



# 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: 766400

## SECTION I - MATERIAL IDENTIFICATION AND USE

|                                                   |                                  |
|---------------------------------------------------|----------------------------------|
| MATERIAL NAME/I.D.: KEMTREET RT 664               |                                  |
| CHEMICAL NAME : NOT APPLICABLE                    | CHEMICAL FAMILY : ALKALINE BLEND |
| CHEMICAL FORMULA: MIXTURE                         | MOLECULAR WEIGHT: NOT APPLICABLE |
| SYNONYMS: NONE                                    |                                  |
| MATERIAL USE: STEAM LINE ANTI-CORROSION TREATMENT |                                  |

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

| HAZARDOUS<br>  INGREDIENTS          | APPROX.<br>  % CONCENT. | TLV<br>  PPM | C.A.S. N.A.<br>  U.N. NUMBERS | LD 50<br>  ORAL, RAT |
|-------------------------------------|-------------------------|--------------|-------------------------------|----------------------|
| DIETHYL (2-HYDROXY<br>  ETHYL)AMINE | 10.0-30.0               | 10           | 100-37-8                      | 1300 MG/KG           |
|                                     |                         |              |                               |                      |
|                                     |                         |              |                               |                      |
|                                     |                         |              |                               |                      |

## SECTION III - PHYSICAL DATA FOR MATERIAL

|                                                  |                                       |                                            |
|--------------------------------------------------|---------------------------------------|--------------------------------------------|
| PHYSICAL STATE: LIQUID                           |                                       |                                            |
| ODOUR AND APPEARANCE: AMBER LIQUID; AMINE ODOUR. |                                       |                                            |
| ODOUR THRESHOLD (PPM)<br>  NOT AVAILABLE         | SPECIFIC GRAVITY<br>  0.975           | VAPOUR PRESSURE (MM)<br>  760 AT 93.3 (C)  |
| VAPOUR DENSITY (AIR=1)<br>  NOT AVAILABLE        | EVAPORATION RATE<br>  (WATER = 1) 1.1 | SOLUBILITY IN WATER<br>  (20°C) COMPLETE   |
| BOILING POINT (C)<br>  106                       | FREEZING POINT (C)<br>  NOT AVAILABLE | % VOLATILE (BY WEIGHT)<br>  100            |
| pH (10% SOLUTION)<br>  11.2-11.8                 | DENSITY (G/ML)<br>  NOT APPLICABLE    | COEF.OF WATER/OIL DISTR<br>  NOT AVAILABLE |



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## SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

|                                                                   |                       |                      |
|-------------------------------------------------------------------|-----------------------|----------------------|
| FLAMMABILITY: COMBUSTIBLE                                         |                       |                      |
| IF YES, UNDER WHICH CONDITIONS: HIGH TEMPERATURES                 |                       |                      |
| 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: 58 (TCC)                              |                       |                      |
| HAZARDOUS COMBUSTION PRODUCTS: MAY EVOLVE NITROGEN OXIDES, CARBON |                       |                      |
| MONOXIDE, CARBON DIOXIDE.                                         |                       |                      |
|                                                                   |                       |                      |
| 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: NORMALLY STABLE                                  |  |  |
| IF NO, UNDER WHICH CONDITIONS: HIGH TEMPERATURES                     |  |  |
|                                                                      |  |  |
| INCOMPATIBILITY TO OTHER SUBSTANCES: YES                             |  |  |
| IF SO, WHICH ONES: AVOID CONTACT WITH STRONG ACIDS, OXIDIZING AGENTS |  |  |
| CAN REACT WITH NITRITES TO FORM CARCINOGENIC NITROSAMINES.           |  |  |
|                                                                      |  |  |
| REACTIVITY AND UNDER WHAT CONDITIONS: NO                             |  |  |
| HAZARDOUS POLYMERIZATION WILL NOT OCCUR.                             |  |  |
|                                                                      |  |  |
| HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION CAN EVOLVE   |  |  |
| OXIDES OF NITROGEN AND CARBON.                                       |  |  |

## 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 SEVERE IRRITATION, PAIN, TEARING. CONJUNCTIVITIS, CORNEAL INJURY.  
SKIN-CONTACT MAY CAUSE SEVERE IRRITATION, POSSIBLE TISSUE DAMAGE.  
INHALATION-OF HIGH CONCENTRATIONS MAY CAUSE IRRITATION OF RESPIRATORY TRACT, CHEST DISCOMFORT.  
INGESTION-MAY CAUSE IRRITATION AND POSSIBLE BURNS TO LIPS, MOUTH THROAT, OESOPHAGUS AND STOMACH, NAUSEA, VOMITING, DIARRHEA, DIZZINESS, DROWZINESS, FATIGUE, THIRST.

EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:  
SKIN-REPEATED CONTACT MAY RESULT IN SEVERE CUMULATIVE DERMATITIS.

| 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-NOT AVAILABLE  
REPRODUCTIVE EFFECTS- NOT AVAILABLE  
MUTAGENICITY-NOT AVAILABLE  
TERATOGENICITY- NOT AVAILABLE

## SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: NEOPRENE  
RESPIRATORY: NIOSH APPROVED RESPIRATOR APPROVED FOR ORGANIC VAPOURS.  
EYE: FACE SHIELD OR SAFETY GOGGLES  
CLOTHING: IMPERMEABLE  
OTHER: EYE WASH AND SAFETY SHOWER  
ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): LOCAL AS NEEDED TO CONTROL FUMES.

LEAK AND SPILL PROCEDURE: REMOVE IGNITION SOURCES. STOP LEAKS AND CONTAIN SPILL. TRANSFER TO SUITABLE CONTAINER FOR RECLAIM OR DISPOSAL. ABSORB REMAINING MATERIAL ONTO NON COMBUSTIBLE ABSORBANT AND SCOOP INTO DISPOSAL CONTAINER.

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 AND SEEK MEDICAL ATTENTION.  
SKIN-REMOVE CONTAMINATED CLOTHING AND FLUSH AFFECTED AREA WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. LAUNDRY 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. DO NOT GIVE FLUIDS. 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, FLAMMABLE, N.O.S.<br>(DIETHYLETHANOLAMINE) | 8(3)  | 2920   | II |

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

STORAGE REQUIREMENTS: STORE IN A COOL, DRY WELL VENTILATED AREA IN ORIGINAL CONTAINER PROPERLY SEALED. DO NOT STORE NEAR INCOMPATIBLE MATERIALS.

SPECIAL SHIPPING INFORMATION: HEATED

## SECTION X - HMIS HAZARD RATING INFORMATION

| FLAMMABILITY | REACTIVITY | HEALTH |
|--------------|------------|--------|
| 2            | 0          | 2      |

## SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT      TELEPHONE # (905) 456-9444  
REVIEWED: JANUARY 12, 2003

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