

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

PRODUCT: 1808-15-007/25 02-020 GLASS CLEANER 539G**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..... 1808-15-007/25 02-020 GLASS CLEANER 539G
CHEMICAL FAMILY..... DETERGENT.
MOLECULAR WEIGHT..... NOT APPLICABLE.
CHEMICAL FORMULA..... NOT APPLICABLE.
TRADE NAMES & SYNONYMS
RECOMMENDED PRODUCT USES..... CLEANER.
FORMULA/LAB BOOK #..... F 15-039C.

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. %
ETHANOL (Ethyl Alcohol)	64-17-5	1-5
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	1-5
ISOBUTANE	75-28-5	1-5
PROPANE	74-98-6	0.1-1.0

Section 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURE IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN OR EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES; FOR EYES, GET MEDICAL ATTENTION. IN CASE OF INGESTION, DO NOT INDUCE VOMITING. CALL A PHYSICIAN OR POISON CONTROL CENTRE IMMEDIATELY AND HAVE NAMES OF INGREDIENTS AVAILABLE.

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 APPARATUS 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.
HAZARDOUS COMBUSTION PRODUCTS..... HYDROCARBON FUMES AND SMOKE. CARBON MONOXIDE WHERE COMBUSTION IS INCOMPLETE.

PRODUCT: 1808-15-007/25 02-020 GLASS CLEANER 539G**Section 05: FIRE FIGHTING MEASURES**

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

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 STORE IN A COOL, WELL VENTILATED AREA NOT TO EXCEED 50 DEG C.
EQUIPMENT
SYNERGISTIC MATERIALS..... NONE KNOWN.

Section 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
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ETHANOL (Ethyl Alcohol) 1000 ppm

ETHYLENE GLYCOL 25 ppm
MONOBUTYL ETHER

ISOBUTANE 1000 ppm

PROPANE 1000 ppm

GLOVES/ TYPE..... WEAR 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 LIQUID.
ODOR..... FRAGRANT.
ODOR THRESHOLD..... NOT AVAILABLE.
pH..... 10.75-11.0.
FREEZING POINT: (°C)..... NOT AVAILABLE.
BOILING POINT (°C)(CONC)..... 78-171.
FLASH POINT (C), TAG CLOSED CUP..... LOWEST KNOWN VALUE IS ETHANOL @ 13C .
EVAPORATION RATE..... LESS THAN 1.
n-BUTYL ACETATE = 1
UPPER FLAMMABLE LIMIT..... 19.
(% BY VOLUME)
LOWER FLAMMABLE LIMIT..... 1.1.
(% BY VOLUME)
VAPOUR PRESSURE(PSIG)-AEROSOL..... 30 - 40.
@ 20 C
VAPOUR DENSITY (AIR=1)..... GREATER THAN 1.
(BY WEIGHT)
SPECIFIC GRAVITY (AEROSOL)..... 0.92-0.96.
SPECIFIC GRAVITY (LIQUID)..... 0.96-1.00.
SOLUBILITY IN WATER g/L (20°C)..... COMPLETE.
COEFFICIENT OF WATER/OIL DIST..... NOT AVAILABLE.
AUTO IGNITION TEMPERATURE (°C)..... 245-422.
AEROSOL PERCENT VOLATILE..... 99-100.
(BY WEIGHT).

