



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

MATERIAL REFERENCE NO: 581500

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMTREET GLYCOL "E-100"	
CHEMICAL NAME : MIXTURE	CHEMICAL FAMILY :GLYCOLS
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT AVAILABLE
SYNONYMS: NONE	
MATERIAL USE: INHIBITED ETHYLENE GLYCOL	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. N.A. U.N. NUMBERS	LD 50 ORAL, RAT
ETHYLENE GLYCOL	60.0-100.0	50	107-21-1	4700 MG/KG
BALANCE NOT CONTROLLED				

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: CLEAR LIQUID; MILD ODOUR.		
ODOUR THRESHOLD (PPM) NOT ESTABLISHED	SPECIFIC GRAVITY 1.130	VAPOUR PRESSURE (MM) 0.08 MMHG (25C)
VAPOUR DENSITY (AIR=1) 2.14	EVAPORATION RATE (BUTYL ACETATE=1) <1	SOLUBILITY IN WATER (20°C) COMPLETE
BOILING POINT (C) 197 (APPROX.)	FREEZING POINT (C) -13 (APPROX.)	% VOLATILE (BY VOLUME) > 95
pH (10% SOLUTION) NO DATA	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: NO		
IF YES, UNDER WHICH CONDITIONS:		
MEANS OF EXTINCTION: CO2, DRY CHEMICAL, WATER FOG.		
SPECIAL PROCEDURES: NONE APPLICABLE		
FLASH POINT (C) AND METHOD: NON-COMBUSTIBLE		
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON.		
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP(C)
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
EXPLOSION DATA SENSITIVITY	RATE OF BURNING	EXPLOSIVE POWER
TO CHEMICAL IMPACT		
NOT AVAILABLE	NOT AVAILABLE	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: OXIDIZING MATERIALS.		
REACTIVITY AND UNDER WHAT CONDITIONS: NOT ESTABLISHED		
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.		
HAZARDOUS DECOMPOSITION PRODUCTS: OXIDES OF CARBON.		
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR		

SECTION VI - HEALTH HAZARD DATA

ROUTE OF ENTRY:		
SKIN CONTACT: NO	SKIN ABSORPTION: NO	EYE CONTACT: YES
INHALATION: YES	INGESTION: YES	



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EFFECTS OF ACUTE EXPOSURE TO MATERIAL:
EYES- MAY EYE IRRITATION, TEARING, REDNESS, SWELLING OF CONJUNCTIVA.
SKIN-MAY CAUSE IRRITATION, DRYING CRACKING. PROLONGED CONTACT MAY CAUSE DERMATITIS IN SENSITIVE INDIVIDUALS.
INHALATION-MAY CAUSE IRRITATION OF EYES, NOSE, THROAT AND RESPIRATORY TRACT AND CNS DEPRESSION.
ABSORPTION-MAY CAUSE SYSTEMIC POISONING.
INGESTION-POISONING OCCURS IN 3 STAGES: CNS DEPRESSION, CARDIOPULMONARY FAILURE AND KIDNEY FAILURE DEPENDING ON AMOUNT.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:
PROLONGED OR REPEATED EXPOSURE TO HIGH CONCENTRATIONS MAY CAUSE LOSS OF APPETITE, AND LIVER, KIDNEY AND NEURAL DISFUNCTION.
PRE-EXISTING SKIN, EYE OR RESPIRATORY DISORDERS, OR IMPAIRED KIDNEY FUNCTION MAY BE AGGRAVATED BY EXPOSURE TO ETHYLENE GLYCOL.
INHALATION-OF MIST MAY PRODUCE SIGNS OF CNS INVOLVEMENT, PARTICULARLY DIZZINESS AND NYSTAGMUS.

LD 50 OF MATL. 6100-8540 MG/KG	LC 50 OF MATL. 10,000 MG/M3	EXPOSURE LIMITS NOT ESTABLISHED	IRRITANCY OF MATL TOXIC
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SENSITIZATION OF MATERIAL NOT AVAILABLE	SYNERGISTIC MATERIALS NOT AVAILABLE
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CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY:
CARCINOGENIC-CLASSIFIED A3-PROVEN FOR ANIMALS
TERATOGENIC-CLASSIFIED PROVEN FOR HUMANS

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: GLOVES & GLASSES IF USING CONCENTRATE

GLOVES: RUBBER, PVC
RESPIRATORY: NIOSH APPROVED AIR-PURIFYING FOR CONC. UP TO 500PPM
AIR SUPPLIED RESPIRATOR IF CONC. IS HIGHER OR UNKNOWN.
EYE: CHEMICAL GOGGLES
FOOTWEAR: IMPERVIOUS
CLOTHING: IMPERVIOUS APRON
OTHER: EYE WASH
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): SUFFICIENT MECHANICAL (GENERAL OR LOCAL EXHAUST) TO MAINTAIN TLV BELOW BELOW ACCEPTABLE LIMITS.

LEAK AND SPILL PROCEDURE: WEAR PROPER PROTECTIVE CLOTHING. CONTAIN SPILL. TRANSFER TO SUTABLE CONTAINER FOR REUSE OR DISPOSAL. ABSORB REMAINING MATERIAL ONTO INERT ABSORBANT. KEEP OUT OF SEWERS, STORM DRAINS AND WATERWAYS.

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



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SECTION VIII - FIRST AID MEASURES

PROCEDURES:
EYE CONTACT-FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ASSISTANCE IF IRRITATION PERSISTS.
SKIN CONTACT-FLUSH THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.
INHALATION-MOVE VICTIM TO FRESH AIR. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. SEEK MEDICAL ATTENTION.
INGESTION-INDUCE VOMITING BY EITHER GIVING IPECAC SYRUP OR PLACING FINGER AT BACK OF THROAT. NEVER GIVE ANYTHING TO AN UNCONSCIOUS OR CONVULSING PERSON. 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.	PACKING GROUP
NOT REGULATED			

HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES AND SKIN. USE IN WELL VENTILATED AREAS. WASH THOROUGHLY AFTER HANDLING.

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

SPECIAL SHIPPING INFORMATION: NONE

SECTION X - HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	TOXICITY
1	0	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444
REVIEWED: NOVEMBER 22, 2002

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