

K-G SPRAY-PAK INC.
8001 KEELE STREET, P.O BOX 89
CONCORD, L4K 1Y8, ONTARIO
CANADA 905--669-9855
(905) 669-9855

PRODUCT: 0205-10-018 BRAKE CLEANER 19444 567G**Section 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MANUFACTURER K-G SPRAY-PAK INC.
8001 KEELE STREET P.O. BOX 89
ONTARIO
CANADA
L4K 1Y8
CANUTEC EMERGENCY #:1-613-996-6666(24HR)
PRODUCT NAME..... 0205-10-018 BRAKE CLEANER 19444 567G
CHEMICAL FAMILY..... CHLORINATED HYDROCARBON.
MOLECULAR WEIGHT..... NOT APPLICABLE.
CHEMICAL FORMULA..... NOT APPLICABLE.
TRADE NAMES & SYNONYMS
RECOMMENDED PRODUCT USES..... CLEANER.
FORMULA/LAB BOOK #..... F 10-462.

Section 02: HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION..... NOT ASSESSED.
SIGNAL WORD..... NOT ASSESSED.
HAZARD STATEMENTS NOT ASSESSED.
PRECAUTIONARY STATEMENTS..... NOT ASSESSED.
OTHER HAZARDS..... NOT ASSESSED.

Section 03: COMPOSITION/INFORMATION INGREDIENTS

Hazardous Ingredients	CAS #	Wt. %
1,1,2-TRICHLOROETHYLENE	79-01-6	10-30
CARBON DIOXIDE	124-38-9	1-5
METHYLENE CHLORIDE	75-09-2	30-60
MINERAL SPIRITS	64742-47-8	5-10
PERCHLOROETHYLENE (TETRACHLOROETHYLENE)	127-18-4	10 -30

Section 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURE IN CASE OF EYE CONTACT, FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION. FOR SKIN, WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPOUR OR SPRAY MIST, REMOVE TO FRESH AIR. IF SWALLOWED; DO NOT INDUCE VOMITING, GET MEDICAL ATTENTION.

Section 05: FIRE FIGHTING MEASURES

FLAMMABILITY..... NOT A FLAMMABLE PRODUCT (AS PER CANADIAN AEROSOL REGULATIONS).
IF YES, UNDER WHICH CONDITIONS?..... EXCESSIVE HEAT, SPARKS AND OPEN FLAME.
SPECIAL PROCEDURES..... WATER FROM FOGGING NOZZLES MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT BUILD-UP IF EXPOSED TO EXTREME TEMPERATURES. FULL PROTECTIVE EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARTATUS SHOULD BE WORN IN A FIRE INVOLVING THIS MATERIAL.
EXPLOSION DATA
SENSITIVITY TO STATIC DISCHARGE. NOT APPLICABLE.
SENSITIVITY TO IMPACT..... NOT APPLICABLE.
EXTINGUISHING MEDIA..... WATER, CARBON DIOXIDE, DRY CHEMICAL, FOAM.

PRODUCT: 0205-10-018 BRAKE CLEANER 19444 567G**Section 05: FIRE FIGHTING MEASURES**

HAZARDOUS COMBUSTION PRODUCTS..... POSSIBLE PHOSGENE OVER 250 DEG C, CHLORINE GAS, HYDROCHLORIC ACID, HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.

AEROSOL FLAME PROJECTION CLASSIFIED AS:..... 0 cm.

FLASHBACK..... NONE.

Section 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL..... REMOVE ALL SOURCES OF IGNITION. USE AN INERT ABSORBENT MATERIAL, AND NON-SPARKING TOOLS. VENTILATE AREA. PREVENT FROM ENTERING A WATERCOURSE.

Section 07: HANDLING AND STORAGE

STORAGE NEEDS..... KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES.

ENGINEERING CONTROLS..... VENTILATION - LOCAL (MECHANICAL IF USED INDOORS ON A CONTINUOUS BASIS).

HANDLING PROCEDURES AND EQUIPMENT STORE IN A COOL, WELL VENTILATED AREA NOT TO EXCEED 50 DEG C.

SYNERGISTIC MATERIALS..... NONE KNOWN.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	TWA	ACGIH TLV STEL	REL	OSHA PEL STEL	NIOSH
1,1,2-TRICHLOROETHYL ENE	50 ppm				
CARBON DIOXIDE	5000 ppm				
METHYLENE CHLORIDE	50 ppm				
MINERAL SPIRITS	100 ppm				
PERCHLOROETHYLENE	25 ppm				
(TETRACHLOROETHYL ENE)					
GLOVES/ TYPE.....	CHEMICAL RESISTANT GLOVES.				
RESPIRATORY/TYPE.....	IF USED INDOORS ON A CONTINUOUS BASIS, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH/MSHATC 23C OR EQUIVALENT) IS RECOMMENDED.				
EYE/TYPE.....	SAFETY GLASSES.				
FOOTWEAR/TYPE.....	NOT NORMALLY REQUIRED.				
OTHER/TYPE.....	NOT REQUIRED.				
EXPOSURE LIMIT OF MATERIAL.....	SEE SECTION 2.				

