

SAFETY DATA SHEET

PRODUCT: ISO-PURE

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SECTION 01: PRODUCT AND COMPANY INFORMATION

MANUFACTURER/SUPPLIER	LES INVESTISSEMENTS B.S.C. INC.
MANUFACTURER'S/SUPPLIERS ADDRESS.....	109 IBER RD., UNIT #3, OTTAWA, ON K2S 0X5 613-744-8896
PRODUCT NAME	ISO-PURE
PRODUCT USE	HAND SANITIZER
EMERGENCY PHONE NUMBER.....	CANUTECH 613-996-6666

SECTION 02: HAZARDS IDENTIFICATION



ROUTE OF ENTRY:	
SKIN CONTACT	MILD IRRITANT. REPEATED OR PROLONGED EXPOSURE MAY LEAD TO DERMATITIS, ERYTHEMA AND SCALING.
SKIN ABSORPTION	METHANOL CAN BE ABSORBED THROUGH THE SKIN IN TOXIC AND LETHAL AMOUNTS. ETHANOL (ETHYL ALCOHOL) AND ETHYL ACETATE POSE LITTLE RISK IN THIS RESPECT.
EYE CONTACT.....	SEVERE IRRITANT. VAPOURS CAN IRRITATE EYES. EYE DAMAGE FROM CONTACT WITH LIQUIDS IS REVERSIBLE AND PROPER TREATMENT WILL RESULT IN HEALING WITHIN A FEW DAYS. DAMAGE IS USUALLY MILD TO MODEATE CONJUNCTIVITIS, SEEN MAINLY AS REDNESS OF THE CONJUNCTIVA.
INHALATION.....	INHALATION OF HIGH CONCENTRATIONS CAN PRODUCE DIZZINESS, FAINTNESS, DROWSINESS, NAUSEA AND VOMITING. SYMPTOMS DEPEND ON THE LEVEL AND DURATION OF EXPOSURE.
INGESTION	THE MOST HAZARDOUS COMPONENT IN ETHANOL DENATURED 2A IS METHANOL, A TOXIC SUBSTANCE WHICH HAS PRODUCED BLINDNESS AND DEATH. THE SYMPTOMS, FOLLOWING INGESTION OF ETHANOL DENATURED 2A INCLUDE DIZZINESS, FAINTNESS, DROWSINESS, DECREASED AWARENESS AND RESPONSIVENESS, EUPHORIA, ABDOMINAL DISCOMFORT, NAUSEA, VOMITING, STAGGERING GAIT, LACK OF COORDINATION AND COMA.
EFFECTS/SYMPTOMS OF ACUTE EXPOSURE	EXPOSURE MAY OCCUR VIA INHALATION, INGESTION, SKIN ABSORPTION AND SKIN OR EYE CONTACT.
EFFECTS/SYMPTOMS OF CHRONIC EXPOSURE....	LONG TERM REPEATED ORAL EXPOSURE TO ETHANOL MAY RESULT IN THE DEVELOPMENT OF PROGRESSIVE LIVER INJURY WITH FIBROSIS. LONG TERM EXPOSURE TO METHANOL HAS BEEN ASSOCIATED WITH HEADACHE, GIDDINESS, CONJUNCTIVITIS, INSOMNIA AND IMPAIRED VISION. PROLONGED AND REPEATED CONTACT WITH SKIN CAN CAUSE DEFATTING AND DRYING OF THE SKIN RESULTING IN SKIN IRRITATION AND DERMATITIS.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE.....	REPEATED EXPOSURE TO ETHANOL MAY EXACERBATE LIVER INJURY PRODUCED FROM OTHER CAUSES.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS HAZARDS IDENTIFICATION

