLOR: White, odorless, crystalline solid.
HOW TO DETECT THIS SUBSTANCE (warning properties): Solid Lithium Hydroxide does not have any unique warning properties. Aqueous solutions of Lithium Hydroxide will turn litmus paper blue.

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable. Lithium Hydroxide may react with carbon dioxide in air to form lithium carbonate.
DECOMPOSITION PRODUCTS: Thermal decomposition of the components of Lithium Hydroxide include lithium compounds and caustic vapors.
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Lithium Hydroxide is not compatible with strong acids. Lithium Hydroxide is corrosive to aluminum, lead, and zinc.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Mixing Lithium Hydroxide with incompatible chemicals.

SECTION 11 TOXICOLOGICAL INFORMATION

TOXICITY DATA: The following toxicology data are currently available for Lithium Hydroxide.

LC_{50} (Inhalation-Rat) 960 mg/m^3/4 hours
LD_{50} (Oral-Rat) 210 mg/kg: LD
LD_{50} (Oral-Mouse) 363 mg/kg
Eye Irritation: In animal tests, solutions of Lithium Hydroxide are similar to solutions of sodium hydroxide, which can cause severe corrosive eye damage.

CARCINOGENICITY STATUS: Lithium Hydroxide is not listed as a carcinogen or suspected carcinogen by IARC, NTP, OSHA or ACGIH.

IRRITANCY OF PRODUCT: This solution will cause severe irritation and corrosive damage to the skin, eyes, and any other contaminated tissue.

SENSITIZATION TO THE PRODUCT: Lithium Hydroxide is not known to be a skin or respiratory sensitizer.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of Lithium Hydroxide on the human reproductive system.

Mutagenicity: Lithium Hydroxide is not reported to cause mutagenic effects in humans.
Embryotoxicity: Lithium Hydroxide is not reported to produce embryotoxic effects in humans
Teratogenicity: Lithium Hydroxide is not reported to cause teratogenic effects in humans.
Reproductive Toxicity: Lithium Hydroxide is not reported to cause reproductive effects in humans.

ACGIH BIOLOGICAL EXPOSURE INDICES (BEIs): Currently there are no ACGIH Biological Exposure Indices (BEIs) determined for Lithium Hydroxide.

SECTION 12 ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: Lithium Hydroxide may react with carbon dioxide in air to form lithium carbonate.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: Due to its corrosivity, Lithium Hydroxide can be harmful or fatal to contaminated plants and animals.

EFFECT OF CHEMICAL ON AQUATIC LIFE: Due to its corrosivity, Lithium Hydroxide can be harmful or fatal to aquatic plants and animals in contaminated bodies of water.

ACUTE AQUATIC TOXICITY:
LITHIUM HYDROXIDE
LC_{50} (*Daphnia magna*) 48 hours = 19.1 mg/L
LITHIUM
NOEC fathead minnow early life stage test = 0.2 mg/L

DEGRADABILITY: No data available.

LOG BIOCONCENTRATION FACTOR (BCF): No data available.

LOG OCTANOL/WATER PARTITION COEFFICIENT: No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations or with regulations of Canada and its Provinces. Lithium Hydroxide, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local solid waste regulatory authority.

EPA WASTE NUMBER: D002 (Characteristic/Corrosivity), applicable to wastes consisting only of Lithium Hydroxide.

SECTION 14 TRANSPORT INFORMATION

THIS MATERIAL IS HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME:	Lithium hydroxide
HAZARD CLASS NUMBER and DESCRIPTION:	8 (Corrosive)
UN IDENTIFICATION NUMBER:	UN 2680
PACKING GROUP:	II
DOT LABEL(S) REQUIRED:	Class 8 (Corrosive)

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2008): 154

MARINE POLLUTANT: Lithium Hydroxide is not designated as a DOT Marine Pollutant (49 CFR 172.101, Appendix B).

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This material is considered as Dangerous Goods, per regulations of Transport Canada. The use of the above U.S. DOT information from the U.S. 49 CFR regulations is allowed for shipments that originate in the U.S. For shipments via ground

SECTION 14 TRANSPORT INFORMATION

vehicle or rail that originate in Canada, the following information is applicable.

PROPER SHIPPING NAME:	Lithium hydroxide monohydrate
HAZARD CLASS NUMBER and DESCRIPTION:	8 (Corrosive)
UN IDENTIFICATION NUMBER:	UN 2680
HAZARD LABEL (S) REQUIRED:	Class 8 (Corrosive)
PACKING GROUP:	II
SPECIAL PROVISIONS:	None
EXPLOSIVE LIMIT & LIMITED QUANTITY INDEX:	1
ERAP INDEX:	None
PASSENGER CARRYING SHIP INDEX:	None
PASSENGER CARRYING ROAD OR RAIL VEHICLE INDEX:	15

INTERNATIONAL AIR TRANSPORT ASSOCIATION DANGEROUS GOODS REGULATIONS: Use the following information for international shipments via air transport.