Section 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... AEROSOL.

APPEARANCE..... CLEAR COLORLESS LIQUID.

ODOR..... ETHEREAL.

ODOR THRESHOLD..... NOT AVAILABLE.

pH..... NOT APPLICABLE.

FREEZING POINT: (°C)..... NOT AVAILABLE.

BOILING POINT (°C)(CONC)..... 39.8-121.

FLASH POINT(°C),TAG CLOSED-CUP NONE.

(CONCENTRATE)

EVAPORATION RATE..... GREATER THAN 1.

n-BUTYL ACETATE = 1

UPPER FLAMMABLE LIMIT..... 52.

(% BY VOLUME)

LOWER FLAMMABLE LIMIT..... 7.6.

(% BY VOLUME)

VAPOUR PRESSURE(PSIG)-AEROSOL..... 80 - 90.

@ 20 C

VAPOUR DENSITY (AIR=1)..... GREATER THAN 1.

(BY WEIGHT)

SPECIFIC GRAVITY (AEROSOL)..... 1.33-1.37.

SPECIFIC GRAVITY (LIQUID)..... 1.33-1.37.

SOLUBILITY IN WATER g/L (20°C)..... NEGLIGIBLE.

PRODUCT: 0205-10-018 BRAKE CLEANER 19444 567G**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

COEFFICIENT OF WATER/OIL DIST..... NOT AVAILABLE.
 AUTO IGNITION TEMPERATURE (°C)..... 556.
 AEROSOL PERCENT VOLATILE..... 100.
 (BY WEIGHT).

Section 10: STABILITY AND REACTIVITY

HAZARDOUS PRODUCTS OF DECOMPOSITION..... POSSIBLE PHOSGENE OVER 250 DEG C, CHLORINE GAS, HYDROCHLORIC ACID. HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.

CHEMICAL STABILITY:
 YES..... UNDER NORMAL CONDITIONS.
 NO, WHICH CONDITIONS?..... NOT APPLICABLE.

COMPATIBILITY WITH OTHER SUBSTANCES:
 NO, WHICH ONES?..... STRONG OXIDIZING AGENTS.
 REACTIVITY CONDITIONS?..... NOT APPLICABLE.
 HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

Section 11: TOXICOLOGICAL INFORMATION

Ingredients	LC50	LD50
1,1,2-TRICHLOROETHYLENE	8450 ppm (4h) RAT-INHAL	7193 mg/kg ORAL-RAT
CARBON DIOXIDE	NOT AVAILABLE	NOT APPLICABLE
METHYLENE CHLORIDE	88,000 mg/m ³ (1/2 hr) INHAL - RAT	2100 mg/kg ORAL - RAT
MINERAL SPIRITS	1400 ppm/4H INHAL - RAT	>5000 mg/kg ORAL - RAT
PERCHLOROETHYLENE (TETRACHLOROETHYLENE)	5200 ppm (4 Hr) INHAL - MOUSE	2629 mg/kg ORAL - RAT
ROUTE OF ENTRY: INHALATION.....	METHYLENE CHLORIDE VAPOURS CAN READILY ACCUMULATE IN POORLY VENTILLATED AREAS AND CAN CAUSE UNCONSCIOUSNESS. INHALATION OF SOLVENTS MAY CAUSE IRRITATION. PROPELLANT IS A SIMPLE ASPHYXIANT.	
INGESTION.....	METHYLENE CHLORIDE HAS MODERATE TOXICITY IF INGESTED. IF ASPIRATED, MAY BE RAPIDLY ABSORBED THROUGH THE LUNGS AND RESULT IN INJURY TO OTHER BODY SYSTEMS. MAY CAUSE HEADACHE, NAUSEA, VOMITING AND WEAKNESS.	
EYE CONTACT.....	MAY CAUSE IRRITATION.	
SKIN CONTACT.....	METHYLENE CHLORIDE-PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION.	
SKIN ABSORPTION.....	NO DATA AVAILABLE FOR THIS PRODUCT MIXTURE.	
EFFECTS OF ACUTE EXPOSURE.....	METHYLENE CHLORIDE OVEREXPOSURE MAY LEAD TO CENTRAL NERVOUS SYSTEM DEPRESSION AND CARDIAC SENSITIZATION. 1,1,2-TRICHLOROETHYLENE OVEREXPOSURE MAY LEAD TO CENTRAL NERVOUS SYSTEM DEPRESSION AND CARDIAC SENSITIZATION. DIZZINESS, NAUSEA. IRRITATION TO SKIN & EYES.	
EFFECTS OF CHRONIC EXPOSURE.....	METHYLENE CHLORIDE MAY HAVE CENTRAL NERVOUS SYSTEM EFFECTS. SOLVENTS MAY CAUSE DEFATTING DERMATITIS . PERCHLOROETHANE - PROLONGED EXPOSURE MAY CAUSE SKIN CRACKING AND DERMATITIS. REPEAT EXPOSURE MAY CAUSE LIVER AND KIDNEY DAMAGE, DEPRESSION, LETHARGY, CARDIAC, ARRHYTHMIA, AND REDUCED FERTILITY AT BELOW THE LD50.	
IRRITANCY OF MATERIAL.....	SKIN/EYE IRRITANT.	
CARCINOGENICITY OF MATERIAL.....	METHYLENE CHLORIDE HAS BEEN LISTED AS A POTENTIAL CARCINOGEN BY IARC. PERCHLOROETHYLENE HAS BEEN LISTED AS A POTENTIAL CARCINOGEN BY IARC. TRICHLOROETHYLENE NOT CLASSIFIED AS CARCINOGENIC BY ACGIH, OR OSHA, AND NOT LISTED AS A CARCINOGEN BY NTP. (1993) ACGIH CLASSIFIES TRICHLOROETHYLENE AS A5. "NOT SUSPECTED AS A HUMAN CARCINOGEN."	
MUTAGENICITY.....	NO INFORMATION IS AVAILABLE AND NO ADVERSE MUTAGENIC EFFECTS ARE ANTICIPATED.	
TERATOGENICITY.....	NO INFORMATION IS AVAILABLE AND NO ADVERSE TERATOGENIC EFFECTS ARE ANTICIPATED.	
REPRODUCTIVE EFFECTS.....	NO INFORMATION IS AVAILABLE AND NO ADVERSE REPRODUCTIVE EFFECTS ARE ANTICIPATED.	
SENSITIZING CAPABILITY OF MATERIAL.	CATECHOLAMINE DRUGS.	

