

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME:	LIQUID PRESOAK	Emergency TEL: CANUTEC
PRODUCT USE:	Machine Dishwasher Liquid	(613) 996-6666
MANUFACTURERS NAME	NORA SYSTEMS INC.	
ADDRESS:	7807 Argyll Road, Edmonton, Alberta T6C 4A9	
SUPPLIER:	NORA SYSTEMS INC.	
WHMIS CLASSIFICATION:	D1B-Toxic	E-Corrosive
TDG CLASSIFICATION:	Potassium Hydroxide Solution, Class 8(9.2), UN 1814 PG II	

SECTION II HAZARDOUS INGREDIENTS

MATERIAL	%	CAS NUMBER	TOXITY DATA: LD50, LC50
Potassium Hydroxide	10-30	1310-58-3	LD50 (Oral, Rat) 365 mg/kg
Sodium Hypochlorite	10-30	7681-52-9	LD50 (Oral, Rat) 5 g/Kg

SECTION III PHYSICAL DATA

PHYSICAL STATE	Liquid	VAPOUR PRESSURE:(mmHg)	n.av.
COLOUR:	pale yellow	VAPOUR DENSITY:(AIR=1)	n.av.
ODOUR:	Chlorine odour	EVAPORATION RATE:	n.av.
BOILING POINT:	n.av.	SPECIFIC GRAVITY:	1.19
FREEZING POINT:	0 Deg.C.	pH:	13-14
SOLUBILITY:	100%	ODOUR THRESHHOLD:	n.av.
		COEFFICIENT OF WATER/OIL:	n.av.

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD): n.av.

FLAMMABILITY LIMITS IN AIR, % BY VOLUME: **Non Flammable** LOWER: n.av. UPPER: n.av.

AUTO- IGNITION TEMPERATURE: n.av.

MEANS OF EXTINCTION: **As for surrounding fire.**

HAZARDOUS COMBUSTION PRODUCTS: **Chlorine, oxygen, potassium and phosphorous oxides.**

SPECIAL FIREFIGHTING PROCEDURES: **As for surrounding fire.**

EXPLOSION DATA-SENSIVITY TO MECHANICAL IMPACT: n.av.

EXPLOSION DATA-SENSIVITY TO STATIC DISCHARGE: n.av.

SECTION V REACTIVITY DATA

CHEMICAL STABILITY: **Chlorine content decreases with heat, light, decrease in pH and contamination with heavy metals.**

CHEMICAL INCOMPATABILITY (MATERIAL & CONDITIONS): **Oxidizing material, acid, chlorinated hydrocarbons, ammonia, aluminum, tin, lead and zinc.**

HAZARDEOUS DECOMPOSITION PRODUCTS: **Hydrogen (from aluminum and other metal mentioned above), chlorine and oxygen.**

SECTION VI TOXIOLOGICAL PROPERTIES

ROUTE OF ENTRY-	SKIN CONTACT:	X	EYE CONTACT: X
	INGESTION:	X	INHALATION: X

EFFECTS OF EXPOSURE- ACUTE AND CHRONIC:

Inhalation- **Irritation of the respiratory tract, inflammation of the lungs.**

Ingestion- **Will cause burning in the mouth and esophagus, nausea, abdominal pain and diarrhea. Perforation of gastrointestinal tract may occur.**

Eyes- **Causes severe irritation to the mucous membranes of the eye. May cause ulceration of the eye.**

Skin- **Severe irritation and burns to the skin.**

EXPOSURE LIMITS:

Potassium Hydroxide – TWA: 2 mg/m3

Sodium Hypochlorite – Ceiling OEL 3 ppm

SENSITIZATION TO PRODUCT: n.av.

CARCINODENICITY: n.av.

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REPRODUCTIVE TOXICITY: n.av.
TERATOGENICITY: n.av.
MUTAGENICITY: n.av.
TOXICOLOGICALLY SYNERGISTIC PRODUCTS: None known.

SECTION VII PERSONAL PROTECTIVE EQUIPMENT

GLOVES: Rubber. Vinyl or neoprene gloves should be worn.
EYES: Chemical worker goggles.
FOOTWEAR: Not normally necessary.
RESPIRATOR: Not normally necessary unless product is misted.
CLOTHING: Rubber. Vinyl or neoprene coveralls should be worn.

SECTION VIII PREVENTIVE MEASURES

STORAGE REQUIREMENTS: Keep container closed when not in use. Store in a cool, dark place away from any possible contaminants.
SHIPPING INFORMATION: As per TDG regulations.
LEAK AND SPILLAGE PROCEDURES: With large spills, dyke for later disposal. Neutralize with sodium sulphite then with diluted acid- like hydrochloric or sulfuric acid. Minor spills can be neutralized and flushed with plenty of water.
HANDLING PROCEDURES: Keep container closed when not in use. Store in cool, dark place away from any possible contaminants.
WASTE DISPOSAL: Waste product should not be discharged into sewers or streams. It should be first neutralized and then discharged according to local, provincial and federal regulations.
SPECIAL ENGINEERING CONTROLS: Use with adequate ventilation with access to eyewash, safety shower and safety equipment.

SECTION IX FIRST AID MEASURE

EYES: Flush with plenty of water for at least 20 minutes. Get medical attention.
SKIN: Remove contaminated clothing immediately and flush with water for at least 15 minutes. Get medical help. No oil or ointment should be applied.
INGESTION: Get medical help immediately. Rinse mouth well with water and give patient large quantities of water or milk to drink to dilute the chemical. Do not induce vomiting.
INHALATION: Remove to fresh air and get medical attention.

SECTION X PREPARATION INFORMATION

PREPARED BY: TECHNICAL DEPARTMENT

TELEPHONE: 780-448-0145

DATE: JANUARY 2008

IMPORTANT: The information presented herein is believed to be accurate and is offered only as a guide. Users should make their own tests to determine the suitability of these products for their own particular purposes. Users assume all risk of use, storage and handling of the product. No warranty, express or implied, is made including, but no limited to, implied warranties of merchantability and fitness for a particular purpose. Nothing contained herein shall be construed as a license to operate under, or recommendation to infringe any patents.

n.av. - Not Available

n.ap- Not applicable