



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: B3

MATERIAL REFERENCE NO: 591100

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEMTREET RT #911	
CHEMICAL NAME: DIETHANOLAMINOETHANOL	CHEMICAL FAMILY: ALKYL HYDROXYL
	AMINE
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: MIXTURE
SYNONYMS: DEHA	
MATERIAL USE: CORROSION CONTROL	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. N.A. U.N. NUMBERS	LD 50 ORAL, RAT
N,N-DIETHYLHYDROXYL AMINE	10.0-30.0	NOT AVAILABLE	3710-84-7	2190 MG/KG

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: CLEAR, LIGHT STRAW COLOURED; AMINE ODOUR.		
ODOUR THRESHOLD (PPM) NOT AVAILABLE	SPECIFIC GRAVITY 0.974	VAPOUR PRESSURE (MM) NOT AVAILABLE
VAPOUR DENSITY (AIR=1) >1	EVAPORATION RATE NOT ESTABLISHED	SOLUBILITY IN WATER (20°C) SOLUBLE
BOILING POINT (C) >100	FREEZING POINT (C) >0	% VOLATILE (BY WEIGHT) 100
pH (10% SOLUTION) 10.0-11.0	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: COMBUSTIBLE		
IF YES, UNDER WHICH CONDITIONS: HIGH HEAT SOURCE		
MEANS OF EXTINCTION: DRY CHEMICAL OR FOAM, CARBON DIOXIDE, WATER FOG		
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF-CONTAINED BREATHING APPARATUS. VAPOURS ARE HEAVIER THAN AIR AND CAN TRAVEL TO A SOURCE OF IGNITION.		
FLASH POINT (C) AND METHOD: 46.1 (TCC)		
HAZARDOUS COMBUSTION PRODUCTS: MAY EVOLVE CARBON DIOXIDE, CARBON MONOXIDE, NOX PRODUCTS.		
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: DEHA BEGINS TO SLOWLY DECOMPOSE AT 120-130 C.		
INCOMPATIBILITY TO OTHER SUBSTANCES: YES		
IF SO, WHICH ONES: OXIDIZERS.		
REACTIVITY AND UNDER WHAT CONDITIONS: YES		
OXIDIZERS MAY REACT WITH AMINES TO FORM NITROSAMINES.		
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.		
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY EVOLVE DIETHYLAMINE.		

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 MAY CAUSE IRRITATION.
SKIN-PROLONGED CONTACT MAY CAUSE IRRITATION.
INGESTION-CAN RESULT IN HEADACHE, LOW BLOOD PRESSURE, DIZZINESS,
NAUSEA, VOMITING, BLUE DISCOLOURATION OF LIPS.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:
NOT ESTABLISHED

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

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
NOT AVAILABLE	NOT AVAILABLE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY
NO DATA

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: SYNTHETIC RUBBER
RESPIRATORY: LOCAL VENTILATION OR MSA APPROVED CARTRIDGE.
EYE: SAFETY GLASSES
CLOTHING: IMPERMEABLE
OTHER: EYE WASH AND SAFETY SHOWER
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): LOCAL IS
SUFFICIENT.

LEAK AND SPILL PROCEDURE: STOP LEAKS AND CONTAIN SPILL. SMALL SPILLS
CAN BE WASHED DOWN FLOOR DRAIN WITH LARGE VOLUMES OF WATER.
LARGE SPILLS-TRANSFER TO CONTAINER FOR RECLAIM OR DISPOSAL. ABSORB
RESIDUE ONTO ABSORBANT AND PLACE IN CONTAINER FOR DISPOSAL.

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. IF PAIN OR IRRITATION PERSIST, SEEK MEDICAL ASSISTANCE. SKIN-REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES. IF PAIN OR IRRITATION PERSIST, SEEK MEDICAL ASSISTANCE. LAUNDER CLOTHING BEFORE REUSE. INHALATION-MOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION. INGESTION, IF SWALLOWED-DO NOT INDUCE VOMITING. GIVE LARGE AMOUNT OF WATER. GET MEDICAL ATTENTION IMMEDIATELY.
SOURCES USED: RAW MATERIAL SUPPLIER'S MATERIAL SAFETY DATA SHEETS
ADDITIONAL INFORMATION: NONE

SECTION IX - TDG SHIPPING INFORMATION

SHIPPING NAME FLAMMABLE LIQUID N.O.S. (DIETHYLHYDROXYLAMINE)	CLASS 3	UN NO. 1993	PACKING GROUP III
HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH SKIN AND CLOTHING.			
STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL VENTILATED AREA IN ORIGINAL CONTAINER. KEEP FROM FREEZING.			
SPECIAL SHIPPING INFORMATION: NONE			

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY 2	REACTIVITY 0	HEALTH 1
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SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT	TELEPHONE # (905) 456-9444
REVIEWED: JANUARY 22, 2003	

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