



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:
 A, D1B, D2A D2B

MATERIAL REFERENCE NO: 153221

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: KEM-A-LOOSE (AEROSOL)
CHEMICAL NAME: NOT APPLICABLE

 | CHEMICAL FORMULA: MIXTURE | MOLECULAR WEIGHT: NOT APPLICABLE |

SYNONYMS: NONE
MATERIAL USE: PENETRATING LUBRICANT

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
MINERAL OIL	10.0-30.0	5 MG/M ³	8042-47-5	NO DATA
TRICHLOROETHYLENE	60.0-100.0	10	79-01-6	5650 MG/KG
ETHYLENE GLYCOL	1.0-5.0	20	111-76-2	470 MG/KG
MONOBUTYL ETHER				
CARBON DIOXIDE PROPELLANT	1.0-5.0	10,000	124-38-9	NO DATA

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: AEROSOL
ODOUR AND APPEARANCE: (CONC.) BROWN LIQUID; SOLVENT ODOUR.

ODOUR THRESHOLD (PPM)	SPECIFIC GRAVITY	VAPOUR PRESSURE (MM)
NOT AVAILABLE	(CONCENTRATE) 1.25	90 PSIG AT 21 (C)

VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	SOLUBILITY IN WATER
> 1	NOT AVAILABLE	(20°C) INSOLUBLE

BOILING POINT (C)	FREEZING POINT (C)	TOTAL VOC % (BY WEIGHT)
(CONC.) 70	NOT AVAILABLE	76

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: FOAM, CO2, DRY CHEMICAL.

| SPECIAL PROCEDURES: WEAR FULL PROTECTIVE GEAR INCLUDING SELF |
| CONTAINED BREATHING APPARATUS. USE SHIELDING TO PROTECT FROM |
| VENTING, BURSTING OR RUPTURING CONTAINERS. USE WATER FOG TO COOL |
FIRE EXPOSED CONTAINERS.
FLASH POINT (C) AND METHOD: CONCENTRATE -NONE TO BOILING (70°C)
NON-FLAMMABLE SPRAY

| HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE, |
HYDROGEN CHLORIDE, TRACE AMOUNTS OF PHOSGENE.
UPPER EXPLOSION LIMIT
52%

EXPLOSION DATA SENSITIVITY	RATE OF BURNING	EXPLOSIVE POWER
TO CHEMICAL IMPACT		PRESSURIZED CONTAINER
NOT AVAILABLE	NOT AVAILABLE	KEEP TEMP. BELOW 49C

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 OXIDIZING AGENTS.

| REACTIVITY AND UNDER WHAT CONDITIONS: NONE KNOWN. |
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION WILL GIVE
CARBON DIOXIDE, CARBON MONOXIDE, HYDROGEN CHLORIDE, TRACE AMOUNTS OF
PHOSGENE.

SECTION VI - HEALTH HAZARD DATA

ROUTE OF ENTRY:
SKIN CONTACT: YES
INHALATION: YES



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|EFFECTS OF ACUTE EXPOSURE TO MATERIAL: |
|EYES-CONTACT CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, SWELLING|
|SKIN-PROLONGED OR FREQUENT CONTACT MAY CAUSE IRRITATION, REDNESS, |
|EDEMA, DRYING AND CRACKING OF SKIN, DERMATITIS. |
|INHALATION-MAY CAUSE IRRITATION OF MUCOUS MEMBRANES AND UPPER |
|RESPIRATORY TRACT. EXCESSIVE EXPOSURE MAY CAUSE DIZZINESS, NAUSEA, |
|HEADACHE, DROWZINESS, FATIGUE, ELEVATED BLOOD PRESSURE AND PULSE |
|RATE. |
|INGESTION-HARMFUL IF INGESTED. CAN CAUSE GASTRO INTESTINAL |
|IRRITATION, NAUSEA, VOMITING, DIARRHEA. |

|EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: PROLONGED EXPOSURES CAN |
|CAUSE BLOOD ABNORMALITIES, KIDNEYS DAMAGE, LIVER DAMAGE AND OTHER |
|CENTRAL AND PERIPHERAL NERVOUS SYSTEM EFFECTS. |