HAZARDOUS INGREDIENTS	C.A.S. #	%	TLV	LD50	LC50
ISOPROPYL ALCOHOL	67-63-0	7 - 13	200 PPM TWA- ACGIH 400 PPM STEL- ACGIH	12870 MG/KG (DERMAL, RABBIT) 4710 MG/KG (ORAL, RAT)	12000 PPM/8H (IHL, RAT)
ETHYL ALCOHOL	64-17-5	30 - 70	SEE SECTION 11	SEE SECTION 11	SEE SECTION 11
METHYL ALCOHOL	67-56-1	7 - 13	SEE SECTION 11	SEE SECTION 11	SEE SECTION 11

SECTION 04: FIRST AID MEASURES

SKIN CONTACT	FLUSH CONTAMINATED SKIN WITH PLENTY OF WATER. REMOVE CONTAMINATED CLOTHING WHILE RINSING. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN.
EYE CONTACT.....	IMMEDIATELY FLUSH EYES WITH WATER FOR AT LEAST 20 MINUTES, HOLDING THE EYELIDS OPEN. GET MEDICAL ATTENTION IMMEDIATELY.
INHALATION.....	REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, START ARTIFICIAL RESPIRATION AT ONCE. IF BREATHING IS DIFFICULT, GIVE OXYGEN. OBTAIN MEDICAL ATTENTION IMMEDIATELY.
INGESTION	DO NOT GIVE ANYTHING BY MOUTH TO A CONVULSING OR UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING. GIVE ONE OR TWO GLASSES (250-300 ML) OF WATER TO DILUTE MATERIAL IN THE STOMACH UNLESS VICTIM IS DROWSY, CONVULSING, OR UNCONSCIOUS. SEEK MEDICAL ASSISTANCE IMMEDIATELY.
NOTES TO PHYSICIAN.....	IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCURS BEFORE VOMITING, GASTRIC LAVAGE WITH A CUFFED ENDOTRACHEAL TUBE SHOULD BE CONSIDERED. METABOLISM OF ISOPROPANOL FORMS ACETONE, WHICH MAY BE DETECTED IN THE URINE AND EXPIRED AIR. IN CONTRAST TO DIABETIC ACIDOSIS, ACIDOSIS WILL OCCUR IN THE ABSENCE OF HYPERGLYCEMIA. HEMODIALYSIS SHOULD BE CONSIDERED IN SEVERE ACUTE INTOXICATIONS.

SECTION 05: FIRE FIGHTING MEASURES

CONDITIONS OF FLAMMABILITY	EXCESSIVE HEAT, SPARKS AND OPEN FLAME.
MEANS OF EXTINCTION/EXTINGUISHING MEDIA: ..	APPLY ALCOHOL-TYPE OR ALL PURPOSE-TYPE FOAM BY MANUFACTURERS' RECOMMENDED TECHNIQUES FOR LARGE FIRES. USE CARBON DIOXIDE OR DRY CHEMICAL MEDIA FOR SMALL FIRES. WATER IS GENERALLY UNSUITABLE AND MAY HELP TO SPREAD THE FIRE.
FLASH POINT.....	>12 (C)
UPPER FLAMMABLE LIMIT (% BY VOLUME).....	N.AV.
LOWER FLAMMABLE LIMIT (% BY VOLUME).....	N.AV.
AUTO-IGNITION TEMPERATURE	N.AV.
SPECIAL FIRE FIGHTING PROCEDURES.....	WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS AND STRUCTURES. USE WATER SPRAY TO DISPERSE VAPOURS. REIGNITION IS POSSIBLE.
UNUSUAL FIRE AND EXPLOSION HAZARDS.....	VAPOURS FORM FROM THE PRODUCT MAY TRAVEL OR BE MOVED BY AIR CURRENTS AND BE IGNITED BY PILOT LIGHTS, OTHER FLAMES, SMOKING, SPARKS, HEATERS, ELECTRICAL EQUIPMENT, STATIC DISCHARGES, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM PRODUCT HANDLING POINT.
EXPLOSION DATA.....	N.AV.
SENSITIVITY TO MECHANICAL IMPACT	N.AV.
SENSITIVITY TO STATIC DISCHARGE	N.AV.
HAZARDOUS COMBUSTION PRODUCTS	SEE HAZARDOUS DECOMPOSITION PRODUCTS.

