



# KENCRO

## CHEMICALS

SODIUM HYDROXIDE SOLUTION (CAUSTIC SODA 50% LIQUID)

### MATERIAL SAFETY DATA SHEET

#### SECTION 1: PRODUCT AND COMPANY INFORMATION

**PRODUCT IDENTIFIER:** CAUSTIC SODA SOLUTION  
**PRODUCT USE:** NEUTRALIZING AGENT IN PETROLEUM REFINING, PULP AND PAPER, SOAPS, INDUSTRIAL CLEANER, PULPING AND BLEACHING  
**CHEMICAL FAMILY:** ALKALINE MIXTURE  
**SUPPLIER'S NAME AND ADDRESS:** KENCRO CHEMICALS LIMITED  
2172 WYECROFT RD., UNIT #4  
OAKVILLE, ON  
L6L 5V6  
905-827-4133  
**24 HR. EMERGENCY NUMBER:** 613-996-6666 (CANUTEC)

#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	C.A.S. #	WT.%	LC50(4HR) (RAT, IHL.)	LD50	
				(ORAL, RAT)	(RABBIT, DERMAL)
SODIUM HYDROXIDE	1310-73-2	40.00 – 55.00	N/AV	N/AV	N/AV

#### SECTION 3: HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

COLOURLESS TO SLIGHTLY HAZY, YELLOW LIQUID. ODOURLESS.  
DANGER! MAY REACT WITH WATER, GENERATING HEAT.  
CONTACT WITH METALS MAY RELEASE SMALL AMOUNTS OF FLAMMABLE HYDROGEN GAS.  
CAUSES BURNS. CORROSIVE TO ALL TISSUES.

##### SIGNS AND SYMPTOMS OF SHORT-TERM (ACUTE EXPOSURE):

**SKIN CONTACT:** SODIUM HYDROXIDE IS EXTREMELY CORROSIVE AND IS CAPABLE OF CAUSING SEVERE BURNS WITH DEEP ULCERATION AND PERMANENT SCARRING. IT CAN PENETRATE TO DEEPER LAYERS OF SKIN AND CORROSION WILL CONTINUE UNTIL REMOVED. THE SEVERITY OF INJURY DEPENDS ON THE CONCENTRATION (SOLUTIONS) AND THE DURATION OF EXPOSURE. BURNS MAY NOT BE IMMEDIATELY PAINFUL; ONSET OF PAIN MAY BE DELAYED MINUTES TO HOURS.

**SKIN ABSORPTION:** A SINGLE PROLONGED SKIN EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS. THE DERMAL LD50 HAS NOT BEEN DETERMINED.

**EYE CONTACT:** EXTREMELY CORROSIVE! THE SEVERITY OF INJURY INCREASES WITH THE CONCENTRATION, THE DURATION OF EXPOSURE, AND THE SPEED OF PENETRATION INTO THE EYE. DAMAGE CAN RANGE FROM SEVERE IRRITATION AND MILD SCARRING TO BLISTERING, DISINTEGRATION, ULCERATION, SEVERE SCARRING AND CLOUDING. CONDITIONS, WHICH AFFECT VISION SUCH AS GLAUCOMA AND CATARACTS, ARE POSSIBLE LATE DEVELOPMENTS. IN SEVERE CASES, THERE IS PROGRESSIVE ULCERATION AND CLOUDING OF EYE TISSUE WHICH MAY LEAD TO PERMANENT BLINDNESS.

**INHALATION:** SODIUM HYDROXIDE DOES NOT READILY FORM A VAPOUR AND INHALATION EXPOSURE IS LIKELY TO OCCUR AS AN AEROSOL. DUE TO ITS CORROSIVE NATURE, SODIUM HYDROXIDE AEROSOLS COULD CAUSE PULMONARY EDEMA (SEVERE, LIFE-THREATENING LUNG INJURY). THE DEVELOPMENT OF PULMONARY EDEMA MAY BE DELAYED UP TO 48 HOURS AFTER EXPOSURE. THE EARLY SYMPTOMS OF PULMONARY EDEMA INCLUDE THE SHORTNESS OF BREATH AND TIGHTNESS IN THE CHEST.

