DI-CORP
DOWN TO EARTH BUSINESS

SAFETY DATA SHEET
POTASSIUM HYDROXIDE 8N

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER:	**Potassium Hydroxide 8N**
OTHER MEANS OF IDENTIFICATION:	None
RECOMMENDED USE:	Laboratory reagent
RESTRICTIONS ON USE:	None known
SUPPLIER IDENTIFIER:	**Di-Corp** **8750-53 Ave** **Edmonton, AB T6E 5G2** **780-440-4923**
EMERGENCY PHONE NUMBER 24hr:	780-468-4064
TRANSPORT EMERGENCY PHONE NUMBER:	**1-888-CANUTEC (226-8832), 613-996-6666 or *666 on a cellular phone**

SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION:

Corrosive to metals – Category 1
Acute oral toxicity – Category 4
Skin corrosion – Category 1A
Serious eye damage – Category 1

LABEL SYMBOLS:

SIGNAL WORD: DANGER

CLASSIFICATION INFORMATION:

May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.

OTHER HAZARDS: None known.

PRECAUTIONARY STATEMENTS:

Prevention:
Absorb spillage to prevent damage.
Keep only in original packaging.
Do not breathe vapour and mist.
Wash hands, face and exposed skin thoroughly after handling.
Wear protective gloves, clothing, eye and face protection when handling.
Do not eat, drink or smoke when using this product.

Response:
IF SWALLOWED: Rinse mouth. Do not induce vomiting. Immediately call a Poison Center or doctor if you feel unwell.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage:
Store in a corrosion resistant container.
Store locked up.

Disposal:
Dispose of product and containers in accordance with local, provincial and federal regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Potassium hydroxide	1310-58-3	35-40

SECTION 4: FIRST AID MEASURES

SKIN CONTACT:	As quickly as possible, remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Immediately flush with lukewarm, gently flowing water for at least 60 minutes. Obtain medical attention when flushing is complete or continue flushing while transporting to emergency care facility.
EYE CONTACT:	Flush with gently flowing warm water for minimum 60 minutes. Hold eyelids open to ensure thorough flushing. Neutral saline may be used as soon as it is available. Obtain medical attention when flushing is complete and no further irritation is felt, or permanent damage may result.
INGESTION:	Do not induce vomiting. Obtain immediate medical attention. If immediate medical attention is not available; rinse mouth thoroughly with water. If spontaneous vomiting occurs keep head below hips to prevent aspiration of the vomit into the lungs; have victim rinse mouth with water again. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	If inhaled remove person to fresh air and keep comfortable for breathing. Obtain immediate medical attention. If victim is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
MOST IMPORTANT SYMPTOMS / EFFECTS:	Causes severe skin and eye burns. Causes digestive tract burns.
IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT	Immediate first aid or medical attention is required to reduce the chance of permanent injury due to eye contact or skin contact. If swallowed, contact emergency services or Poison Control Center immediately. Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Use media appropriate for packaging and surrounding materials. Avoid using water unless necessary for other materials, in which case, flood to absorb heat generated. Contact with water will evolve heat and could cause ignition of paper, cardboard, etc.
UNSUITABLE EXTINGUISHING MEDIA:	Do not use carbon dioxide as an extinguishing agent.
SPECIFIC FIRE HAZARDS:	May generate heat when contacted with water.
HAZARDOUS COMBUSTION PRODUCTS:	No information available.
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS:	Self-contained breathing apparatus required for fire-fighting personnel. Move containers from fire area, or cool with water spray, if possible.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIMENT AND EMERGENCY PROCEDURES

Use appropriate safety equipment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Soak up spills with noncombustible absorbent material. Collect in appropriate containers for disposal. Wash with dilute vinegar solution to neutralize residue on surface. Rinse spill area thoroughly with water.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

