



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: 740400

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMTREET 404	
CHEMICAL NAME: NOT APPLICABLE	CHEMICAL FAMILY: ALKALINE BLEND
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: BOILER WASH	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 RAT, ORAL
POTASSIUM HYDROXIDE	1.0-5.0	2 MG/M3	1310-58-3	214 MG/KG
ETHYLENE DIAMINE	1.0-5.0	NO DATA	64-02-8	300 MG/KG
TETRA ACETIC ACID				
TETRAPOTASSIUM PYROPHOSPHATE	10.0-30.0	NO DATA	7320-34-5	>1000 MG/KG

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: BROWN LIQUID, LOW ODOUR		
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY	VAPOUR PRESSURE (MM)
NOT AVAILABLE	1.145	NOT AVAILABLE
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	SOLUBILITY IN WATER
NOT AVAILABLE	(WATER=1) >1	(20 ° C) COMPLETE
BOILING POINT (C)	FREEZING POINT (C)	% VOLATILE (BY WEIGHT)
NOT AVAILABLE	NOT AVAILABLE	>75
pH (10% SOLUTION)	DENSITY (G/ML)	COEF.OF WATER/OIL DISTR
12.0-13.0	NOT APPLICABLE	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, CHEMICAL FOAM, CARBON DIOXIDE			
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR, INCLUDING SELF-			
CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH			
WATER.			
FLASH POINT (C) AND METHOD: NONE (TCC)			
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON, POTASSIUM AND			
PHOSPHOROUS			
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 AVAILABLE			

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE		
IF NO, UNDER WHICH CONDITIONS:		
INCOMPATIBILITY TO OTHER SUBSTANCES: YES		
IF SO, WHICH ONES: STRONG ACIDS, METALS, ORGANIC CHEMICALS,		
NITROCARBONS, HALOCARBONS.		
REACTIVITY AND UNDER WHAT CONDITIONS: CAN CORRODE METALS. EXOTHERMIC		
WHEN ADDED TO WATER. CAN REACT VIOLENTLY WITH ACIDS. CAN PRODUCE		
CARBON MONOXIDE WHEN ADDED TO REDUCING SUGARS.		
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION CAN FORM		
OXIDES OF CARBON, POTASSIUM AND PHOSPHOROUS.		

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-CONTACT CAN CAUSE SEVERE IRRITATION, STINGING OR BURNS, INTENSE |
|WATERING, CONJUNCTIVITIS. |
|SKIN-CONTACT CAN MODERATE TO SEVERE IRRITATION, ITCHING, |
|INFLAMMATION. |
|INHALATION-OF MISTS CAN CAUSE IRRITATION OF NASAL AND RESPIRATORY |
|SYSTEM. |
|INGESTION-MAY CAUSE SEVERE IRRITATION AND POSSIBLE BURNS TO MOUTH |
|AND ESOPHAGUS. MAY CAUSE ABDOMINAL DISCOMFORT, NAUSEA, VOMITING AND |
|DIARRHEA. |

|EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: |
|EYES-CONTACT MAY CAUSE ULCERATION OF EYES, LOSS OF SIGHT. |
|SKIN-CONTACT MAY SEVERE IRRITATION, DRYING, CRACKING OF SKIN. |
|INHALATION-MAY CAUSE CHEMICAL BRONCHITIS, ASPHYXIA. |
|INGESTION-MAY CAUSE RISK OF PERFORATION OF STOMACH, STATE OF SHOCK, |
|UNCONSCIOUSNESS. |

|LD 50 OF MATL. |LC 50 OF MATL. |EXPOSURE LIMIT(S) |IRRITANCY OF MATL |
| NOT AVAILABLE | NOT AVAILABLE | NOT AVAILABLE | CORROSIVE |

|SENSITIZATION OF MATERIAL | SYNERGISTIC MATERIALS |
| NOT AVAILABLE | NOT AVAILABLE |

|CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY |
| NONE KNOWN |
| |

SECTION VII - PREVENTIVE MEASURES

|PERSONAL PROTECTIVE EQUIPMENT: |

| GLOVES: RUBBER OR VINYL WHEN HANDLING CONCENTRATE |
|RESPIRATORY: NONE FOR NORMAL USE. APPROPRIATE NIOSH APPROVED |
| RESPIRATOR IF MISTING OCCURS. |
| EYE: SAFETY GLASSES AND FACE SHIELD. |
| FOOTWEAR: RUBBER |
| CLOTHING: RUBBER APRON. LONG SLEEVED SHIRT AND FULL LENGTH |
| TROUSERS. |
| OTHER: EYE WASH AND SAFETY SHOWER |
|ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): PROVIDE |
|LOCAL VENTILATION IN CONFINED OR POORLY VENTILATED AREAS TO MAINTAIN |
|AIRBORN CONCENTRATIONS WITHIN PERMISSIBLE LIMITS. |

|LEAK AND SPILL PROCEDURE: WEAR RECOMMENDED PROTECTIVE EQUIPMENT. |
|STOP LEAK AND CONTAIN SPILL. TRANSFER TO SUITABLE CONTAINER FOR |
|REUSE OR DISPOSAL. ABSORB REMAINING MATERIAL ONTO INERT ABSORBANT |
|AND SCOOP INTO DISPOSAL CONTAINER. FLUSH FLOOR THOROUGHLY WITH WATER |

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



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SECTION VIII - FIRST AID MEASURES

PROCEDURES:
EYES-IMMEDIATELY FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES
WHILE HOLDING EYELIDS OPEN. GET IMMEDIATE MEDICAL ATTENTION.
SKIN-REMOVE CONTAMINATED CLOTHING IMMEDIATELY AND FLUSH AFFECTED
AREA WITH WATER FOR AT LEAST 15 MINUTES. IF PAIN OR IRRITATION
PERSIST GET MEDICAL ATTENTION. WASH CLOTHING BEFORE RE-USE.
INHALATION-MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT GIVE
OXYGEN. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION AND THEN OXYGEN
CONTACT A PHYSICIAN.
INGESTION-DO NOT INDUCE VOMITING. SLOWLY GIVE 1-2 GLASSES OF WATER.
NEVER GIVE ANYTHING BY MOUTH IF PERSON IS UNCONSCIOUS OR CONVULSING.
GET IMMEDIATE MEDICAL ATTENTION.

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

ADDITIONAL INFORMATION: NONE

SECTION IX - TDG SHIPPING INFORMATION

SHIPPING NAME	CLASS	UN NO.	PG
CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXIDE)	8	1760	II

HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES, SKIN AND
CLOTHING. AVOID CONTACT WITH ACIDS AND REACTIVE MATERIALS. WASH
HANDS AFTER HANDLING.

STORAGE REQUIREMENTS: STORE IN A COOL, DRY AREA. KEEP CONTAINER
CLOSED WHEN NOT IN USE. KEEP FROM FREEZING.

SPECIAL SHIPPING INFORMATION: HEATED

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
0	1	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT	TELEPHONE # (905) 456-9444
REVISED: OCTOBER 10, 2009	REPLACES: MARCH 14, 2006

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