INGESTION: SEVERE PAIN; BURNING OF THE MOUTH, THROAT AND ESOPHAGUS; VOMITING; DIARRHEA; COLLAPSE AND POSSIBLE DEATH MAY RESULT.

POTENTIAL CHRONIC HEALTH EFFECTS: REPEATED OR PROLONGED SKIN CONTACT WOULD BE EXPECTED TO CAUSE DRYING, CRACKING, AND INFLAMMATION OF THE SKIN (DERMATITIS). REPEATED AND/OR PROLONGED EXPOSURES MAY CAUSE PRODUCTIVE COUGH, RUNNING NOSE, BRONCHOPNEUMONIA, PULMONARY EDEMA (FLUID BUILD UP IN LUNGS) AND REDUCTION OF PULMONARY FUNCTION.

OTHER IMPORTANT HAZARDS: SEE TOXICOLOGICAL INFORMATION, SECTION 11.

**SECTION 4: FIRST AID MEASURES**

**GENERAL:** CORROSIVE EFFECTS ON THE SKIN AND EYES MAY BE DELAYED AND DAMAGE MAY OCCUR WITHOUT THE SENSATION OR ONSET OF PAIN. STRICT ADHERENCE TO FIRST AID MEASURES FOLLOWING ANY EXPOSURE IS ESSENTIAL. SPEED IS ESSENTIAL. IF YOU FEEL UNWELL SEEK MEDICAL ADVICE (SHOW THE LABEL WHERE POSSIBLE)

**INHALATION:** MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, OXYGEN MAY BE BENEFICIAL IF ADMINISTERED BY TRAINED PERSONNEL, PREFERABLY ON A DOCTOR'S ADVICE. GIVE ARTIFICIAL RESPIRATION ONLY IF BREATHING HAS STOPPED. GIVE CARDIOPULMONARY RESUSCITATION (CPR) ONLY IF THERE IS NO BREATHING AND NO PULSE. DO NOT USE MOUTH-TO-MOUTH METHOD IF VICTIM INGESTED OR INHALED THE SUBSTANCE: INDUCE ARTIFICIAL RESPIRATION WITH THE AID OF A POCKET MASK EQUIPPED WITH A ONE-WAY VALVE OR OTHER PROPER RESPIRATORY MEDICAL DEVICE. OBTAIN MEDICAL ATTENTION IMMEDIATELY. SYMPTOMS OF PULMONARY EDEMA CAN BE DELAYED UP TO 48 HOURS AFTER EXPOSURE.

**SKIN CONTACT:** IMMEDIATELY FLUSH SKIN WITH RUNNING WATER FOR A MINIMUM OF 20 MINUTES OR UP TO 60 MINUTES FOR CRITICAL BODY AREAS IF IRRITATION PERSISTS, REPEAT FLUSHING. UNDER RUNNING WATER, REMOVE CONTAMINATED CLOTHING, JEWELRY, AND SHOES. FOR BURNS OBTAIN MEDICAL ATTENTION IMMEDIATELY. DO NOT TRANSPORT VICTIM UNLESS THE RECOMMENDED FLUSHING PERIOD IS COMPLETED OR FLUSHING CAN BE CONTINUED DURING TRANSPORT. DISCARD CONTAMINATED CLOTHING AND SHOES IN A MANNER WHICH LIMITS FURTHER EXPOSURE.

**EYE CONTACT:** IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR A MINIMUM OF 20 MINUTES, PREFERABLY UPWARD TO 60 MINUTES. HOLD EYELIDS OPEN DURING FLUSHING. IF IRRITATION PERSISTS, REPEAT FLUSHING. DO NOT TRANSPORT VICTIM UNTIL THE RECOMMENDED FLUSHING PERIOD IS COMPLETED UNLESS FLUSHING CAN BE CONTINUED DURING TRANSPORT. OBTAIN MEDICAL ATTENTION IMMEDIATELY.

