



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, E

MATERIAL REFERENCE NO: 760500

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMTREET 605	
CHEMICAL NAME : NOT APPLICABLE	CHEMICAL FAMILY : ACID BLEND
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: CONCENTRATED COOLING WATER TREATMENT	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
SULPHURIC ACID	5.0-10.0	1 MG/M3	7664-93-9	2100 MG/KG
ZINC SULPHATE	5.0-10.0	NOT AVAIL	7733-02-0	2449 MG/KG
1-HYDROXYETHYLIDENE -1,1,DIPHOSPHONIC ACID	5.0-10.0	NOT AVAIL	2809-21-4	2400 GM/KG
SODIUM POLYACRYLATE	1.0-5.0	NOT AVAIL	9003-04-7	NOT AVAIL
PHOSPHINO PROPONATE	1.0-5.0	NOT AVAIL	71050-62-9	>10 MG/KG
SODIUM TOLYTRIAZOLE	1.0-5.0	NOT AVAIL	29385-43-1	15 MG/KG
MALEIC ANHYDRIDE CO-POLYMER	1.0-5.0	NOT AVAIL	113221-69-5	3870 MG/KG

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: CLEAR PALE YELLOW LIQUID; ACRID ODOUR.		
ODOUR THRESHOLD (PPM) 50 PPM CALCULATED	SPECIFIC GRAVITY 1.112	VAPOUR PRESSURE (MM) 760 AT 93.3 (C)
VAPOUR DENSITY (AIR=1) 1	EVAPORATION RATE (WATER = 1) 1.1	SOLUBILITY IN WATER (20°C) COMPLETE
BOILING POINT (C) 93.3	FREEZING POINT (C) NOT AVAILABLE	% VOLATILE (BY WEIGHT) 80
pH (10% SOLUTION) 1.7-1.9	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: CHEMICAL FOAM, CARBON DIOXIDE, WATER FOG		
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF- CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.		
FLASH POINT (C) AND METHOD: MINIMUM 100 (TCC)		
HAZARDOUS COMBUSTION PRODUCTS: CARBON IOXIDE, CARBON MONOXIDE, MAY EVOLVE SULPHUR DIOXIDE VAPOURS ON BOILING.		
UPPER EXPLOSION LIMIT NOT AVAILABLE	LOWER EXPLOSION LIMIT NOT AVAILABLE	AUTOIGNITION TEMP(C) NOT AVAILABLE
EXPLOSION DATA SENSITIVITY TO CHEMICAL IMPACT NOT AVAILABLE	RATE OF BURNING NOT AVAILABLE	EXPLOSIVE POWER NOT AVAILABLE
SENSITIVITY TO STATIC DISCHARGE: NOT AVAILABLE		

SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: NORMALLY STABLE IF NO, UNDER WHICH CONDITIONS: HIGH TEMPERATURES
INCOMPATIBILITY TO OTHER SUBSTANCES: YES IF SO, WHICH ONES: AVOID CONTACT WITH STRONG ALKALIES OR OTHER REACTIVE MATERIALS. MAY CORRODE SUCH METALS AS STEEL, IRON, TIN BRASS.
REACTIVITY AND UNDER WHAT CONDITIONS: NOT KNOWN HAZARDOUS POLYMERIZATION WILL NOT OCCUR.
HAZARDOUS DECOMPOSITION PRODUCTS: MAY EVOLVE SULPHUR DIOXIDE GAS ON BOILING.

SECTION VI - HEALTH HAZARD DATA

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



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EFFECTS OF ACUTE EXPOSURE TO MATERIAL:
EYES-CONTACT MAY CAUSE STINGING OR BURNING, INTENSE WATERING, CONJUNCTIVITIS.
SKIN-CONTACT MAY CAUSE BURNING, INFLAMMATION, PAINFUL BLISTERS.
INHALATION-MAY CAUSE SEVERE IRRITATION OF NOSE, EYES AND THROAT, COUGHING, DIFFICULTY IN BREATHING.
INGESTION-MAY CAUSE IRRITATION AND BURNING SENSATION OF LIPS, MOUTH AND THROAT, PAIN IN SWALLOWING, GASTRO-INTESTINAL IRRITATION, ABUNDANT SALIVATION, STOMACH CRAMPS, NAUSEA AND VOMITING.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:
EYES-FREQUENT OR PROLONGED CONTACT MAY CAUSE CORNEAL SCARRING, CLOUDING, GLAUCOMA, CATARACTS.
INHALATION OF LARGE QUANTITIES OF VAPOUR OR MIST MAY CAUSE LIVER AND KIDNEY DAMAGE.
INGESTION OF SIGNIFICANT QUANTITIES OF SULPHURIC ACID MAY CAUSE LIVER AND KIDNEY DAMAGE, CARDIOVASCULAR EFFECTS.

LD 50 OF MATL. NOT AVAILABLE	LC 50 OF MATL. NOT AVAILABLE	EXPOSURE LIMIT(S) NOT AVAILABLE	IRRITANCY OF MATL CORROSIVE
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SENSITIZATION OF MATERIAL NOT AVAILABLE	SYNERGISTIC MATERIALS NOT AVAILABLE
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CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:
SULPHURIC ACID IS CLASSIFIED AS CARCINOGENIC BY IARC.

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: RUBBER OR VINYL
RESPIRATORY: APPROVED FOR ACID MIST OR VAPOURS
EYE: FACE SHIELD OR SAFETY GOGGLES
FOOTWEAR: IMPERMEABLE
CLOTHING: RUBBER APRON.
OTHER: EYE WASH AND SAFETY SHOWER
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): LOCAL AS NEEDED TO CONTROL FUMES.

LEAK AND SPILL PROCEDURE: STOP LEAKS AND CONTAIN SPILL. RECLAIM IF POSSIBLE OR DILUTE SPILL WITH LARGE AMOUNTS OF WATER THEN NEUTRALIZE WITH DILUTE SODA ASH OR LIME. AFTER ALL VISIBLE TRACES HAVE BEEN REMOVED, FLUSH AREA WITH LARGE AMOUNTS OF 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 EYES WITH RUNNING WATER FOR 15 MINUTES. OBTAIN MEDICAL ASSISTANCE.
 SKIN-REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES. IF PAIN OR IRRITATION PERSIST, SEEK MEDICAL ASSISTANCE. LAUNDRER CLOTHING BEFORE REUSE.
 INHALATION-MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION AND THEN GIVE OXYGEN. GET MEDICAL ATTENTION.
 INGESTION-IF SWALLOWED-DO NOT INDUCE VOMITING. GIVE MILK OF MAGNESIA MILK OR EGG WHITES. IF VOMITING OCCURS, GIVE FLUIDS AGAIN.
 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. (SULPHURIC ACID)	8	1760	III

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

STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL VENTILATED AREA IN ORIGINAL CONTAINER PROPERLY SEALED.

SPECIAL SHIPPING INFORMATION: HEATED

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMABILITY	REACTIVITY	HEALTH
0	1	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444
 REVIEWED: JANUARY 14, 2003

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