

Material Safety Data Sheet		(MSDS)		Reviewed: 03/11/09	
Date of Issue: 01/20/2006					
SECTION 1 - MANUFACTURER INFORMATION					
Manufacturer Name: DLI					
Trade Name: KOPTEC Ethanol 190 Proof			Emergency Telephone U.S.: (800) 424-9300 CANADA: (703) 527-3887		
Chemical Name or Synonym: Ethyl Alcohol			Info Telephone: 610-755-0800		
Mfg. Address: 460 Glennie Circle					
City: King of Prussia			State, Zip: PA 19406		
SECTION II - HAZARDOUS INGREDIENTS					
CAS #	Chemical Name	Percent	PEL	TLV	Other Limits Recommended
64-17-5	Ethyl Alcohol	95%	1000 ppm	1000 ppm	NL
Additional Information: Unidentified ingredients are not considered hazardous under the Federal Hazard Communication Standard (29 CFR 1910.1200)					
SECTION III - PHYSICAL DATA					
Physical State: Liquid		Specific Gravity (H2O=1.0): 0.811-0.821			
Odor: Alcohol odor		Boiling Point: 173 °F.			
Color: Clear, colorless liquid		Density: 6.72			
Vapor Pressure: 44.6		Freezing Point: No Data Available			
Vapor Density (Air=1): Heavier than air		Melting Point: (-173 °F.)			
Evaporation Rate (Butyl acetate-1): Slower than ether		Solubility in Water: Complete			
Percent Volatile: 100		PH: N/A			
SECTION IV - FIRE AND EXPLOSION DATA					
Flash Point: 58° F		Flammable Limits: 0.033 to 0.19		AutoIgnition Temperature: 685 °F.	
Extinguishing Media: Use water fog, alcohol foam, dry chemical or CO ₂ .					
Special Fire Fighting Procedures: Clear fire area of unprotected personnel. Do not enter fire area without full bunker gear, helmet w/face shield, Bunker coats, gloves, and rubber boots. Include a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed container with water.					
Additional Information: Hazard Ratings HMIS: Health = 1 Flammability = 3 Reactivity = 0 Personal Protection = H (Splash goggles, gloves, chemical apron, vapor respirator) NFPA: Health = 1 Flammability = 3 Reactivity = 0					

SECTION V - HEALTH HAZARD DATA	
ACUTE:	Irritation as noted below. Shortness of breathing, confused behavior, redness of skin, swelling of tissues, watery eyes and nausea.
EYES:	Can cause moderate eye irritation. High vapor concentration may also be irritating.
SKIN:	Can cause mild skin irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
INHALATION:	May cause mild irritation to nose, throat and respiratory tract and may result in central nervous system (CNS) depression.
INGESTION:	Ingestion of excessive quantities may cause irritation of the digestive tract and signs of nervous system depression (headache, drowsiness, dizziness, loss of coordination and fatigue)..
CHRONIC, OTHER:	Pre-existing skin, eye, and respiratory disorders may be aggravated by exposure to Ethanol.
First Aid	
Eyes:	Immediately flush with plenty of water for at least 15 minutes, while holding eyelids open. Seek immediate medical attention.
Skin:	Flush skin with water while removing contaminated clothing. If irritation occurs, seek medical attention. Do not reuse clothing or shoes until cleaned.
Inhalation:	Remove victim to fresh air and provide oxygen if breathing is difficult. Seek immediate medical attention.
Ingestion:	Do not give liquids if victim is unconscious or drowsy. Otherwise, give two glasses of water and induce vomiting by giving 30 mL syrup of IPECAC, upon directions of physician or poison control center. DO NOT induce vomiting if victim is unconscious or drowsy. Call doctor.
NOTE to Physician:	Do not induce vomiting - FIRST contact poison control center, treatment depends on volume of substance, time elapsed, due to faster absorption.
SECTION VI - REACTIVITY DATA	
Stability: Stable.	Conditions to Avoid: Avoid heat, sparks, flame and contact with strong oxidizing agents.
Hazardous Decomposition or By-Products:	Carbon Monoxide and unidentified organic compounds may be formed during combustion.
Polymerization:	Will not occur.
SECTION VII - SPILL OR LEAK PROCEDURES	
Spill Management:	WARNING-FLAMMABLE. Eliminate all ignition sources. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency. Equipment must be grounded to prevent sparking. Contain liquid with absorbent material and place in non-leaking container. Seal tightly for disposal.
Waste Disposal Method:	Container disposal regulation may vary with amount of liquid content remaining in container. Refer to latest Federal and State Regulations regarding proper disposal of ALL containers. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.
Method:	The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state and local regulatory agencies.
SECTION VIII - SPECIAL PROTECTION INFORMATION	
Respiratory:	If exposure exceeds occupational exposure limits (see Section II), use a NIOSH-approved respirator. In accordance with 29 CFR 1910.134, use either an atmosphere supplying respirator or an air purifying respirator for organic compounds.
Eyes:	Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.
Protective Gloves:	Chemical Resistant Gloves.
Ventilation:	Use Explosion Proof Ventilation as required to control vapor concentrations.
Other Clothing and Equipment:	To prevent repeated or prolonged skin contact, wear impervious clothing and boots.
SECTION IX - ADDITIONAL INFORMATION	
Safe Handling and Storage:	Do not contact skin, eyes, mouth or ingest. Eye wash fountains and showers should be available for emergency use. Do not store alcohol above 120°F.
SECTION X - TRANSPORTATION INFORMATION	
DOT Hazard Class:	ORM-D Consumer Commodity Cat # V1116 Ethanol solution, Class 3, UN 1170, PG II Flammable Liquid - Cat #V1101,V1101G,V1105,V1105M, V1105SG,V1155,V1155M

The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or for the consequences of its use or misuse.