**INGESTION:** IF VICTIM IS ALERT AND NOT CONVULSING, RINSE MOUTH OUT AND GIVE 8 - 10 OZ. OF WATER TO DILUTE MATERIAL. DO NOT INDUCE VOMITING. IF SPONTANEOUS VOMITING OCCURS, HAVE VICTIM LEAN FORWARD WITH HEAD DOWN TO AVOID THE BREATHING IN OF VOMITUS, RINSE MOUTH AND ADMINISTER MORE WATER. OBTAIN MEDICAL ATTENTION IMMEDIATELY. IMMEDIATELY TRANSPORT VICTIM TO AN EMERGENCY FACILITY.

**NOTES TO PHYSICIAN:** SYMPTOMATIC. TREATMENT AND SUPPORTIVE THERAPY AS INDICATED. THIS PRODUCT CONTAINS MATERIALS THAT MAY CAUSE SEVERE PNEUMONITIS IF ASPIRATED. IF INGESTION HAS OCCURRED LESS THAN 2 HOURS EARLIER, CARRY OUT CAREFUL GASTRIC LAVAGE; USE ENDOTRACHEAL CUFF IF AVAILABLE, TO PREVENT ASPIRATION. OBSERVE PATIENT FOR RESPIRATORY DIFFICULTY FROM ASPIRATION PNEUMONITIS. GIVE ARTIFICIAL RESUSCITATION AND APPROPRIATE CHEMOTHERAPY IF RESPIRATION IS DEPRESSED.

**SECTION 5: FIRE FIGHTING MEASURES**

**FIRE HAZARDS/CONDITION OF FLAMMABILITY:** NOT FLAMMABLE UNDER NORMAL CONDITIONS OF USE. MAY REACT WITH WATER, GENERATING HEAT. THE HEAT THAT IS GENERATED MAY BE SUFFICIENT ENOUGH TO IGNITE NEARBY COMBUSTIBLE MATERIALS. CONTACT WITH SOME REACTIVE METALS MAY PRODUCE FLAMMABLE HYDROGEN GAS.

**FLASH POINT:** N/AP.

**FLASH POINT METHOD:** N/AP.

**LOWER FLAMMABLE LIMIT:** N/AP.

**OXIDIZING PROPERTIES:** NONE KNOWN

**FLAME PROJECTION LENGTH:** N/AP.

**EXPLOSION DATA: SENSITIVITY TO MECHANICAL IMPACT/STATIC DISCHARGE:** NOT EXPECTED TO BE SENSITIVE TO MECHANICAL IMPACT OR STATIC DISCHARGE.

**SUITABLE EXTINGUISHING MEDIA:** USE MEDIA SUITABLE TO THE SURROUNDING FIRE SUCH AS WATER FOG OR FINE SPRAY, ALCOHOL FOAMS, CARBON DIOXIDE AND DRY CHEMICAL. IF WATER IS USED, CARE SHOULD

**AUTO IGNITION TEMPERATURE:** N/AV.

**UPPER FLAMMMABLE LIMIT:** N/AP.

**FLASHBACK OBSERVED:** N/AP.

BE TAKEN, SINCE IT CAN GENERATE HEAT AND CAUSE SPLATTERING IF APPLIED DIRECTLY TO SODIUM HYDROXIDE. WATER CAN BE USED IN FLOODING QUANTITIES AS A SPRAY OR FOG TO KEEP FIRE-EXPOSED CONTAINER COOL AND ABSORB HEAT.

**SPECIAL FIRE-FIGHTING PROCEDURES/EQUIPMENT:**

WEAR FULL PROTECTIVE EQUIPMENT INCLUDING A SELF-CONTAINED BREATHING APPARATUS (SCBA). TAKE CARE NOT TO SPLASH OR SPLATTER THIS MATERIAL. EVACUATE AREA AND FIGHT FIRE FROM A SAFE DISTANCE OR A PROTECTED LOCATION. APPROACH FIRE FROM UPWIND. IF POSSIBLE, ISOLATE MATERIALS NOT INVOLVED IN THE FIRE AND PROTECT PERSONNEL. MOVE CONTAINERS FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES.

