



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: D2A, D2B, E

MATERIAL REFERENCE NO: 545100

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMTREET SB 451	
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. N.A. U.N. NUMBERS	LD 50 ORAL, RAT
SODIUM HYDROXIDE	1.0-5.0	2 MG/M3	1310-73-2	140 MG/KG
TETRA SODIUM SALT OF ETHYLENE-DIAMINE TETRAACETIC ACID	2.0-5.0	NOT AVAILABLE	64-02-8	3030 MG/KG

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: CLEAR, AMBER COLOUR; ACRID ODOUR.		
ODOUR THRESHOLD (PPM) NOT ESTABLISHED	SPECIFIC GRAVITY 1.06	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) 90
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: NONE FLAMMABLE		
IF YES, UNDER WHICH CONDITIONS:		
MEANS OF EXTINCTION: WATER FOG, CARBON DIOXIDE, DRY CHEMICAL		
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF-		
CONTAINED BREATHING APPARATUS FOR ALL CHEMICAL FIRES.		
FLASH POINT (C) AND METHOD: NONE		
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON, NITROGEN AND SILICA		
AMMONIA		
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP(C)
NOT APPLICABLE	NOT APPLICABLE	NOT AVAILABLE
EXPLOSION DATA SENSITIVITY	RATE OF BURNING	EXPLOSIVE POWER
TO CHEMICAL IMPACT		
NOT AVAILABLE	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 LARNYX.
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, SEVERE 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: SMALL SPILLS SHOULD BE FLUSHED WITH LARGE
VOLUMES OF WATER. LARGE SPILLS SHOULD BE CONTAINED AND TRANSFERED
TO SUITABLE CONTAINER FOR REUSE OR DISPOSAL. ABSORB REMAINING
MATERIAL ONTO INERT ABSORBENT.

WASTE DISPOSAL: DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL AND
FEDERAL REGULATIONS.



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SECTION VIII - FIRST AID MEASURES

PROCEDURES:
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. LAUNDRY CLOTHING BEFORE REUSE.
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: PROTECT AGAINST EYE AND SKIN CONTACT. WASH THOROUGHLY AFTER HANDLING.			
STORAGE REQUIREMENTS: STORE IN A COOL, DRY AREA. KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP FROM FREEZING.			
SPECIAL SHIPPING INFORMATION: NONE			

SECTION X - HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
0	0	1

SECTION XI - PREPARATION DATE OF MSDS

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

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