Material Safety Data Sheet

Date: March 12,2017 **Product:** Isopropyl Alcohol (99%) **Product Information:** IPA-99% **Product Code:** 00L-IPA99. **D.I.N**.: Not Applicable Supplier: Dominion Vet. Labs. 1199 Sanford St. Winnipeg, Manitoba R3E 3A1 Telephone: (204)-589-7361 Fax: (204)-943-9612 **Product Identification** Product Use: Industrial solvent, cleaner, degreaser Chemical Identity/Name: Isopropyl alcohol 60 to 100% Synonyms: Isopropanol, IPA, Dimethyl Carbinol, 2-Propanol. CAS No.:67-63-0 Molecular Formula: CH3CHOH-CH3 **Regulatory Section** WHMIS Classification: Flammable liquid, Class B-2 **TDG Classification:** Name: Isopropyl Alcohol. Class: 3 UN 1219 Packing Group: II Regulated Limit: N/A **Hazardous Ingredients of Material** Chemical Identity CAS#/NA#/UN# Conc.(w/w) LD50

60 100%

400ppm

67- 63- 0

Isopropanol

Physical /Properties Data Physical State:Liquid Appearance and Odour: Clear, colourless liquid with characteristic odour. **Odour threshold:** 40-200 ppm **Boiling Pt. (Deg.C) :82-97 Specific Gravity:** .785 - .805 Melting/Freezing Pt.(Deg.C):-86 to 126 Vapour Pressure: 33 pH:N/A Vapour Density: 2.01 Bulk/Density(g/mL):same as specific gravity **Evapouration Rate:** 2.5 Solubility: Soluble in water % Volatile by Volume: 100. Coefficient of water/Oil Distr.:N/A **Reactivity Data Stability:** Under Normal Conditions:Stable Under Fire Conditions:Flammable Hazardous Polymerization: Will Not Occur **Conditions and Materials to Avoid:** Conditons: High temperatures, sparks, open flames and other sources of ignition. Materials:Strong oxidizers, caustics, Ammonia, Chlorinates solvents. **Hazardous decomposition products:** Thermal decomposition products are toxic and mau include carbon dioxide, corbon monoide and, possible, irritating gases Fire or Explosion Data Flashpoint and method of determination: TCC (Deg. C):13 Deg. C **Autoignition Teperature:** 399 Deg C Flammability Limits in Air (%): Lower - 2.0

Upper - 12.0

Fire or Explosion Data

Fire Extinguishing Methods:

Large fires: AFFF type foam

Small fires:Co2 or dry chemical or if water is available, use it in the form of fog.

Fire Fightinhg Procedures: Use water spray to cool fire exposed containers or structures. Use water spray to disperse vapors, re-ignitions is possible. Use Self-contained breathing apparatus and protective clothing.

Fire and Explosion Hazards: Vapors from this product are heavier than air, asnd may travel to a soarse of ignitition, pilot light, heaters, electric motors some distance away, and then flash back to the piont of product discharge causing an explosion and fire.

Sensitivity to mechanical impact: N/A Not expected to be sensitive to mechanical impact.

Rate of Burning: N/A

Explosive power:N/A

Sensitivity to static discharge:N/A Expect to be sensitive to static discharge when vapors are present below the lower and upper explosive limit.

Toxilogical and health Data

Exposure limits:

Toxicological Data:

Isopropyl Alcohol LD50 (Oral Rat) = 5045 mg/kg (1)

LD50 (Dermal Rabbit) = 13000 mg/;kg (1) LC50 (Inhal'n.Rat) = 22600 ppm for 4 hours (1)

Carcinogenicity Data: The ingredient (s) of this product is (are) not classified

Reproductive Effects/Toxicity: No information is available and no adverse reproductive effects are anticapted.

Teratogenicity Data:N/A

Mutagenicity Data: N/A

Respiratory / Skin Sensitization:may cause sensitization or other allergic responses.

Synergistic Materials: Alcohols may interact synergistically with chlorinated solvents

Effects of Exposure

Route of Entry:

Skin contact: May cause defatting, drying and cracking of the skin. Prolonged and repeated contacxt may lead to dermatitis.