**HAZARDOUS COMBUSTION PRODUCTS:**

SODIUM OXIDES.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**LEAK AND SPILL PROCEDURES:**

RESTRICT ACCESS TO AREA UNTIL COMPLETION OF CLEAN UP. ENSURE TRAINED PERSONNEL CONDUCT THE CLEAN UP. VENTILATE AREA. WEAR ADEQUATE PERSONAL PROTECTION EQUIPMENT. DO NOT TOUCH SPILLED MATERIAL. PREVENT ENTRY INTO SEWERS OR WATERWAYS. COMPLY WITH FEDERAL, PROVINCIAL/STATE AND LOCAL REGULATIONS ON REPORTING RELEASES. SOLUTIONS SHOULD BE CONTAINED BY DIKING WITH INERT MATERIAL SUCH AS SAND OR EARTH. SOLUTIONS CAN BE RECOVERED OR CAREFULLY DILUTED WITH WATER AND CAUTIOUSLY NEUTRALIZED WITH ACIDS SUCH AS ACETIC ACID OR HYDROCHLORIC ACID.

**SECTION 7: HANDLING AND STORAGE**

**SAFE HANDLING PROCEDURES:**

USE SMALLEST POSSIBLE AMOUNTS IN DESIGNATED AREAS WITH ADEQUATE VENTILATION. KEEP CONTAINERS CLOSED WHEN NOT IN USE. EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUES. AVOID GENERATING MISTS. TRANSFER SOLUTIONS USING EQUIPMENT, WHICH IS CORROSIVE-RESISTANT. CAUTIOUSLY TRANSFER INTO STURDY CONTAINERS MADE OF COMPATIBLE MATERIALS. NEVER RETURN CONTAMINATED MATERIAL TO ITS ORIGINAL CONTAINER. CONSIDERABLE HEAT IS GENERATED WHEN DILUTED WITH WATER. PROPER HANDLING PROCEDURES MUST BE FOLLOWED TO PREVENT VIGOROUS BOILING, SPLATTERING, OR VIOLENT ERUPTION OF THE DILUTED SOLUTION. NEVER ADD WATER TO CAUSTIC. ALWAYS ADD CAUSTIC TO WATER AND PROVIDE AGITATION.

**STORAGE REQUIREMENTS:**

STORE IN A COOL, DRY, WELL-VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE AND WHEN EMPTY. PROTECT FROM DAMAGE. STORE AWAY FROM INCOMPATIBLE MATERIALS SUCH AS STRONG ACIDS, NITROAROMATIC, NITROPARAFFINIC, OR ORGANOHALOGEN COMPOUNDS. USE CORROSIVE-RESISTANT STRUCTURAL MATERIALS AND LIGHTING AND VENTILATION SYSTEMS IN THE STORAGE AREA. AVOID FREEZING. DO NOT EXPOSE SEALED CONTAINERS TO TEMPERATURES ABOVE 40°C (104°F).

**INCOMPATIBLE MATERIALS:**

REACTS VIOLENTLY WITH WATER GENERATING SIGNIFICANT HEAT AND DANGEROUSLY SPATTERING CORROSIVE SODIUM HYDROXIDE. VIOLENTLY POLYMERIZES ACETALDEHYDE, ACROLEIN OR ACRYLONITRILE. PRODUCES FLAMMABLE AND EXPLOSIVE HYDROGEN GAS IF IT REACTS WITH SODIUM TETRAHYDROBORATE OR METALS, SUCH AS ALUMINUM, TIN, OR ZINC. CAN FORM SPONTANEOUSLY FLAMMABLE CHEMICALS UPON CONTACT WITH 1,2-DICHLOROETHYLENE, TRICHLOROETHYLENE, OR TETRACHLOROETHANE. CAN PRODUCE CARBON MONOXIDE UPON CONTACT WITH SOLUTIONS OF SUGARS, SUCH AS FRUCTOSE, LACTOSE, AND MALTOSE.

**SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**EXPOSURE LIMITS**

INGREDIENTS	ACGIH TLV		OSHA PEL	
	TWA	STEL	PEL	STEL
SODIUM HYDROXIDE	2MG/M <sup>3</sup> (CEILING)	N/AV.	2MG/M <sup>3</sup>	N/AV.