SECTION 06: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES	CONTAIN SPILLED MATERIAL. PROVIDE ADEQUATE VENTILATION AND PROTECTIVE EQUIPMENT. REMOVE SOURCES OF HEAT, SPARKS OR FLAMES. SPILL SHOULD BE COLLECTED IN SUITABLE CONTAINERS OR ABSORBED ON A SUITABLE ABSORBENT MATERIAL FOR SUBSEQUENT DISPOSAL.
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SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT.....	KEEP AWAY FROM HEAT, SPARKS AND FLAMES. EQUIPMENT MUST BE GROUNDED. KEEP CONTAINER CLOSED WHEN NOT IN USE. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. AVOID BREATHING VAPOURS. AVOID INGESTION. WEAR PROTECTIVE EQUIPMENT DURING HANDLING. USE ADEQUATE VENTILATION. WASH EXPOSED SKIN THOROUGHLY AFTER HANDLING. FOLLOW LABEL WARNINGS
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STORAGE REQUIREMENTS..... EVEN AFTER CONTAINER IS EMPTIED. MAINTAIN A GOOD PERSONAL HYGIENE.
 KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAMES. KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

SECTION 08: EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROL..... THE VENTILATION SYSTEM SHOULD BE NON-SPARKING, GROUNDED AND SEPARATE FROM OTHER EXHAUST VENTILATION SYSTEMS. LOCAL VENTILATION IS RECOMMENDED WHEN HANDLING.

PERSONAL PROTECTIVE EQUIPMENT

SKIN PROTECTION IMPERVIOUS GLOVES (VITON, NITRILE) SHOULD BE WORN AT ALL TIMES WHEN HANDLING THIS PRODUCT.CHEMICAL RESISTANT CLOTHING.

EYE/FACE PROTECTION..... CHEMICAL SAFETY GOGGLES SHOULD BE WORN.

RESPIRATORY PROTECTION IF EXPOSURE EXCEEDS OCCUPATIONAL EXPOSURE LIMITS, USE AN APPROPRIATE NIOSH-APPROVED RESPIRATOR. USE A NIOSH-APPROVED CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOUR CARTRIDGES OR USE A NIOSH-APPROVED SUPPLIED-AIR RESPIRATOR. FOR HIGH AIRBORNE CONCENTRATIONS, USE A NIOSH-APPROVED SUPPLIED-AIR RESPIRATOR, EITHER SELF-CONTAINED OR AIRLINE BREATHING APPARATUS, OPERATED IN POSITIVE PRESSURE MODE.

WORK/HYGIENE PRACTICES PROVIDE AN EYEWASH STATION IN THE AREA. SAFETY SHOWERS SHOULD BE AVAILABLE FOR EMERGENCY USE.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE..... LIQUID

APPEARANCE & ODOUR..... CLEAR – APPLE & ALCOHOL ODOUR

ODOUR THRESHOLD..... N.AV.

SPECIFIC GRAVITY..... 0.899

VAPOUR PRESSURE (MMHG)..... N.AV.

VAPOUR DENSITY (AIR=1)..... N.AV.

EVAPORATION RATE..... N.AV.

BOILING POINT..... N.AV.

FREEZING/MELTING POINT N.AV.

PH..... N.AV.

SOLUBILITY IN WATER (% W/W)..... SOLUBLE.

COEFFICIENT OF WATER/OIL DISTRIBUTION N.AV.

SECTION 10: STABILITY AND REACTIVITY

STABILITY STABLE UNDER NORMAL OPERATING CONDITIONS.

