



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:
B2, D1B, D2A, E

MATERIAL REFERENCE NO: 591400

SECTION I - MATERIAL IDENTIFICATION AND USE

| MATERIAL NAME/I.D.: KEMTREET RT #914 |
| CHEMICAL NAME : NOT APPLICABLE | CHEMICAL FAMILY : ALKALINE BLEND |
| CHEMICAL FORMULA: MIXTURE | MOLECULAR WEIGHT: NOT APPLICABLE |
| SYNONYMS: NONE |
| MATERIAL USE: RETURN LINE 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
2-AMINO-2-METHYL-1- PROPANOL	3.0-7.0	NO DATA	124-68-5	2900 MG/KG AVAILABLE
CYCLOHEXYLAMINE	7.0-13.0	10	108-91-8	156 MG/KG ORAL RABBIT

SECTION III - PHYSICAL DATA FOR MATERIAL

| PHYSICAL STATE: LIQUID |
| ODOUR AND APPEARANCE: CLEAR, AMBER LIQUID; AMINE ODOUR. |
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY	VAPOUR PRESSURE (MM)
NOT AVAILABLE	0.982	NOT AVAILABLE
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	SOLUBILITY IN WATER
>1	NOT ESTABLISHED	(20°C) COMPLETE
BOILING POINT (C)	FREEZING POINT (C)	% VOLATILE (BY WEIGHT)
100	<100	100
pH (10% SOLUTION)	DENSITY (G/ML)	COEF.OF WATER/OIL DISTR
11.0-12.0	NOT APPLICABLE	NOT AVAILABLE



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SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: FLAMMABLE			
IF YES, UNDER WHICH CONDITIONS: VAPOURS MAY BE FLAMMABLE.			
MEANS OF EXTINCTION: ALCOHOL FOAM, CO2, WATER FOG.			
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF-			
CONTAINED BREATHING APPARATUS. VAPOURS ARE HEAVIER THAN AIR AND MAY			
TRAVEL TO IGNITION SOURCE AND FLASH BACK.			
FLASH POINT (C) AND METHOD: MINIMUM 31.7 (C)			
HAZARDOUS COMBUSTION PRODUCTS: MAY EVOLVE NITROGEN OXIDES, SMOKE,			
SOOT, CARBON DIOXIDE, CARBON MONOXIDE.			
UPPER EXPLOSION LIMIT	LOWER EXPLOSION LIMIT	AUTOIGNITION TEMP(C)	
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	
EXPLOSION DATA SENSITIVITY			
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: AVOID CONTACT WITH STRONG ACIDS, OXIDIZING AGENTS			
REACTIVE METALS.			
REACTIVITY AND UNDER WHAT CONDITIONS: NO			
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.			
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY EVOLVE			
NITROUS OXIDES. CARBON MONOXIDE, CARBON DIOXIDE.			

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 STINGING, BURNING, INTENSE WATERING. PROLONGED CONTACT MAY CAUSE PERMANENT EYE INJURY.
SKIN-MAY CAUSE ITCHING OR TINGLING, INFLAMMATION, POSSIBLE BURNS.
INHALATION-MAY CAUSE IRRITATION OF NOSE, EYES AND THROAT, COUGHING, DIFFICULTY IN BREATHING. EXCESSIVE INHALATION MAY CAUSE BRONCHITIS, PULMONARY EDEMA AND CHEMICAL PNEUMONITIS.
INGESTION-MAY CAUSE IRRITATION AND BURNING SENSATION OF LIPS, MOUTH AND THROAT, PAIN IN SWALLOWING, GASTRO-INTESTINAL IRRITATION, ABDOMINAL PAIN, NAUSEA AND VOMITING.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: NO DATA

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

SENSITIZATION OF MATERIAL	SYNERGISTIC MATERIALS
NOT AVAILABLE	NOT AVAILABLE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY
REPRODUCTIVE EFFECTS-CYCLOHEXYLAMINE CAUSES PATERNAL EFFECTS IN ANIMAL STUDIES AT MODERATE TO HIGH DOSAGES.
MUTAGENICITY-CYCLOHEXYLAMINE CAUSES SOME CHROMOSOMAL ABBERATIONS IN ANIMALS. SEVERAL OTHER INVESTIGATIONS HAVE NEGATIVE RESULTS.
TERATOGENICITY-CYCLOHEXYLAMINE CAUSES POST-IMPLANT MORTALITY IN ANIMALS FROM DOSAGES NEAR THE LC50.

SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: RUBBER OR VINYL
RESPIRATORY: WORN BY PERSONS SENSITIVE TO FUMES
EYE: FACE SHIELD OR SAFETY GOGGLES
CLOTHING: LONG SLEEVED SHIRTS, TROUSERS, BUTYL RUBBER BOOTS AND APRON.
OTHER: EYE WASH AND SAFETY SHOWER
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): MECHANICAL RECOMMENDED.

LEAK AND SPILL PROCEDURE: WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT. STOP LEAKS AND CONTAIN SPILL. RECLAIM IF POSSIBLE.
SMALL SPILLS-WIPE UP OR MOP UP AND PLACE IN DISPOSAL CONTAINER.
LARGE SPILLS-ABSORB ONTO NON-COMBUSTIBLE ABSORBENT AND PLACE IN APPROVED CONTAINER FOR DISPOSAL. DO NOT ALLOW LIQUID TO FLOW INTO WATERWAYS. PRODUCT IS EXPECTED TO BE TOXIC TO AQUATIC LIFE.

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. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION, IF SWALLOWED-DO NOT INDUCE VOMITING. GIVE WATER, VINEGAR AND WATER OR FRUIT JUICE. 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.	PACKING GROUP
CORROSIVE LIQUID, FLAMMABLE N.O.S. (CYCLOHEXYLAMINE)	8 (3)	2920	II

HANDLING PROCEDURES AND EQUIPMENT:
AVOID CONTACT WITH STRONG ACIDS OR REDUCING AGENTS. WASH THOROUGHLY AFTER HANDLING.

STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL VENTILATED AREA IN ORIGINAL CONTAINER. KEEP CONTAINER CLOSED WHEN NOT IN USE.

SPECIAL SHIPPING INFORMATION: NONE

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
3	0	2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444
REVIEWED: JANUARY 8, 2003

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