PRODUCT: 1808-15-007/25 02-020 GLASS CLEANER 539G**Section 10: STABILITY AND REACTIVITY**

HAZARDOUS PRODUCTS OF DECOMPOSITION..... 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
ETHANOL (Ethyl Alcohol)	31,623 ppm (4 hr) INHAL - RAT	7060 mg/kg ORAL - RAT
ETHYLENE GLYCOL MONOBUTYL ETHER	450 ppm (4 hr) INHAL - RAT	530 - 2616 mg/kg ORAL - RAT
ISOBUTANE	142,500 ppm (4h) INHAL - RAT	NOT APPLICABLE
PROPANE	NOT AVAILABLE	>5000 mg/kg DERMAL-RABBITS
ROUTE OF ENTRY: INHALATION.....	INHALATION OF SOLVENTS MAY CAUSE IRRITATION. PROPELLANT IS A SIMPLE ASPHYXIANT.	
INGESTION.....	ETHYLENE GLYCOL MONOBUTYL ETHER MAY CAUSE RED BLOOD CELL HEMOLYSIS AND POSSIBLE LIVER AND KIDNEY DAMAGE. MAY CAUSE HEADACHE, NAUSEA, VOMITING AND WEAKNESS.	
EYE CONTACT.....	ETHYLENE GLYCOL MONOBUTYL ETHER CAUSES MODERATE IRRITATION AND POSSIBLE CORNEAL INJURY.	
SKIN CONTACT.....	MAY CAUSE IRRITATION.	
SKIN ABSORPTION.....	ETHYLENE GLYCOL MONOBUTYL ETHER PENETRATES SKIN READILY. FREQUENT OR WIDE SPREAD CONTACT MAY RESULT IN THE ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS. SIGNS AND SYMPTOMS OF TOXICITY ARE SIMILAR TO THOSE OF SWALLOWING.	
EFFECTS OF ACUTE EXPOSURE.....	DIZZINESS, NAUSEA. IRRITATION TO SKIN & EYES.	
EFFECTS OF CHRONIC EXPOSURE.....	ETHYLENE GLYCOL MONOBUTYL ETHER MAY CAUSE HEMOLYSIS OF THE RED BLOOD CELLS LEADING TO POSSIBLE LIVER AND KIDNEY DAMAGE. . SOLVENTS MAY CAUSE DEFATTING DERMATITIS	
IRRITANCY OF MATERIAL.....	SKIN/EYE IRRITANT.	
CARCINOGENICITY OF MATERIAL.....	THE INGREDIENTS OF THIS PRODUCT ARE NOT LISTED AS CARCINOGENS BY NTP, (NATIONAL TOXICOLOGY PROGRAM), NOT REGULATED AS CARCINOGENS BY OSHA, (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION), AND HAVE NOT BEEN EVALUATED BY IARC, (INTERNATIONAL AGENCY FOR RESEARCH ON CANCER), NOR BY ACGIH (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS).	
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.....	UNKNOWN.	

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 INFORMATION

T.D.G. CLASSIFICATION..... CONSUMER COMMODITY (AEROSOLS, UN1950, CLASS 2.2).
 D.O.T. CLASSIFICATION..... CONSUMER COMMODITY, ORM-D.

PRODUCT: 1808-15-007/25 02-020 GLASS CLEANER 539G

Section 15: REGULATORY INFORMATION

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION..... A,D1A,D2B.
CNFC SECTION 3.3.5..... LEVEL 1.
CEPA (Canadian Environmental Protection ... ALL SUBSTANCES IN THIS PRODUCT ARE LISTED ON THE CANADIAN DOMESTIC
Act) SUBSTANCES LIST (DSL) OR ARE NOT REQUIRED TO BE LISTED.

U.S. REGULATIONS:

HMIS RATING HEALTH..... 2 MODERATE 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:
*111-76-2 ETHYLENE GLYCOL

CALIFORNIA PROPOSITION 65:..... MONOBUTYL ETHER
THE FOLLOWING STATEMENT IS MADE IN ORDER TO COMPLY WITH THE
CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986:
WARNING: THIS PRODUCT DOES NOT INTENTIONALLY
CONTAIN ANY CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE
CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

CAS #: CHEMICAL NAME:

TSCA (Toxic Substances Control Act)..... N/A.
ALL COMPONENT OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY. ANY
IMPURITIES PRESENT IN THIS PRODUCT ARE EXEMPT FROM LISTING.

VOC (w/w%)..... 9-10.

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 Jan21/14