

JIG-A-LOO INC.
316-2 KNOWLTON RD
BROME LAKE, QC
JOE 1V0
CANADA

PRODUCT: 10251-01-013US JIG1601 JIG-A-LOO 311G

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER MANUFACTURED FOR:
JIG-A-LOO INC.
316-2 Knowlton Rd, Brome Lake, Qc JOE 1V0 (450-243-1500)
For Chemical Emergency
Spill Leak Fire Exposure or Accident
Call Canutec Day or Night
DOMESTIC NORTH AMERICA 613-947-5048
INTERNATIONAL, CALL 613-947-5048 (collect calls accepted)

PRODUCT NAME..... 10251-01-013US JIG1601 JIG-A-LOO 311G
CHEMICAL FAMILY..... CHLORINATED HYDROCARBON.
MOLECULAR WEIGHT..... NOT APPLICABLE.
CHEMICAL FORMULA..... MIXTURE.
TRADE NAMES & SYNONYMS
RECOMMENDED PRODUCT USES..... LUBRICANT.
FORMULATION NUMBER..... 004-1-167-B.
FORMULA/LAB BOOK #..... 99-1882B.

SECTION 02: HAZARDS IDENTIFICATION



HAZARD CLASSIFICATION..... DANGER.
SIGNAL WORD..... DANGER.
HAZARD STATEMENTS H223 FLAMMABLE AEROSOL. H229 PRESSURIZED CONTAINER: MAY BURST IF HEATED. H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H350 MAY CAUSE CANCER <STATE ROUTE OF EXPOSURE IF IT IS CONCLUSIVELY PROVEN THAT NO OTHER ROUTES OF EXPOSURE CAUSE THE HAZARD>. H401 TOXIC TO AQUATIC LIFE. . H335 MAY CAUSE RESPIRATORY IRRITATION.

PRECAUTIONARY STATEMENTS..... P101 IF MEDICAL ADVICE IS NEEDED, HAVE PRODUCT CONTAINER OR LABEL AT HAND. 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. %
ISOBUTANE	75-28-5	7-13
METHYLENE CHLORIDE	75-09-2	30-60
PERCHLOROETHYLENE (TETRACHLOROETHYLENE)	127-18-4	10-30
PROPANE	74-98-6	5-10

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..... FLAMMABLE.
IF YES, UNDER WHICH CONDITIONS?..... EXCESSIVE HEAT, SPARKS AND OPEN FLAME.

PRODUCT: 10251-01-013US JIG1601 JIG-A-LOO 311G**SECTION 05: FIRE FIGHTING MEASURES**

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..... 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:..... 15 - 45cm.
 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	PEL	OSHA PEL STEL	REL	NIOSH
ISOBUTANE	1000 ppm					
METHYLENE CHLORIDE	50 ppm					
PERCHLOROETHYLENE	25 ppm					
(TETRACHLOROETHYL ENE)						
PROPANE	1000 ppm					
GLOVES/ TYPE.....	NONE REQUIRED FOR NORMAL APPLICATION OF AEROSOL PRODUCTS WHERE MINIMAL SKIN CONTACT IS EXPECTED.					
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.					

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... AEROSOL.
 APPEARANCE..... CLEAR LIQUID.
 ODOR..... CHLORINATED HYDROCARBON.
 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..... 22.
 (% BY VOLUME)
 LOWER FLAMMABLE LIMIT..... 1.9.
 (% BY VOLUME)
 VAPOUR PRESSURE(PSIG)-AEROSOL..... 30 - 40.

PRODUCT: 10251-01-013US JIG1601 JIG-A-LOO 311G**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

@ 20 C
 VAPOUR DENSITY (AIR=1)..... GREATER THAN 1.
 (BY WEIGHT)
 SPECIFIC GRAVITY (AEROSOL)..... 1.03-1.07.
 SPECIFIC GRAVITY (LIQUID)..... 1.37-1.41.
 SOLUBILITY IN WATER g/L (20°C)..... NOT AVAILABLE.
 COEFFICIENT OF WATER/OIL DIST..... NOT AVAILABLE.
 AUTO IGNITION TEMPERATURE (°C)..... NOT AVAILABLE.
 AEROSOL PERCENT VOLATILE..... 97-98.
 (BY WEIGHT).
 AEROSOL PERCENT VOC (w/w)..... 20-21.

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
ISOBUTANE	142,500 ppm (4h) INHAL - RAT	NOT APPLICABLE
METHYLENE CHLORIDE	88,000 mg/m ³ (1/2 hr) INHAL - RAT	2100 mg/kg ORAL - RAT
PERCHLOROETHYLENE (TETRACHLOROETHYLENE)	5200 ppm (4 Hr) INHAL - MOUSE	2629 mg/kg ORAL - RAT
PROPANE	NOT AVAILABLE	>5000 mg/kg DERMAL-RABBITS
ROUTE OF ENTRY: INHALATION.....	METHYLENE CHLORIDE VAPOURS CAN READILY ACCUMULATE IN POORLY VENTILATED AREAS AND CAN CAUSE UNCONSCIOUSNESS. PROPELLANT IS A SIMPLE ASPHYXANT.	
INGESTION.....	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.	
EFFECTS OF CHRONIC EXPOSURE.....	METHYLENE CHLORIDE MAY HAVE CENTRAL NERVOUS SYSTEM EFFECTS. SOLVENTS MAY CAUSE DEFATTING DERMATITIS	
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.	
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..... PERCHLOROETHYLENE-THE LC50/96 HOUR VALUES FOR FISH ARE BETWEEN 10 AND 100mg/l. THIS MATERIAL IS EXPECTED TO BE TOXIC TO AQUATIC LIFE.

PRODUCT: 10251-01-013US JIG1601 JIG-A-LOO 311G**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 2.1 (6.1)).
 D.O.T. CLASSIFICATION..... CONSUMER COMMODITY, ORM-D.
 IMDG/IMO:
 Classification..... CONSUMER COMMODITY/LIMITED QUANTITY.
 Proper Shipping Name..... AEROSOLS, FLAMMABLE.
 UN Class..... 2.1 (6.1).
 UN Number..... UN1950.
 Marine Pollutant..... YES.
 IATA:
 IATA Shipping Description..... UN1950, Aerosols, Flammable 2.1 (6.1).
 IATA Hazard Class..... 2.1 (6.1).
 ID Number..... UN1950.
 IATA Hazard Labels Required:..... Flammable Gas.

SECTION 15: REGULATORY INFORMATION**CANADIAN REGULATIONS:**

WHMIS CLASSIFICATION..... A,B5,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..... 2 MODERATE HAZARD.
 HMIS RATING FLAMMABILITY..... 4 SEVERE 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)

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, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
 . CAS #: CHEMICAL NAME:

. *127-18-4
 TETRACHLOROETHYLENE . *75-09-2
 METHYLENE CHLORIDE (DICHLOROMETHANE)

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%)..... 20-21.

SECTION 16: OTHER INFORMATION

NOTICE FROM JIG-A-LOO INC..... THE INFORMATION ON THIS MATERIAL SAFETY DATA SHEET IS PROVIDED BY JIG-A-LOO INC. FREE OF CHARGE. WHILE BELIEVED TO BE RELIABLE, IT IS INTENDED FOR USE BY SKILLED PERSONS AT THEIR OWN RISK. JIG-A-LOO 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 MAY19/15