



# 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: D2B, E

MATERIAL REFERENCE NO: 518000

## SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: CT 180	
CHEMICAL NAME : NOT APPLICABLE	CHEMICAL FAMILY : ALKALINE BLEND
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: MIXTURE
MATERIAL USE: CORROSION AND SCALE PREVENTION	

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. N.A. U.N. NUMBERS	LD 50 ORAL, RAT
SODIUM HYDROXIDE	5.0-10.0	2 MG/M3	1310-73-2	140 MG/KG
AMINOTRI (METHYLENE-)	3.0-7.0	NOT	6419-19-8	2910 MG/KG
PHOSPHONIC ACID		AVAILABLE		
SODIUM MOLYBDATE	3.0-7.0	5 MG/M3	10102-40-6	NO DATA
HYDROXYPHOSPHONO	1.0-5.0	NO DATA	23783-26-8	2750 MG/KG
ACETIC ACID				
PHOSPHINOCARBOXYLIC	1.0-5.0	NO DATA	71050-62-9	>5,000 MG/KG
ACID, SODIUM SALT				
SODIUM TOLYTRIAZOLE	1.0-5.0	NO DATA	64665-57-21	920 MG/KG

## SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE:	LIQUID	
ODOUR AND APPEARANCE:	CLEAR, AMBER LIQUID, LOW ODOUR.	
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY	VAPOUR PRESSURE (MM)
NOT AVAILABLE	1.13	NOT AVAILABLE
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	SOLUBILITY IN WATER
APPROXIMATELY 1	(WATER=1) 0.9	(20 ° C) SOLUBLE
BOILING POINT (C)	FREEZING POINT (C)	% VOLATILE (BY WEIGHT)
100	APPROX. 0 C	> 70
pH ( CONCENTRATED )	DENSITY (G/ML)	COEF.OF WATER/OIL DISTR
12.0-13.0	NOT APPLICABLE	NOT AVAILABLE



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## SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: NON-FLAMMABLE	
IF YES, UNDER WHICH CONDITIONS:	
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MEANS OF EXTINCTION: WATER FOG, CARBON DIOXIDE, DRY CHEMICAL, FOAM.	
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SPECIAL PROCEDURES: APPROPRIATE FOR SURROUNDING MATERIALS.	
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FLASH POINT (C) AND METHOD: NONE (TCC)	
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HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE,	
OXIDES OF NITROGEN, AMMONIA, POSSIBLE TRACE AMOUNTS OF PHOSPHINE.	
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UPPER EXPLOSION LIMIT   LOWER EXPLOSION LIMIT   AUTOIGNITION TEMP(C)	
NOT APPLICABLE   NOT APPLICABLE   NOT AVAILABLE	
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EXPLOSION DATA SENSITIVITY   RATE OF BURNING   EXPLOSIVE POWER	
TO CHEMICAL IMPACT	
NOT AVAILABLE   NOT APPLICABLE   NOT AVAILABLE	
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SENSITIVITY TO STATIC DISCHARGE: NOT AVAILABLE	
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## SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: STABLE	
IF NO, UNDER WHICH CONDITIONS:	
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INCOMPATIBILITY TO OTHER SUBSTANCES: YES	
IF SO, WHICH ONES: ACIDS, STRONG OXIDIZERS.	
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REACTIVITY AND UNDER WHAT CONDITIONS: NOT ESTABLISHED	
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HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION CAN	
RELEASE OXIDES OF CARBON AND NITROGEN	
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## SECTION VI - HEALTH HAZARD DATA

ROUTE OF ENTRY:	
SKIN CONTACT: YES	SKIN ABSORPTION: YES
INHALATION: YES	INGESTION: YES
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|EFFECTS OF ACUTE EXPOSURE TO MATERIAL:  
|EYES-CONTACT CAN CAUSE IRRITATION  
|SKIN-CONTACT CAN CAUSE IRRITATION  
|INHALATION-EXCESSIVE INHALATION OF MISTS OR VAPOURS CAN CAUSE  
| IRRITATION OF RESPIRATORY TRACT.  
|INGESTION-CAN CAUSE IRRITATION OF GASTROINTESTINAL TRACT, NAUSEA,  
| VOMITING.  
|

|EFFECTS OF CHRONIC EXPOSURE TO MATERIAL:  
| NONE KNOWN  
|  
|

|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 |  
|NONE KNOWN  
|  
|

## SECTION VII - PREVENTIVE MEASURES

|PERSONAL PROTECTIVE EQUIPMENT:  
|  
| GLOVES: RUBBER OR PLASTIC  
|RESPIRATORY: NONE REQUIRED  
| EYE: SAFETY GLASSES  
| FOOTWEAR: IMPERMEABLE  
| CLOTHING: IMPERMEABLE  
| OTHER: EYE WASH AND SAFETY SHOWER  
|ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): LOCAL  
| IS SUFFICIENT.

|LEAK AND SPILL PROCEDURE: SMALL SPILLS-WASH 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.  
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|WASTE DISPOSAL:  
| DISPOSE OF IN ACCORDANCE WITH FEDERAL, PROVINCIAL AND LOCAL  
| REGULATIONS.  
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## SECTION VIII - FIRST AID MEASURES

### | PROCEDURES:

| EYES-FLUSH WITH RUNNING WATER FOR 15 MINUTES. IF IRRITATION PERSISTS  
| GET MEDICAL ATTENTION.  
| SKIN-FLUSH AFFECTED AREA WITH RUNNING WATER FOR 15 MINUTES WHILE  
| REMOVING CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, GET  
| MEDICAL ATTENTION. LAUNDER CLOTHING BEFORE REUSE.  
| INHALATION-REMOVE TO FRESH AIR.  
| INGESTION-IF INGESTED DO NOT INDUCE VOMITING. GIVE WATER OR FRUIT  
| JUICE TO DILUTE STOMACH CONTENTS. DO NOT GIVE FLUIDS IF PERSON IS  
| UNCONSCIOUS OR CONVULSING. GET MEDICAL ATTENTION.  
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### | 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, N.O.S.	8	1760	III

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

### | STORAGE REQUIREMENTS: STORE IN A COOL, DRY AREA. KEEP FROM FREEZING. | |

### | SPECIAL SHIPPING INFORMATION: HEATED |

## SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
0	0	2

## SECTION XI - PREPARATION DATE OF MSDS

| PREPARED BY: TECHNICAL DEPARTMENT      TELEPHONE # (905) 456-9444 |  
| REVIEWS: FEBRUARY 19, 2004 |

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