



MATERIAL SAFETY DATA SHEET

KEM CANADA MFG.
4 BLAIR DRIVE
BRAMPTON, ONTARIO
L6T 2H5
TEL# (905) 456-9444

EMERGENCY # CANUTEC (613) 996-6666
"USE IN CASE OF CHEMICAL EMERGENCY ONLY"

W.H.M.I.S. CLASSIFICATION: D2B, E

MATERIAL REFERENCE NO: 544800

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMTREET SB 448	
CHEMICAL NAME : NOT APPLICABLE	CHEMICAL FAMILY : BLENDED PRODUCT
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: STEAM BOILER TREATMENT	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
SODIUM HYDROXIDE	1.0-5.0	2 MG/M3	1310-73-2	140 MG/KG
2-PROPENOIC ACID (SODIUM SALT)	1.0-5.0	NOT AVAILABLE	9003-04-7	NOT AVAILABLE
AMINO-2 METHYL-2 PROPANOL-1	1.0-5.0	NOT AVAILABLE	124-68-5	NOT AVAILABLE

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: CLEAR, AMBER COLOUR; ACRID ODOUR.		
ODOUR THRESHOLD (PPM) NOT ESTABLISHED	SPECIFIC GRAVITY 1.021	VAPOUR PRESSURE (MM) NOT ESTABLISHED
VAPOUR DENSITY (AIR=1) NOT ESTABLISHED	EVAPORATION RATE NOT AVAILABLE	SOLUBILITY IN WATER (20°C) COMPLETE
BOILING POINT (C) NOT AVAILABLE	FREEZING POINT (C) NOT AVAILABLE	% VOLATILE (BY VOLUME) >92
pH (10.0 % SOLUTION) 12.0-13.0	DENSITY (G/ML) NOT APPLICABLE	COEF.OF WATER/OIL DISTR NOT AVAILABLE



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SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: NON-FLAMMABLE			
IF YES, UNDER WHICH CONDITIONS:			
MEANS OF EXTINCTION: WATER FOG, CARBON DIOXIDE, DRY CHEMICAL			
SPECIAL PROCEDURES: NONE APPLICABLE			
FLASH POINT (C) AND METHOD: NONE			
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON AND NITROGEN,			
AMMONIA			
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP(C)	
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	
EXPLOSION DATA SENSITIVITY			
TO CHEMICAL IMPACT			
NOT APPLICABLE	NOT APPLICABLE	NOT AVAILABLE	
SENSITIVITY TO STATIC DISCHARGE: NOT APPLICABLE			

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE			
IF NO, UNDER WHICH CONDITIONS:			
INCOMPATIBILITY TO OTHER SUBSTANCES: YES			
IF SO, WHICH ONES: ACIDS, REACTIVE METALS, ORGANIC HALOGENS, ORGANIC			
NITRO COMPOUNDS.			
REACTIVITY AND UNDER WHAT CONDITIONS: NOT ESTABLISHED			
HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON AND NITROGEN,			
AMMONIA.			

SECTION VI - HEALTH HAZARD DATA

ROUTE OF ENTRY:			
SKIN CONTACT: YES	SKIN ABSORPTION: YES	EYE CONTACT: YES	
INHALATION: YES	INGESTION: YES		



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EFFECTS OF ACUTE EXPOSURE TO MATERIAL:
EYES-MAY CAUSE BURNS, CORNEAL DAMAGE.
SKIN-MAY CAUSE IRRITATION, BURNS.
INHALATION-MAY CAUSE IRRITATION OF MOUTH, THROAT AND LARYNX.
EXCESSIVE MIST INHALATION MAY CAUSE LUNG DAMAGE WHICH COULD
RESULT IN CHEMICAL PNEUMONIA.
INGESTION-OF LARGE AMOUNTS MAY RESULT IN GASTRO-INTESTINAL
IRRITATION OR ULCERATION, BURNS TO THE MOUTH AND THROAT.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:
MAY CAUSE DERMITITIS UPON FREQUENT OR PROLONGED CONTACT.

LD 50 OF MATL.	LC 50 OF MATL.	EXPOSURE LIMITS	IRRITANCY OF MATL
NOT AVAILABLE	NOT AVAILABLE	NOT ESTABLISHED	MODERATE

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
NOT AVAILABLE	NOT AVAILABLE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:
NONE KNOWN

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: GLOVES & GLASSES IF USING CONCENTRATE

GLOVES: RUBBER / VINYL / PVA
RESPIRATORY: AIR PURIFYING RESPIRATOR IF MISTY CONDITIONS PREVAIL.
EYE: SAFETY GOGGLES OR FACE SHIELD
FOOTWEAR: IMPERMEABLE
CLOTHING: IMPERMEABLE
OTHER: EYE WASH
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): GENERAL IS
NORMALLY SUFFICIENT.

LEAK AND SPILL PROCEDURE:
VENTILATE. SMALL SPILLS SHOULD BE FLUSHED WITH LARGE AMOUNTS OF
WATER. LARGE SPILLS SHOULD BE COLLECTED FOR RECLAIM OR DISPOSAL.
ABSORB REMAINING RESIDUAL ONTO INERT ABSORBANT AND SCOOP INTO
DISPOSAL CONTAINER.

WASTE DISPOSAL:
DISPOSE OF THROUGH A LICENSED DISPOSAL FACILITY IN ACCORDANCE WITH
LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.



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SECTION VIII - FIRST AID MEASURES

PROCEDURES: HAZARDOUS PRODUCT. OBTAIN MEDICAL ATTENTION FOR ALL EXPOSURES OTHER THAN MINOR INSTANCES OF INHALATION OR SKIN CONTACT. INHALATION: REMOVE TO FRESH AIR. GIVE OXYGEN IF BREATHING IS DIFFICULT. SEEK MEDICAL ATTENTION. EYE CONTACT: FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION. SKIN CONTACT: FLUSH THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. RINSE MOUTH WITH WATER. DRINK MILK OR WATER. DO NOT GIVE ANYTHING BY MOUTH IF VICTIM IS UNCONSCIOUS. GET MEDICAL ATTENTION IMMEDIATELY.

SOURCES USED: RAW MATERIAL SUPPLIER'S MATERIAL SAFETY DATA SHEETS

ADDITIONAL INFORMATION: NONE

SECTION IX - TDG SHIPPING INFORMATION

SHIPPING NAME	CLASS	UN NO.	PACKING GROUP
CORROSIVE LIQUID N.O.S. (SODIUM HYDROXIDE)	8	1760	III

HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH SKIN AND EYES. WASH THOROUGHLY AFTER HANDLING.

STORAGE REQUIREMENTS:
STORE IN A COOL DRY PLACE. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
KEEP FROM FREEZING.

SPECIAL SHIPPING INFORMATION: NONE

SECTION X - HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
0	0	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444
REVIEWED: DECEMBER 14, 2002

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