PRODUCT: 0205-10-018 BRAKE CLEANER 19444 567G**Section 12: ECOLOGICAL CONSIDERATIONS**

ENVIRONMENTAL..... NOT AVAILABLE.

Section 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL..... DO NOT PUNCTURE OR INCINERATE CONTAINERS, EVEN WHEN EMPTY. DISPOSE OF IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.

Section 14: TRANSPORTATION INFORMATIONT.D.G. CLASSIFICATION..... CONSUMER COMMODITY (AEROSOLS, UN1950, CLASS 2.2 (6.1)).
D.O.T. CLASSIFICATION..... CONSUMER COMMODITY, ORM-D.**Section 15: REGULATORY INFORMATION**

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION..... A,D1B,D2A,D2B.
CNFC SECTION 3.3.5..... LEVEL 1.
CEPA (Canadian Environmental Protection ...
Act) ALL SUBSTANCES IN THIS PRODUCT ARE LISTED ON THE CANADIAN DOMESTIC
SUBSTANCES LIST (DSL) OR ARE NOT REQUIRED TO BE LISTED.

U.S. REGULATIONS:

HMIS RATING HEALTH..... 3 SERIOUS HAZARD.
HMIS RATING FLAMMABILITY..... 1 SLIGHT HAZARD.
HMIS RATING REACTIVITY..... 0 MINIMAL HAZARD.
HMIS RATING PERSONAL PROTECTION.. B.
NFPA CODE 30B..... LEVEL 1.
SARA 313 INFORMATION:..... THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE
REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND
AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:
. CAS #: CHEMICAL NAME:
. *127-18-4
PERCHLOROETHYLENE (TETRACHLOROETHYLENE)
. *75-09-2 METHYLENE CHLORIDE (DICHLOROMETHANE)
. *79-01-6 1,1,2-TRICHLOROETHYLENE.
CALIFORNIA PROPOSITION 65:..... THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE
CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986:
. WARNING: THIS PRODUCT CONTAINS A CHEMICAL
KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.
. CAS #: CHEMICAL NAME:
. *127-18-4
TETRACHLOROETHYLENE
METHYLENE CHLORIDE (DICHLOROMETHANE) . *75-09-2
1,1,2-TRICHLOROETHYLENE. . *79-01-6
TSCA (Toxic Substances Control Act)..... ALL COMPONENT OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. ANY
IMPURITIES PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.
VOC (w/w%)..... 30-40.**Section 16: OTHER INFORMATION**NOTICE FROM K-G SPRAY- PAK INC THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY K-G
SPRAY PAK INC. FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS
INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. K-G SPRAY PAK
INC. ASSUMES NO RESPONSIBILITY FOR EVENTS RESULTING OR DAMAGES
INCURRED FROM ITS USE. THE INFORMATION ON THIS MATERIAL SAFETY DATA
SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND
DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN
ANY PROCESS.PREPARED BY..... Regulatory Affairs
PREPARATION DATE May14/14