



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

MATERIAL REFERENCE NO: 109121

SECTION I - MATERIAL IDENTIFICATION AND USE

MATERIAL NAME/I.D.: BRAKLEEN (AEROSOL)
CHEMICAL NAME: NOT APPLICABLE CHEMICAL FAMILY: PRESSURIZED BLEND
CHEMICAL FORMULA: MIXTURE MOLECULAR WEIGHT: NOT APPLICABLE
SYNONYMS: NONE
MATERIAL USE: BRAKE PARTS CLEANER

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENTS	APPROX. % CONCENT.	TLV PPM	C.A.S. NUMBERS	LD 50 ORAL, RAT
TETRACHLOROETHYLENE	60.0-100.0	25	127-18-4	>5000 MG/KG
CARBON DIOXIDE	1.0-5.0	5,000	124-38-9	NOT
PROPELLANT				AVAILABLE

SECTION III - PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE: AEROSOL
ODOUR AND APPEARANCE: CLEAR, COLOURLESS LIQUID; SOLVENT ODOUR.
ODOUR THRESHOLD (PPM) SPECIFIC GRAVITY VAPOUR PRESSURE (MM)
NOT AVAILABLE (CONCENTRATE) 1.619 NOT AVAILABLE (C)
VAPOUR DENSITY (AIR=1) EVAPORATION RATE SOLUBILITY IN WATER
> 1 NOT AVAILABLE (20°C) NEGLIGIBLE
BOILING POINT (C) FREEZING POINT (C) TOTAL VOC %
(CONCENTRATE) 121 EST. NOT AVAILABLE 0
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: NOT APPLICABLE			
MEANS OF EXTINCTION: FOAM, DRY CHEMICAL, CO2.			
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 (C) T.C.C.			
FLAME EXTENSION NON FLAMMABLE SPRAY			
HAZARDOUS COMBUSTION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE,			
TRACE AMOUNTS OF PHOSGENE, CHLORINE			
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 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, STRONG ALKALIES.			
REACTIVITY AND UNDER WHAT CONDITIONS: NOT KNOWN			
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.			
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION WILL PRODUCE			
CARBON DIOXIDE, CARBON MONOXIDE, TRACE AMOUNTS OF PHOSGENE AND			
CHLORINE.			

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. |
|SKIN-CONTACT MAY CAUSE BURNING SENSATION, MILD IRRITATION. |
|INHALATION-CAN CAUSE IRRITATION OF NASAL AND RESPIRATORY PASSAGES. |
|VERY HIGH CONCENTRATIONS MAY CAUSE IRRITATION TO UPPER RESPIRATORY |
|TRACT, DIZZINESS, NAUSEA, AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS. |
|INGESTION-CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING |
|AND DIARRHEA. ASPIRATION INTO LUNGS CAN CAUSE CHEMICAL PNEUMONITIS. |

|EFFECTS OF CHRONIC EXPOSURE TO MATERIAL: |
|SKIN-PROLONGED OR REPEATED CONTACT MAY CAUSE DEFATTING, DERMATITIS. |
| |
| |

LD 50 OF MATL.	LC 50 OF MATL.	EXPOSURE LIMIT(S)	IRRITANCY OF MATL
NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE	SKIN AND EYE
			IRRITANT, TOXIC

|SENSITIZATION OF MATERIAL | SYNERGISTIC MATERIALS |
| NONE KNOWN | NONE KNOWN |

|CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY: |
|CONTAINS TETRACHLOROETHYLENE WHICH HAS BEEN SHOWN TO INCREASE THE |
|INCIDENCE OF TUMORS IN CERTAIN STRAINS OF MICE AND RATS. THIS |
|PRODUCT IS NOT BELIEVED TO POSE A MEASURABLE RISK TO HUMANS WHEN |
|HANDLED AS RECOMMENDED. |

SECTION VII - PREVENTIVE MEASURES

|PERSONAL PROTECTIVE EQUIPMENT: |

| GLOVES: POLYETHYLENE, NITRILE, ETHYL VINYL ALCOHOL LAMINATE, |
| POLYVINYL ALCOHOL, VITON. |
|RESPIRATORY: WHERE EXPOSURE GUIDELINES MAY BE EXCEEDED. WEAR ORGANIC |
| VAPOR RESPIRATOR OR SELF CONTAINED BREATHING APPARATUS. |
| EYE: SAFETY GLASSES. |
| FOOTWEAR: ADEQUATE TO PREVENT CONTACT WITH SKIN. |
| CLOTHING: ADEQUATE TO PREVENT CONTACT WITH SKIN. |
| OTHER: EYE WASH AND SAFETY SHOWER |
|ENGINEERING CONTROLS (EG VENTILATION, ENCLOSED PROCESS): GENERAL OR |
| LOCAL VENTILATION IN CONFINED SPACES OR WHEN TLV IS EXCEEDED. |

|LEAK AND SPILL PROCEDURE: REMOVE SOURCES OF IGNITION. ALLOW |
|PROPELLANT TO EVAPORATE. ABSORB ONTO SUITABLE ABSORBANT. SWEEP UP |
|AND PLACE IN CONTAINER FOR DISPOSAL. WASH AREA TO REMOVE RESIDUAL |
|PRODUCT. |
| |

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



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SECTION VIII - FIRST AID MEASURES

| PROCEDURES: |
| EYES-IMMEDIATELY FLUSH WITH RUNNING WATER FOR AT LEAST 15 MINUTES. |
| GET MEDICAL ATTENTION. |
| SKIN-FLUSH WITH SOAP AND WATER FOR AT LEAST 15 MINUTES. GET MEDICAL |
| ASSISTANCE IF IRRITATION PERSISTS. |
| INHALATION-REMOVE TO FRESH AIR. IF NOT BREATHING, ADMINISTER |
| ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GET IMMEDIATE |
| MEDICAL ATTENTION. |
| INGESTION-IF SWALLOWED, DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING |
BY MOUTH TO AN UNCONSCIOUS PERSON. 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 ONLY IN WELL-VENTILATED AREAS. WASH THOROUGHLY AFTER HANDLING.
STORAGE REQUIREMENTS: STORE IN A COOL, DRY, WELL-VENTILATED AREA.
DO NOT STORE WHERE TEMPERATURES EXCEED 49 (C).

SPECIAL SHIPPING INFORMATION: NON-HEATED

SECTION X - HMIS HAZARD RATING INFORMATION

| FLAMMABILITY | REACTIVITY | HEALTH |
| 1 | 0 | 2 |

SECTION XI - PREPARATION DATE OF MSDS

| PREPARED BY: TECHNICAL DEPARTMENT TELEPHONE # (905) 456-9444 |
REVIEWED: OCTOBER 5, 2009

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