CONDITIONS TO AVOID..... AVOID EXCESSIVE HEAT, OPEN FLAMES AND ALL IGNITION SOURCES. ISOPROPYL ALCOHOL IN CONTACT WITH AIR, PRODUCES PEROXIDES WHICH CAN EXPLODE WHEN CONCENTRATED.

INCOMPATIBILITY (MATERIALS TO AVOID)..... AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND ACIDS. ALUMINUM AT HIGH TEMPERATURES.

HAZARDOUS DECOMPOSITION PRODUCT..... CARBON MONOXIDE AND CARBON DIOXIDE ARE PRODUCED ON COMBUSTION.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

EXPOSURE LIMITS..... ETHYL ALCOHOL: TLV: 1000 PPM; METHANOL: 200 PPM; ETHYL ACETATE: 400 PPM. REFERENCES: ACGIH (1988-1989), RTECS (1983), CCOHS (1988), SHELL CHEMICAL (1988).

LD50..... RAT-ORAL: ETHYL ALCOHOL: 7,060 MG/KG; METHANOL: 5,628 MG/KG; ETHYL ACETATE: 11,300 MG/KG; RABBIT-SKIN: ETHYL ALCOHOL: 20,000 MG/KG; METHANOL: 20,000 MG/KG.

LC50..... RAT-INHALATION, PPM/4 H: ETHYL ALCOHOL: 31,623; METHANOL: 64,000.

IRRITANCY OF MATERIAL SEE SECTION 2.

SENSITIZATION TO PRODUCT N.AV.

CARCINOGENICITY.....	ISOPROPYL ALCOHOL TESTED NEGATIVE IN TWO MUTAGENICITY ASSAYS; THE MOUSE MICRONUCLEUS AND CHINESE HAMSTER OVARY ASSAYS.
REPRODUCTIVE TOXICITY	N.AV.
TERATOGENICITY	ISOPROPYL ALCOHOL, WHEN ADMINISTERED ORALLY TO RATS AND RABBITS, PRODUCES REDUCED FETAL BODY WEIGHTS IN RATS ONLY AT DOSES WHICH RESULT IN TREATMENT RELATED TO MATERNAL DEATHS AND PRODUCES NO INDICATION OF FETAL EFFECTS IN RABBITS EVEN AT DOSE WHICH RESULTED IN SIGNIFICANT MATERNAL MORTALITY. ISOPROPYL ALCOHOL PRODUCES NO EVIDENCE OF DEVELOPMENTAL NEUROTOXICITY.
MUTAGENICITY	ISOPROPYL ALCOHOL TESTED NEGATIVE IN TWO MUTAGENICITY ASSAYS; THE MOUSE MICRONUCLEUS AND CHINESE HAMSTER OVARY ASSAYS.
TOXICOLOGICAL SYNERGISTIC PRODUCTS.....	N.AV.
CHRONIC TOXICITY	N.AV.
SYNERGISTIC MATERIALS.....	ETHANOL WITH CARBON TETRACHLORIDE, CHLOROFORM, BROMOTRICHLOROMETHANE, DIMETHYLNITROSAMINE, THIOACETAMIDE. METHANOL WITH CARBON TETRACHLORIDE AND MEK WITH N-HEXANE, METHYL N-BUTYL KETONE.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION	N.AV.
OTHER INFORMATION.....	N.AV.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL.....	IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL AND FEDERAL REGULATIONS.
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SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME.....	FLAMMABLE LIQUIDS, TOXIC N.O.S (ETHANOL, METHANOL)
TDG CLASSIFICATION	3 (6.1)
UN NUMBER	1992
PACKGING GROUP	II

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION	B2, D1A, D2B
CPR COMPLIANCE	THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

PREPARATION INFORMATION	PREPARED BY: REGULATORY AFFAIRS, TELEPHONE - (613)-744-8896 PREPARATION DATE: JULY 1, 2016
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N.AV. = NOT AVAILABLE
N.AP. = NOT APPLICABLE