SEE COMPOSITION/INFORMATION ON INGREDIENTS, SECTION 2.

**ENGINEERING CONTROLS:**

LOCAL EXHAUST VENTILATION SHOULD BE APPLIED WHEREVER THERE IS AN INCIDENCE OF POINT SOURCE EMISSIONS OR DISPERSION OF REGULATED CONTAMINANTS IN THE WORK AREA. VENTILATION CONTROL OF THE CONTAMINANT AS CLOSE TO ITS POINT OF GENERATION IS BOTH THE MOST ECONOMICAL AND SAFEST METHOD TO MINIMIZE PERSONNEL EXPOSURE OF AIRBORNE CONTAMINANTS. THE MOST EFFECTIVE MEASURES ARE THE TOTAL ENCLOSURE OF PROCESSES AND THE MECHANIZATION OF HANDLING PROCEDURES TO PREVENT ALL PERSONAL CONTACT.

**GLOVES/TYPE:**

GLOVES MADE FROM RUBBER SHOULD BE IMPERVIOUS UNDER CONDITIONS OF USE.

**RESPIRATORY/TYPE:**

UP TO 10mg/m<sup>3</sup>: SUPPLIED AIR RESPIRATOR (SAR) OPERATED IN A CONTINUOUS-FLOW MODE, EYE PROTECTION NEEDED; OR FULL-FACEPIECE RESPIRATOR WITH HIGH-EFFICIENCY PARTICULATE FILTER(S); OR POWERED AIR-PURIFYING RESPIRATOR WITH DUST AND MIST FILTER(S), EYE PROTECTION NEEDED; OR FULL FACEPIECE SELF CONTAINED BREATHING APPARATUS (SCBA).

**EYE/TYPE:**

USE FULL FACE SHIELD AND CHEMICAL SAFETY GOGGLES WHEN THERE IS POTENTIAL FOR CONTACT.

**FOOTWEAR/TYPE:**

RUBBER SAFETY BOOTS.

**CLOTHING /TYPE:**

PROTECTIVE CLOTHING MADE FROM RUBBER SHOULD BE IMPERVIOUS UNDER CONDITIONS OF USE.

**OTHER/TYPE:**

EYE BATH AND SAFETY SHOWER.

<b>SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES</b>
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<b>PHYSICAL STATE:</b>	LIQUID	<b>APPEARANCE:</b>	CLEAR TO SLIGHTLY HAZY LIQUID
<b>ODOUR:</b>	ODOURLESS	<b>ODOUR THRESHOLD:</b>	N/AV.
<b>pH:</b>	14.0	<b>BOILING POINT:</b>	142 – 148°C (288- 298°F)
<b>SPECIFIC GRAVITY:</b>	1.53 @ 15.5°C (60°F)	<b>MELTING/FREEZING POINT:</b>	12 – 15°C (54 – 59°F)
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b>	N/AV.	<b>SOLUBILITY IN WATER:</b>	100% COMPLETE
<b>EVAPOURATION RATE:</b>	N/AV.	<b>VAPOUR DENSITY (AIR = 1):</b>	N.AP.
		<b>VAPOUR PRESSURE (mmHg) at 20°C (68°F):</b>	1.5 mmHg
<b>MOLECULAR WEIGHT:</b>	39.99		
<b>MOLECULAR FORMULAR:</b>	NaOH		

<b>SECTION 10: REACTIVITY AND STABILITY DATA</b>
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**STABILITY AND REACTIVITY:**

STABLE UNDER THE RECOMMENDED STORAGE AND HANDLING CONDITIONS PRESCRIBED. MAY ABSORB CARBON DIOXIDE FROM THE AIR TO FORM SODIUM CARBONATE. MAY REACT WITH WATER, GENERATING HEAT. CONTACT WITH SOME REACTIVE METALS MAY PRODUCE FLAMMABLE HYDROGEN GAS. HAZARDOUS POLYMERIZATION DOES NOT OCCUR.

