

OFI TESTING EQUIPMENT, INC.
MATERIAL SAFETY DATA SHEET

Effective Date:02/25/02

SECTION I - PRODUCT IDENTIFICATION	
Chemical Name:	OXYETHLATED ALKYL PHENOL LIQUID
Trade Name:	AKTAFLO E [®] , SOLUTION
OFI Part No.	292-00
Chemical Family:	
Formula:	Not Applicable for Mixtures
SECTION II - HAZARDOUS CONSTITUENTS	
CAS #:	CHEMICAL NAME
67-63-0	Isopropyl Alcohol 4.0% by Volume
SECTION III - PHYSICAL PROPERTIES	
Appearance / Odor:	Clear, Amber Liquid / Slight Alcohol Like Odor
Solubility:	Miscible in Water.
Specific Gravity:	< 1.0
pH:	No Information Found.
% Volatiles by Vol.:	No Information Found.
Melting Point:	32 ° F (0 °C)
Boiling Point:	180 ° F (82 °C) - Isopropyl Alcohol
Vapor Density (Air=1):	2.1 - Isopropyl Alcohol
Vapor Pressure (mmHg):	44 @ 77 °F (25 °C) - Isopropyl Alcohol
SECTION IV - FIRE, EXPLOSION AND REACTIVITY	
Fire:	Flash Point: 53 °F (12 °C) CC, Auto Ignition Temperature: 750 °F (399 °C) Flammable Limits in Air % by Volume: lel 2.0, uel 12.7. Listed Fire Data is for Isopropyl Alcohol (major component).
Explosion:	Above Flash Point, Vapor-Air Mixtures are Explosive within Flammable Limits noted above. Sensitive to Static Discharge. Vapors can Flow Along Surfaces to Distant Ignition Source and Flash Back. Sealed Containers may Rupture when Heated. Sensitive to Static Discharge.
Fire Extinguishing Media:	Alcohol-Resistant Foam, Dry Chemical, Foam or Carbon Dioxide. Water may be Ineffective.
Special Information:	In the Event of Fire, Wear Full Protective Clothing and NIOSH-Approved Self-Contained Breathing Apparatus with Full Facepiece Operated in the Pressure Demand or Other Postitive Pressure Mode. Water may be Used to Flush Spills away from Exposures and to Dilute Spills to Non-Flammable Mixtures.
General Reactivity:	Stable Under Ordinary Conditions of Use and Storage.
Hazardous Decomposition:	Carbon Dioxide and Carbon Monoxide may Form when Heated to Decomposition.
Incompatibilities:	Heat, Flame, Strong Oxidants, Silver Salts, Acid Chlorides, Alkali Metals, Oleum, Metal Hydrides, Hydrazine, and Many Other Substances.
Hazardous Polymerization:	Will Not Occur.
SECTION V - HEALTH HAZARD INFORMATION	
Inhalation:	Exposure may Cause Irritation to the Mucous Membranes of the Upper Respiratory Tract. Proloned Exposures to High Concentrations may Cause Drowsiness, Loss of Appetite and Inability to Concentrate and Possibly Death.
Ingestion:	Can Cause Headaches, Gastritis, Intoxication, Blindness and in Acute Cases, Death. Cathartic. Very Active, even in Small Amounts (30 - 100 mg). May Cause Purging, Collapse, and Fall in Blood Pressure or an Itching Skin Rash that can Become Ulcerous. Other Systemic Effects are Not Well Known.
Skin:	Can Cause Skin Irritation, Cracking, or Flaking due to Dehydration and Defatting Action. May be Absorbed Through the Skin with Possible Systemic Effects.
Eye Contact	Vapors Cause Eye Irritation. Splashes Cause Severe Irritation, Possible Corneal Burns and Permanent Eye Damage.
Chronic Exposure:	Prolonged Skin Contact Causes Drying and Cracking of Skin. May Effect Nervous System. May Affect Liver, Blood and Reproductive System. Continued Small Amounts could Result in Blindness.

