

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

**PRODUCT: 11111-BT237 MICROBE DRAIN MAGIK****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..... 11111-BT237 MICROBE DRAIN MAGIK  
CHEMICAL FAMILY..... AQUEOUS MIXTURE.  
MOLECULAR WEIGHT..... NOT APPLICABLE.  
CHEMICAL FORMULA..... MIXTURE.  
TRADE NAMES & SYNONYMS..... X237.  
RECOMMENDED PRODUCT USES..... A/C SYSTEM CLEANER.  
FORMULA/LAB BOOK #..... F 10-089.

**Section 02: HAZARDS IDENTIFICATION**

HAZARD CLASSIFICATION..... Warning.  
SIGNAL WORD..... Warning.  
HAZARD STATEMENTS ..... H229 PRESSURIZED CONTAINER: MAY BURST IF HEATED.  
PRECAUTIONARY STATEMENTS..... P102 KEEP OUT OF REACH OF CHILDREN. P103 READ LABEL BEFORE USE.  
OTHER HAZARDS..... No additional information available.

**Section 03: COMPOSITION/INFORMATION INGREDIENTS**

Hazardous Ingredients	CAS #	Wt. %
WATER	7732-18-5	30-60
LYOPHILIZED BACTERIA CULTURES	N/A	0.1-1.0
PLANT BASED SURFACTANT/FOAMING AGENT	N/A	20-40
ISOBUTANE	75-28-5	3-7
PROPANE	74-98-6	1-5

**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

**PRODUCT: 11111-BT237 MICROBE DRAIN MAGIK****Section 05: FIRE FIGHTING MEASURES**

PRODUCTS..... 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 ..... 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	ACGIH TLV		OSHA PEL		REL	NIOSH
	TWA	STEL	PEL	STEL		

WATER Not established

PLANT BASED N/A  
 SURFACTANT/FOAMING AGENT

ISOBUTANE 1000 ppm

PROPANE 1000 ppm

GLOVES/ TYPE..... RECOMMENDED.  
 RESPIRATORY/TYPE..... IF USED INDOORS ON A CONTINUOUS BASIS, USE OF A CARTRIDGE TYPE RESPIRATOR (NIOSH/MSHATC 23C OR EQUIVALENT) IS RECOMMENDED.  
 EYE/TYPE..... FACE SHIELD. GOGGLES OR SPLASH GUARD.  
 FOOTWEAR/TYPE..... NOT NORMALLY REQUIRED.  
 OTHER/TYPE..... EYE WASH FACILITY SHOULD BE CLOSE IN PROXIMITY.  
 EXPOSURE LIMIT OF MATERIAL..... SEE ABOVE.

**Section 09: PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL STATE..... AEROSOL.  
 APPEARANCE..... AMBER.  
 ODOR..... CITRUS ODOUR.  
 ODOR THRESHOLD..... NOT AVAILABLE.  
 pH..... 6.5-7.5.  
 FREEZING POINT: (°C)..... NOT AVAILABLE.  
 BOILING POINT (°C)(CONC)..... LOWEST KNOWN VALUE IS 100C BASED ON WATER.  
 FLASH POINT (C), TAG CLOSED CUP..... 93.3C.  
 EVAPORATION RATE..... LESS THAN 1.  
 n-BUTYL ACETATE = 1  
 UPPER FLAMMABLE LIMIT..... HYDROCARBON MIX = 6.5 APPROX.  
 (% BY VOLUME)  
 LOWER FLAMMABLE LIMIT..... 0.6.  
 (% BY VOLUME)  
 VAPOUR PRESSURE(PSIG)-AEROSOL..... 75-85.  
 @ 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)..... NOT DETERMINED.  
 AEROSOL PERCENT VOLATILE..... 99-100.  
 (BY WEIGHT).

**PRODUCT: 11111-BT237 MICROBE DRAIN MAGIK****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
WATER	N/A	>90ml/kg ORAL - RAT
LYOPHILIZED BACTERIA CULTURES	N/A	N/A
PLANT BASED SURFACTANT/FOAMING AGENT	N/A	N/A
ISOBUTANE	142,500 ppm (4h) INHAL - RAT	NOT APPLICABLE
PROPANE	NOT AVAILABLE	>5000 mg/kg DERMAL-RABBITS
ROUTE OF ENTRY: INHALATION..... INGESTION.....	PROPELLANT IS A SIMPLE ASPHYXIANT. HARMFUL IF SWALLOWED. MAY CAUSE NAUSEA, DIARRHEA AND ABDOMINAL CRAMPS.	
EYE CONTACT..... SKIN CONTACT..... SKIN ABSORPTION..... EFFECTS OF ACUTE EXPOSURE.....	MAY CAUSE EYE IRRITATION AND BLURRED VISION. MAY CAUSE IRRITATION. MAY CAUSE IRRITATION. DUST OR VAPORS MAY BE IRRITATING TO SKIN, EYES, AND RESPIRATORY TRACT.	
EFFECTS OF CHRONIC EXPOSURE..... IRRITANCY OF MATERIAL..... CARCINOGENICITY OF MATERIAL.....	NONE KNOWN. SKIN/EYE IRRITANT. 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..... TERATOGENICITY..... REPRODUCTIVE EFFECTS..... SENSITIZING CAPABILITY OF MATERIAL.	NO INFORMATION IS AVAILABLE AND NO ADVERSE MUTAGENIC EFFECTS ARE ANTICIPATED. NO INFORMATION IS AVAILABLE AND NO ADVERSE TERATOGENIC EFFECTS ARE ANTICIPATED. NO INFORMATION IS AVAILABLE AND NO ADVERSE REPRODUCTIVE EFFECTS ARE ANTICIPATED. 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.

**Section 15: REGULATORY INFORMATION**

## CANADIAN REGULATIONS:

WHMIS CLASSIFICATION..... A,D2B.  
 CNFC SECTION 3.3.5..... LEVEL 1.

**PRODUCT: 11111-BT237 MICROBE DRAIN MAGIK****Section 15: REGULATORY INFORMATION**

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..... 1 SLIGHT 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 NO INGREDIENTS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372.

CALIFORNIA PROPOSITION 65:..... NAME: . CAS #: . N/A. CHEMICAL  
 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%)..... <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 ..... Aug29/14