Eye absorption: This product causes irritation, redness and pain. Vapours from this product are irritating to the eyes.

Inhalation:Product is irritating to the nose, throat and respiratory tract. May cause central nervous (cns) depression.

Ingestion: This product causes irritation, a burning sensation of the mouth, throat and respiratory tract and abdominal pain. May cause central nervous system (cns) depression.

Effects of chronic exposure: CNS depression is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. severe overexposures may lead to coma and possible death due to respiratory failure.

Sensitization: is the process whereby a biological change occurs in the individual because of previous exposeure to a substance and, as a result, the individual reacts more strongly when subsequently exposed to the substance. Once sensitized, an individual can react to extremely low airborne levels, even below the TLV or to skin contact.

First Aid Measures

Skin Contact: Flush Skin With running water and wash effected areas thoroughly with soap and water. Start flushing flushing while removing contaminated clothing. Obtain medical attention Immediately.

Eye Contact:Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing If irritation persist, repeat flushing. Obtain medical Attention.

Inhalation:Move vitim to fresh air. Give artifical respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitationv(CPR) if there is no breathing and no pulse. Obtain medical attention IMMEDIATELY.

Ingestion:If victim is alert and convulsing, rinse mouth out and give 1/2 to 1 glass of water to dilute material IMMEDIATELY contact the poison control center. Vomiting should only be induced under the direction of a physician or a poison control center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. IMMEDIATELY transport victim to an emergency facility.

Emergency Medical Care: This product contains materials that may cause severe pneumonitis if aspirated. If ingestion has occured lass than 2 hours earlier, carry out careful gastric lavage: use endotracheal cuff if available, to prevent aspiration. Observe patient for respiratory difficulty from aspiration pneumontitis. Give articical resuscitation and appropriate chemotherapy if respiration is depressed.

Recommendations listed in this section indicate the type of equipment which will provide protection against	
overexposeure to this product Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your work place.	-
Engineering Controls:Local exhaust ventilation required. Ventilation should be explosion proof. Vetilate low lying areas such as sumps or pits where dense vapors may collect.	=
Respiratory Controls: Approved air-purifying respirators equiped with organic capor cartridges for concentrations up to 1000 ppm. An air supplied respirator if concentrations are higher or unknown.	-
Skin Protection: Gloves and protective clothing made of neoprene should be impervious under conditions of use. Prior to use user should confirm inpermeability.	=
Eye Prtection: Safety glasses with side shields are recommended to prevent, eye contact. Use chemical safety goggles when there is potential for eye contact.	-
Other Protective Equipment: Wear an impermeable apron and boots. Locate safety shower and eyewash station close to chemical handle area.	=
Handling Preecures and Equipment: Ground and bond equipment and containers to prevent a static charge buildup. Use spark resisitant tools and avoid "Splash-Filling" of containers. Do not use poorly ventilated or confines areas without proper resiratory protection.	-
Storage Temperature: Store in a cool, well ventilated area. Keep away from heat, sparks and flame. Keep containers closed. Do not expose sealed containers to temperature above 40 Deg. C.	=
Other Precautions: Use only with adequate ventilation and avoid breathing vapors or mist. Avoid contactr w eyes, skin or clothing. Wash throughly with soap and water after handling. Wash contaminated clothing throu before re-use.	
Enviromental Protection Data	-
Steps to be taken in the event of a spill or leak: Eliminate all the sources of ignition. Collect product for recovery or disposal. For release to land, or storm water runoff, contain discharge by constructing dyke or applying inert absorbant; for release to water, utilize damming and/or water diversion to minimize the spread of contamintion. Ventilate enclosed spaces. Notify applicable government authority if release is report could adversly affect the environment.	

Deactivating Chemicals:N/A

-	aste material at an apporoved (hazardous) waste treatment oplicale laws. Do not dispose of waste with normal garbage or to sewer
	Prepared by:
	Date: March 12,2017
	Checked By:D.Earn

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