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

|SENSITIZATION OF MATERIAL | SYNERGISTIC MATERIALS |
| NOT KNOWN | NONE KNOWN |

|CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY: |
|TRICHLOROETHYLENE IS CLASSIFIED 2A (SUSPECTED FOR HUMANS) CARCINOGEN |
|BY IARC. |

SECTION VII - PREVENTIVE MEASURES

|PERSONAL PROTECTIVE EQUIPMENT: |

| GLOVES: CHEMICAL RESISTANT AS REQUIRED. |
|RESPIRATORY: IF TLV IS EXCEEDED USE NIOSH/MSHA APPROVED AIR |
| PURIFYING RESPIRATOR FOR SHORT TERM EXPOSURES. |
| EYE: CHEMICAL GOGGLES AS REQUIRED. |
| FOOTWEAR: NO SPECIAL REQUIREMENTS. |
| CLOTHING: NO SPECIAL REQUIREMENTS. COVER EXPOSED SKIN. |
| OTHER: EYE WASH AND SAFETY SHOWER |
|ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): PROVIDE |
|LOCAL EXHAUST TO MAINTAIN AIRBORN CONCENTRATIONS WITHIN ACCEPTABLE |
|LIMITS. |

|LEAK AND SPILL PROCEDURE: REMOVE SOURCES OF IGNITION. ALLOW |
|PROPELLANT TO EVAPORATE. PROVIDE ADEQUATE VENTILATION. ABSORB ONTO |
|SUITABLE ABSORBENT. SWEEP UP AND PLACE IN DISPOSAL CONTAINER. WASH |
|AREA TO PREVENT SLIPPING. |

|WASTE DISPOSAL: DISPOSE OF IN ACCORDANCE WITH FEDERAL, PROVINCIAL |
|AND LOCAL REGULATIONS. DO NOT PUNCTURE OR INCINERATE. |



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SECTION VIII - FIRST AID MEASURES

| PROCEDURES: |

| EYES-FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES WHILE HOLDING |

| EYELIDS OPEN. GET IMMEDIATE MEDICAL ATTENTION. |

| SKIN-WASH THOROUGHLY WITH SOAP AND WATER. GET MEDICAL ATTENTION IF |

| IRRITATION PERSISTS. |

| INHALATION-REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED GIVE |

| ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION. |

| INGESTION-IF SWALLOWED, DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING |

| BY MOUTH IF VICTIM IS UNCONSCIOUS OR CONVULSING. 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
D.G. Safety Marks are in accordance with 49 CFR			

| HANDLING PROCEDURES AND EQUIPMENT: AVOID CONTACT WITH EYES AND SKIN. |

| USE IN WELL-VENTILATED AREAS ONLY. REMOVE ALL SOURCES OF IGNITION. |

| DO NOT SMOKE WHEN HANDLING PRODUCT. |

| STORAGE REQUIREMENTS: STORE IN A COOL, DRY, WELL-VENTILATED AREA |

| AWAY FROM OXIDIZING AGENTS. DO NOT STORE WHERE TEMPERATURES EXCEED |

| 49 (C). |

| SPECIAL SHIPPING INFORMATION: NONE |

SECTION X - HMIS HAZARD RATING INFORMATION

FLAMMABILITY	REACTIVITY	HEALTH
(CONC.) 1	(CONC.) 0	(CONC.) 2

SECTION XI - PREPARATION DATE OF MSDS

PREPARED BY: TECHNICAL DEPARTMENT	TELEPHONE # (905) 456-9444
REVISED: OCTOBER 4, 2009	REPLACES: DECEMBER 23, 2005

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