PROPER SHIPPING NAME:	Lithium hydroxide
HAZARD CLASS NUMBER and DESCRIPTION:	8 (Corrosive)
UN IDENTIFICATION NUMBER:	UN 2680
PACKING GROUP:	II
LABEL(S) REQUIRED:	Class 8 (Corrosive)
PACKING INSTRUCTIONS:	Passenger Aircraft: 814 Cargo Aircraft: 816

EMERGENCY RESPONSE CONTACT FOR AN INCIDENT DURING TRANSPORTATION:
CHEMTREC 1-800-424-9300 or 1-703-527-3887

SECTION 15 REGULATORY INFORMATION

ADDITIONAL U.S. REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: Lithium Hydroxide is not subject to the reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act and Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

CERCLA SECTION 103 (40 CFR 302.4) Listed CERCLA HAZARDOUS SUBSTANCE: No
SARA SECTION 302 (40 CFR 355.30) EXTREMELY HAZARDOUS SUBSTANCE: No
SARA SECTION 304 (40 CFR 355.40) RQ – CERCLA OR SARA 302: No
SARA SECTION 313 (40 CFR 372.65) Toxic Chemical Release Inventory (TRI Form R): No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

U.S. TSCA INVENTORY STATUS: Lithium Hydroxide Anhydrous is listed on the TSCA Inventory.

U.S. TSCA 12(b) EXPORT NOTIFICATION: TSCA 12(b) Notification is not required, per 40 CFR 707, for Lithium Hydroxide Anhydrous.

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

U.S. STATE REGULATORY INFORMATION: Lithium Hydroxide is covered under specific State regulations, as denoted below:

Massachusetts - Substance List: No.
New Jersey - Right to Know Hazardous Substance List: : Lithium Hydroxide.
Michigan - Critical Materials Register: Lithium Compounds.
Pennsylvania - Hazardous Substance List: No.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Lithium Hydroxide is not on the California Proposition 65 lists.

ANSI STANDARD LABELING (Precautionary Statements): **DANGER!** CORROSIVE. CAUSES SEVERE EYE AND SKIN BURNS. HARMFUL OR FATAL IF INHALED OR INGESTED. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Use in well-ventilated area. Do not take internally. Wear gloves, goggles, and appropriate body protection. Keep container closed. FIRST AID: In case of eye contact, immediately flush eyes for at least 30 minutes with large amounts of water**.** In case of contact with skin, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. If ingested, do not induce vomiting. Seek medical attention if adverse effects. .. IN CASE OF FIRE: Use any media that is appropriate for the surrounding fire. IN CASE OF SPILL: Sweep up or vacuum spilled Lithium Hydroxide carefully, avoiding the generation of dusts. Decontaminate the area thoroughly. If necessary, neutralize area with citric acid. Place in a suitable container. Avoid contact with strong acids. Consult Material Safety Data Sheet before use.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: Lithium Hydroxide Anhydrous is on the DSL Inventory.

CANADIAN WHMIS CLASIFICATION AND SYMBOLS: **Class E** Corrosive

SECTION 16 OTHER INFORMATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATING: Health Hazard = 3; Fire Hazard = 0; Physical Hazard = 0

NFPA 704 RATING: Health Hazard = 3; Fire Hazard = 0; Instability Hazard = 0

4 = Severe Hazard 3 = Serious Hazard 2 = Moderate Hazard 1 = Slight Hazard 0 = Minimal Hazard

REVISIONS MADE IN 2009:

Section 1: Office Hours

Section 2: Emergency Overview

Section 4: General First Aid, Skin flushing time

Section 5: Moved flammability data to Section 9

Section 8: Exposure limit

Section 12: Added ecotoxicity data

Section 15: Label First Aid statement

The information in this Material Safety Data Sheet is based on data that [redacted] believes to be reliable as of the MSDSs date of revision. [redacted], makes no warranty or representation of any kind that the MSDS does not contain errors. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside the control of [redacted], there are no warranties, expressed or implied, and [redacted] assumes no liability in connection with the use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe on any patents. Any use of these data and information must be determined by the user to be in accordance with Federal, State and local laws and regulations.

DEFINITIONS OF EXPOSURE LIMIT TERMS AND ABBREVIATIONS

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association that establishes exposure limits. **TLV** - Threshold Limit Value - an airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average **(TWA)**, the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level **(C)**. Skin absorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration. **PEL** - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based on the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.

IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. **The DFG MAK** is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. **NIOSH** is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. **O**ccupational **S**afety and **H**ealth **A**dministration (**OSHA**). NIOSH issues exposure guidelines called **R**ecommended **E**xposure **L**evels (**REL**s). When no exposure guidelines are established, an entry of **NE** is made for reference.

GRAPHICAL REPRESENTATION OF HAZARDS

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATING

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD	(BLUE)	3
FLAMMABILITY HAZARD	(RED)	0
PHYSICAL HAZARD	(YELLOW)	0

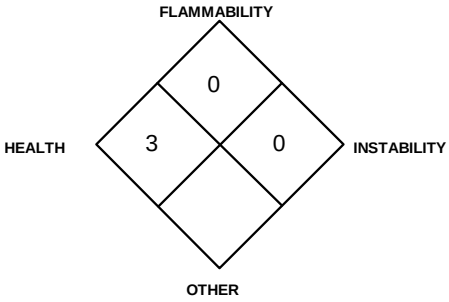
PROTECTIVE EQUIPMENT

EYES	RESPIRATORY	HANDS	BODY

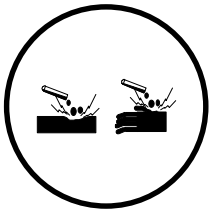
See Section 8

For Routine Industrial Use and Handling Applications

NATIONAL FIRE PROTECTION SYSTEM RATING



WHMIS SYMBOL
Class E: Corrosive



See Section 16 for Definition of Ratings