SECTION V - HEALTH, HAZARD INFORMATION (cont.)	
Carcinogenic References:	NTP Carcinogen - Known: No, IARC Category- 3 (Isopropyl Alcohol)
Aggravated by Exposure:	Persons with Pre-Existing Skin Disorders or Eye Problems or Impaired Respiratory Function, or Impaired Liver or Kidney Function may be More Susceptible to the Effects of this Agent.
SECTION VI - EMERGENCY & FIRST AID PROCEDURES	
Inhalation:	Remove to Fresh Air. If not Breathing, Give Artificial Respiration. If Breathing is Difficult, Give Oxygen. Get Medical Attention.
Ingestion:	Induce Vomiting Immediately as Directed by Medical Personnel. Give Large Amounts of Water to Drink. Never Give Anything by Mouth to an Unconscious Person. Get Medical Attention.
Skin:	Immediately Flush Skin with Plenty of Water for at Least 15 Minutes. Call a Physician if Irritation Develops.
Eyes:	Immediately Flush Eyes with Plenty of Water for at Least 15 Minutes, Lifting Upper and Lower Eyelids Occasionally. Get Medical Attention Immediately.
SECTION VII - INDUSTRIAL HYGIENE MEASURES	
Ventilation System:	A System of Local and/or General Exhaust is Recommended to Keep Employee Exposures below the Airborne Exposure Limits. Local Exhaust Ventilation is Generally Preferred because it can Control the Emissions of the Contaminant at its Source, Preventing Dispersion of it into the General Work Area.
Airborne Exposure Limits:	OSHA Permissible Exposure Limit (PEL) 400 ppm (TWA) ACGIH Threshold Limit (TLV) 400 ppm (TWA), 400 ppm (STEL). Isopropyl Alcohol.
Personal Respirators: (NIOSH APPROVED)	A Full-Facepiece Organic Vapor Respirator may be Worn up to 50 Times the Exposure Limit or the Maximum Use Concentration Specified by the Appropriate Regulatory Agency or Respirator Supplier, Whichever is Lowest. For Emergencies or Instances Where Exposure Levels are Not Known, Use a Full-Facepiece Positive-Pressure Air Supplied Respirator.
Skin Protection:	Wear Impervious Protective Clothing, Including Boots, Gloves, Lab Coat, Apron or Coveralls, as Appropriate, to Prevent Skin Contact. Neoprene and Nitrile Rubber are Recommended.
Eye Protection:	Use Chemical Safety Goggles and/or a Full Face Shield where Splashing is Possible. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.
SECTION VIII - INDUSTRIAL HYGIENE MEASURES	
Accidental Release:	Ventilate area or Leak or Spill. Remove all Sources of Ignition. Wear Appropriate Personal Protective Equipment as Specified in Section 7. Isolate Hazard Area. Keep Unnecessary and Unprotected Personnel from Entering. Contain and Recover Liquid when Possible. Use Non-Sparking Tools and Equipment. Collect Liquid in an Appropriate Container or Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and Place in a Chemical Waste Container.
Disposal:	Do Not Use Combustible Materials, such as Saw Dust. Do Not Flush to Sewer! US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.
Environmental Fate:	When Released to the Soil and Water, this Material may Evaporate to Moderate Extent. When Released into the Soil, This Material may Leach into Groundwater. When Released into the Water, This Material is Expected to have a Half Life Between 1 and 10 Days.
SECTION IX - SPECIAL PRECAUTIONS	
Handling and Storage:	Keep in a Tightly Closed Container, Stored in a Cool, Dry, Ventilated Area. Protect against Physical Damage and where a Fire Hazard May be Acute. Storage and Use should be No Smoking Areas. Do Not Pressurize, Cut, Weld, Braze, Solder, Drill, Grind or Expose Containers to Heat, Sparks, Flame, Static Electricity or Other Sources of Ignition. Containers of this Material may be Hazardous when Empty since they Retain Product Residues.
SECTION X - DOT SHIPPING REQUIREMENTS	
Shipping Name:	FLAMMABLE LIQUID N.O.S. (ISOPROPYL ALCOHOL)
Hazard Class:	3.2
Identification No.:	UN1993, Packing Group: II
NFPA Rating:	HEALTH-2, FLAMMABILITY-3, REACTIVITY-0
SECTION XI - IN CASE OF EMERGENCY	
(713) 880 - 9884	OFI TESTING EQUIPMENT, INC. - Regular Business Hours
(713) 880 - 9885	OFI TESTING EQUIPMENT, INC. - After Regular Business Hours