**CONDITIONS TO AVOID:**

AVOID HEAT AND OPEN FLAME. AVOID CONTACT WITH INCOMPATIBLE MATERIALS. AVOID MOISTURE.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

THERMAL DECOMPOSITION – SODIUM OXIDE. REFER TO HAZARDOUS COMBUSTION PRODUCTS IN SECTION 5.

<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>
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**TOXICOLOGICAL DATA:** NO DATA IS AVAILABLE ON THE PRODUCT ITSELF. REFER TO SECTION 2 FOR INDIVIDUAL INGREDIENT LD50'S AND LC50'S.

**CARCINOGENIC STATUS:** NO COMPONENTS ARE LISTED AS CARCINOGENIC BY ACGIH, IARC, OSHA, OR NTP.

**REPRODUCTIVE EFFECTS:** NOT EXPECTED TO HAVE OTHER REPRODUCTIVE EFFECTS.

**TERATOGENICITY:** NOT EXPECTED TO BE A TERATOGEN.

**MUTAGENICITY:** NOT EXPECTED TO BE MUTAGENIC IN HUMANS.

**SENSITIZATION TO MATERIAL:**

NOT EXPECTED TO BE A SKIN OR RESPIRATORY SENSITIZER.

**SYNERGISTIC MATERIALS:** NO INFORMATION AVAILABLE.

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:**

PRE-EXISTING SKIN, EYE AND RESPIRATORY DISORDERS.

**ADDITIONAL HEALTH HAZARDS:**

NONE KNOWN.

## SECTION 12: ECOLOGICAL INFORMATION

### ENVIRONMENTAL EFFECTS:

ECOLOGICAL CHARACTERISTICS OF THIS PRODUCT HAVE NOT BEEN FULLY INVESTIGATED. THE PRODUCT SHOULD NOT BE ALLOWED TO ENTER DRAINS OR WATER COURSES, OR BE DEPOSITED WHERE IT CAN AFFECT GROUND OR SURFACE WATERS.

### IMPORTANT ENVIRONMENTAL CHARACTERISTICS:

NO INFORMATION AVAILABLE.

**ECOTOXICOLOGICAL:** NO DATA IS AVAILABLE ON THE PRODUCT ITSELF.

## SECTION 13: DISPOSAL CONSIDERATIONS

**HANDLING FOR DISPOSAL:** SEE SECTION 7 – HANDLING AND STORAGE FOR FURTHER DETAILS.

**METHOD OF DISPOSAL:** DISPOSE OF IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND LOCAL HAZARDOUS WASTE LAWS.

## SECTION 14: TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** SODIUM HYDROXIDE SOLUTION

**TDG CLASSIFICATION:** CLASS 8, UN1824, PACKING GROUP II

## SECTION 15: REGULATORY INFORMATION

**WHMIS CLASSIFICATION:** CLASS E (CORROSIVE MATERIAL)

ALL INGREDIENTS LISTED APPEAR ON THE DOMESTIC SUBSTANCES LIST (DSL) AND TOXIC SUBSTANCE CONTROL ACT (TSCA) INVENTORY.

## SECTION 16: OTHER INFORMATION

<b>LEGEND:</b>	ACGIH	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
	CAS #	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
	DSL	DOMESTIC SUBSTANCE LIST
	IARC	INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
	LC	LETHAL CONCENTRATION
	LD	LETHAL DOSE
	N.AP.	NOT APPLICABLE
	N. AV.	NOT AVAILABLE
	NTP	NATIONAL TOXICOLOGY PROGRAM
	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
	PEL	PERMISSIBLE EXPOSURE LIMIT
	SAR	SUPPLIED AIR RESPIRATOR
	SCBA	SELF-CONTAINED BREATHING APPARATUS
	STEL	SHORT TERM EXPOSURE LIMIT
	TDG	CANADIAN TRANSPORTATION OF DANGEROUS GOODS ACT & REGULATIONS
	TSCA	TOXIC SUBSTANCE CONTROL ACT
	TWA	TIME WEIGHTED AVERAGE
	WHMIS	WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM

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**MSDS PREPARATION DATE:** (DD/MM/YYYY)

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