



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: 229400

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KOOLIT (BULK)	
CHEMICAL NAME: NOT APPLICABLE	CHEMICAL FAMILY: SOLVENT BLEND
CHEMICAL FORMULA: MIXTURE	MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE	
MATERIAL USE: DRILL COOLANT	

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
METHYLENE CHLORIDE	30.0-60.0	100	75-09-2	1600 MG/KG
KEROSENE	20.0-40.0	10	8008-20-6	>5000 MG/KG
TRIBUTOXYETHY PHOSPHATE	1.0-5.0	NOT AVAILABLE	78-51-3	9490 MG/KG

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: LIQUID		
ODOUR AND APPEARANCE: LIGHT, AMBER, CLEAR LIQUID, SLIGHT SPICY, SOLVENT ODOUR.		
ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY	VAPOUR PRESSURE (MM)
NOT AVAILABLE	1.02	NOT AVAILABLE
VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	SOLUBILITY IN WATER
> 1	NOT AVAILABLE	(20°C) INSOLUBLE
BOILING POINT (C)	FREEZING POINT (C)	% VOLATILE (BY WEIGHT)
(INITIAL) 45	NOT AVAILABLE	80
pH (10% SOLUTION)	DENSITY (G/ML)	COEF.OF WATER/OIL DISTR
NOT APPLICABLE	NOT APPLICABLE	NOT AVAILABLE



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SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: NON-FLAMMABLE			
IF YES, UNDER WHICH CONDITIONS:			
MEANS OF EXTINCTION: AS FOR SURROUNDING MATERIALS			
SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF			
CONTAINED BREATHING APPARATUS.			
FLASH POINT (C) AND METHOD: NONE			
HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON AND SULPHUR,			
POSSIBLE TRACES OF HYDROGEN CHLORIDE, PHOSGENE, PHOSPHATE OXIDES			
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: STRONG ALKALIES, OXIDANTS.			
REACTIVITY AND UNDER WHAT CONDITIONS: NOT KNOWN			
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.			
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION WILL GIVE			
OXIDES OF CARBON AND SULPHUR, TRACES OF HCl AND PHOSGENE.			

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 IRRITATION TO EYES AND MUCOUS MEMBRANES. |
| SKIN-CONTACT MAY CAUSE SKIN IRRITATION. |
| INHALATION- AT LOW CONCENTRATIONS IT CAUSES FEELING OF DRUNKENNESS |
| AND DECREASED ALERTNESS. AT HIGH CONCENTRATIONS IT CAN CAUSE |
| INCOORDINATION, LOSS OF CONCIIOUSNESS AND POSSIBLY DEATH. MAY |
| ALSO AFFECT THOSE WITH HEART CONDITIONS. |
| INGESTION-MAY CAUSE NAUSEA, VOMITING, SICKNESS. |
| |

| EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: |
| SKIN-PROLONGED OR REPEATED CONTACT MAY CAUSE DRYING OF SKIN. |
| ABSORPTION-AT LOW CONCENTRATIONS METHYLENE CHLORIDE CAN HAVE AN |
| EFFECT ON THE NERVOUS SYSTEM. HOWEVER, NO PERMANENT EFFECT |
| HAS BEEN NOTED. |
| |

| 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 |
| NONE KNOWN | NONE KNOWN |

| CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY: |
| CONTAINS METHYLENE CHLORIDE WHICH HAS BEEN SHOWN TO CAUSE CANCER IN |
| CERTAIN LABORATORY ANIMALS. MAY ALSO AFFECT THOSE WITH HEART |
| CONDITIONS. USE ONLY IN WELL-VENTILATED AREAS. |
| |

SECTION VII - PREVENTIVE MEASURES

| PERSONAL PROTECTIVE EQUIPMENT: |

| GLOVES: RUBBER OR VITON IF REQUIRED |
| RESPIRATORY: NOT NORMALLY REQUIRED. FOR PROLONGED EXPOSURES OR IF |
| TLV IS EXCEEDED USE APPROVED ORGANIC CANISTER OR SELF |
| CONTAINED BREATHING APPARATUS. |
| EYE: CHEMICAL GOGGLES |
| FOOTWEAR: NO SPECIAL REQUIREMENTS |
| CLOTHING: NO SPECIAL REQUIREMENTS |
| OTHER: EYE WASH AND SAFETY SHOWER |
| ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): MECHANICAL |
| VENTILATION IN CONFINED SPACES OR WHEN TLV IS EXCEEDED. |

| LEAK AND SPILL PROCEDURE: REMOVE SOURCES OF IGNITION. SMALL SPILLS |
| MAY BE WIPED. LARGE SPILLS-CONTAIN SPILL. TRANSFER TO APPROPRIATE |
| CONTAINER FOR DISPOSAL. ABSORB REMAINDER WITH SUITABLE |
| ABSORBANT AND PLACE IN CONTAINER FOR DISPOSAL. CLEAN CONTAMINATED |
| AREA WITH SOLVENT BASED CLEANER. |

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



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SECTION VIII - FIRST AID MEASURES

PROCEDURES:
EYES-FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ASSISTANCE.
SKIN-FLUSH WITH SOAP AND WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ASSISTANCE IF IRRITATION PERSISTS.
INHALATION-REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT GIVE OXYGEN. IF NOT BREATHING, ADMINISTER ARTIFICIAL RESPIRATION AND THEN GIVE OXYGEN. GET MEDICAL ASSISTANCE.
INGESTION-IF SWALLOWED, DO NOT INDUCE VOMITING. RINSE MOUTH WITH WATER. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CONTACT PHYSICIAN OR POISON CONTROL CENTRE IMMEDIATELY.

SOURCES USED: RAW MATERIAL SUPPLIER'S MATERIAL SAFETY DATA SHEETS

ADDITIONAL INFORMATION: NONE

SECTION IX - TDG SHIPPING INFORMATION

SHIPPING NAME	CLASS	UN NO.	PG
TOXIC LIQUID, ORGANIC, N.O.S. (DICHLOROMETHANE)	6.1	2810	III

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

STORAGE REQUIREMENTS: STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM OXIDIZING AGENTS. DO NOT STORE WHERE TEMPERATURES EXCEED 50 (C).

SPECIAL SHIPPING INFORMATION: NON-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
REVIWED: OCTOBER 4, 2009

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