This product is extremely corrosive and highly reactive. Wear personal protective equipment. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid ingestion. Discard non-rubber shoes. Discard contaminated leather articles (belts, watchbands, etc). Wash clothing before reuse. Caution: When contacting water a large amount of heat will be generated, causing the water to become very hot or even to boil. Handle the solution with precautions as hot object. When mixing with water add product slowly, with constant stirring, to water. Ensure temperature of water does not exceed 95°C to prevent boiling.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in cool, dry area away from incompatibles. Dry all equipment before use. Wash all equipment thoroughly with water when handling is completed. Keep container tightly closed and properly labelled. Empty packages contain residual hazardous material and should be handled as if full.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	ACGIH TLV-TWA = 2 mg/m^3 (ceiling)
ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate vapour or mist use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure below limits. Ensure ventilation equipment is corrosion resistant and separate from other exhaust ventilation systems.
	PERSONAL PROTECTIVE MEASURES
RESPIRATORY PROTECTION:	Use a properly fitted particulate filter respirator complying with an approved standard if airborne concentrations exceeds TLV or if a risk assessment indicates this is necessary.
PROTECTIVE GLOVES:	Rubber gauntlets recommended.
EYE PROTECTION:	Wear tight fitting chemical goggles. Do not wear contact lenses.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Protective clothing as required to prevent contact. Ensure eye-wash station and emergency shower are available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear colourless liquid
ODOUR:	Odourless
ODOUR THRESHOLD:	Not applicable
pH:	14
MELTING POINT / FREEZING POINT:	~-45°C
BOILING POINT / RANGE:	~112°C
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	Not applicable
FLAMMABILITY / EXPLOSIVE LIMITS:	Not applicable
VAPOUR PRESSURE:	Not available
VAPOUR DENSITY:	Not available
RELATIVE DENSITY:	1.3
SOLUBILITY:	Miscible in water
PARTION COEFFICIENT:	Not available
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not applicable
VISCOSITY:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Not reactive.
CHEMICAL STABILITY:	Stable under recommended storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS:	Reacts vigorously, violently or explosively with many organic and inorganic chemicals, such as strong acids, acid chlorides, acid anhydrides, ketones, glycols and organic peroxides.
CONDITIONS TO AVOID:	Avoid contact with water and incompatible materials.
INCOMPATIBLE MATERIALS:	Strong acids; may react violently. Water; generates heat. May react with organ halogen compounds, nitro and chloro organic compounds, and reducing sugars and whey solids. Avoid contact with water reactive materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	May react with metals generating explosive hydrogen gas.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY:	Potassium Hydroxide LD50 = 205 mg/kg (oral, rat) LD50 > 1260 mg/kg (dermal, rabbit)
SKIN CONTACT:	Corrosive! May cause severe burns and tissue destruction. There may be a delay between the time of exposure and the onset of irritation depending on the concentration of the product. Prolonged or repeated contact, even to dilute solutions, can cause a high degree of tissue destruction.
EYE CONTACT:	Corrosive! May cause severe damage including burns and blindness. Severity of effects depends on concentration and how soon after exposure the eyes are washed.
INGESTION:	Corrosive! May cause severe burns and complete tissue perforation of mucous membranes of mouth, throat and stomach.
INHALATION:	Exposure to powder, mist or liquid can produce burns of the respiratory tract. Severe exposures could result in pulmonary edema.
CARCINOGENICITY:	No information available.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	No information available.
CHRONIC TOXICITY:	No information available.
TARGET ORGAN EFFECTS:	Not available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	Potassium Hydroxide: LC50 – Gambusia affinis = 80mg/L/96hr LC50 – Daphnia = 40 mg/L/48hr EC50 – Algae = 1337 mg/L/120hr
PERSISTENCE AND DEGRADABILITY:	Not applicable to inorganic substances.
BIOACCUMULATIVE POTENTIAL:	Will not bioaccumulate.
MOBILITY IN SOIL:	No information available.
OTHER ADVERSE EFFECTS:	May cause shifts in water pH outside the range of pH 5-10. This change may be toxic to aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. Empty containers, which have not been cleaned and purged, contain residual hazardous material and must be recycled, or disposed of, in accordance with local regulations.

SECTION 14: TRANSPORTATION INFORMATION

TDG	Regulated
DOT	Regulated
IATA	Regulated
IMDG	Regulated
UN NUMBER:	UN1814
PROPER SHIPPING NAME:	POTASSIUM HYDROXIDE, SOLUTION
CLASS:	8
PACKING GROUP:	II
IMDG HAZARDS:	Not listed as a marine pollutant
BULK TRANSPORT:	Not regulated
SPECIAL PRECAUTIONS:	None

SECTION 15: REGULATORY INFORMATION

DSL:	Listed
WHMIS CLASS:	D1B; E
TSCA:	Listed

SECTION 16: OTHER INFORMATION

REVISION DATE:	February 17, 2017
PREVIOUS VERSION DATE:	Not applicable

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