

JAYTECH, INC.
1290 OSBORNE RD NE
MINNEAPOLIS, MN 55432-2892
(763)795-9331 FAX: (763)795-9332

EMERGENCY PHONE:
1-800-424-9300
EFFECTIVE DATE:
03/06

MATERIAL SAFETY DATA SHEET

Chemical Name and Synonyms: **JT-Kool 101**

Ethylene Glycol
Ethylene Glycol - Industrial Grade
CAS # 000107211

Chemical Family: Oxygenated Hydrocarbon

S.A.R.A. Information:

Hazards: Acute Chronic
Physical Data: Mixture Liquid

Section 1: Hazardous Ingredients

Ingredient CAS Number	Max % W/W	SARA Applies			TWA/TLV (ppm)	Air Contaminant Levels		Skin	Agent
		312	313	372		STEL (ppm)	CEIL (ppm)		
Ethylene Glycol 1,2 Ethanediol (CAS # 107-21-1)	90-95%	Y	Y	Y			50 50	N N	OSHA ACGIH
Diethylene Glycol DEG (CAS # 111-46-6)	5-8%	Y	N	N					
Sodium Hydroxide -50% (CAS # 1310-73-2)	<1%				2mg/m ³				

Section II: Health Hazards

Potential Effects of Exposure:

Eyes: Eye contact with product may cause severe irritation

Skin: Skin contact may cause mild irritation. Prolonged or repeated skin contact may cause sensitization (allergic reaction).

Inhalation: Inhalation may cause irritation, visual disturbance, pneumonia, central nervous system (CNS) depression. Symptoms of early to moderate central nervous system (CNS) depression include giddiness, dizziness, confusion, drunken behavior, headache, nausea, diarrhea, vomiting, tiredness and drowsiness. In extreme cases, symptoms of central nervous system (CNS) depression include stupor, convulsions, unconsciousness, coma and even death.

Ingestion: Ingestion may cause irritation, pain, visual disturbance, hearing impairment, increased acidity of blood and body (metabolic acidosis), central nervous system (CNS) depression. Symptoms of early to moderate central nervous system (CNS) depression include giddiness, dizziness, confusion, drunken behavior, headache, nausea, diarrhea, vomiting, tiredness and drowsiness. In extreme cases, symptoms of central nervous system depression include stupor, convulsions, unconsciousness, coma and even death.

Target Organs

Overexposure may cause damage to: Kidney, liver and lungs

Animal Test Data – Based on Laboratory Test Data: Overexposure may cause damage to, disorders of, or adversely affect the following systems, functions, or organs: Fetus

FIRST AID:

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Call a physician.

SECTION II: HEALTH HAZARDS (Continued)

SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly clean clothing before reuse. Discard contaminated shoes and contaminated leather articles. Call a physician.

INHALATION: Remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Call a physician.

INGESTION: If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician.

OTHER INFORMATION:

Routes of entry: Eye contact, skin contact

Overexposure may aggravate disorders of the: Liver, kidneys, respiratory system

Carcinogens Status: No components, present in excess of 0.1% by weight are listed as carcinogens by IARC, NTP, or OSHA.

SECTION III: SPECIAL PROTECTION**PROTECTIVE EQUIPMENT:**

Eyes: Chemical goggles

Skin: Impervious gloves, clean body covering clothing

Inhalation: If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in positive pressure breathing apparatus should be readily available.

Ventilation Required: Adequate ventilation is required to minimize exposure to maintain exposure levels below OSHA/ACGIH requirements.

Additional Protective Measures: Safety shower, eye wash fountain and washing facilities should be readily available.

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method): > or = 232° (TCC)

Flammable Limits (% Volume in Air) Upper: 15.3 **Lower:** 1.7

HMIS INFO:

Health: 1

Fire: 1

React: 0

Special: X

Extinguishing Media: Water, fog, foam, carbon dioxide, dry chemical

Fire Fighting Procedures: Prevent human exposure to fire, fumes, smoke and products of combustion.

Evacuate non-essential personnel. Firefighters should wear full face, self-contained breathing apparatus and impervious protective clothing.

Unusual Fire and Explosion Hazards: None currently known.

SECTION V: PHYSICAL DATA

Boiling Point: 387° to 464°F

Freezing Point: 8°F

Specific Gravity (H₂O=1): > or = 1.12 @ 60°F

Vapor Pressure (MM HG.): 0.060 to 0.080 @ 68° F

Vapor Density (Air = 1): > or = 2.1000Q

Evaporation Rate (N-Butyl Acetat=1): <0.0100

Solubility in Water: Complete

Percent Volatile by Volume: Not Determined

pH: aqueous approx. 11.5

Appearance: Colorless to lightly colored liquid

Odor: Nil

SECTION VI: REACTIVITY DATA

Stability: Stable

Incompatibility: Bleaching agents (oxidizers), inorganic acids, inorganic bases. Avoid contact with bleaching agents and oxidizers, which include chlorine, oxygen permanganates, perchlorates, percarbonates, peroxides, chromates, hypochlorites, nitric acid and sulfuric acid.

Conditions to Avoid: none currently known

Hazardous Decomposition Products: Carbon monoxide, miscellaneous organic compounds, some possibly toxic.

Hazardous Polymerization: Will not occur

SECTION VII: SPILL AND LEAK PROCEDURES

Steps to be taken if material is released or spilled: Evacuate non-essential personnel, eliminate ignition sources, and wear protective equipment (see Section III). Shut off source of leak only if safe to do so. Contain spill. Recover free product. To clean up residue, flush sparingly with water or use an absorbent. Avoid runoff to ground water, surface waters, and sewers. It may be necessary to remove contaminated soil. If product is flammable or combustible, use non-sparking tools. If acidity (low pH) is a problem neutralize with dilute acetic acid or dilute hydrochloric (muriatic) acid. If required, notify state and local authorities.

Disposal Method: At very low concentrations (less than 10 ppm) this material can be biodegraded in a biological waste treatment plant. Solids must be disposed of in a permitted hazardous waste management facility. Recovered liquids may be reprocessed or incinerated. Incineration must be handled in a permitted hazardous waste management facility. Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State.

SECTION VIII:

Hazard Class: Unclassified

Label Requirements: None

Reportable Quantity: None

SECTION IX: ADDITIONAL INFORMATION

LABEL SIGNAL WORD:

Warning

Precautions: Wear protective equipment when handling. Use only with adequate ventilation. Wash thoroughly after handling. Do not breathe vapor or mist. Do not get in eyes or on skin. Do not swallow.

Handling: Keep heat, lights, fire and sparks away. For industrial use only. **Attention:** This container is hazardous when emptied. Since emptied container contains product residues (vapor or liquid), all labeled hazard precautions must be observed.

Storage: Keep container closed when not in use. Store away from oxidizers. Keep out of reach of children.

SECTION X: COMPLIANCE INFORMATION

TSCA Inventory Status: Listed

The information provided in this material Safety Data Sheet has been obtained from sources believed to be reliable. Jaytech, Inc. provides no warranties, either expressed or implied and assumes no responsibility for the accuracy or completeness of the data contained herein. This information is offered for your information, consideration, and investigation. You should satisfy yourself that you have all current data relevant to your particular use. Jaytech, Inc. knows of no medical condition, other than those noted on this material safety data sheet, which are generally recognized as being aggravated by exposure to this product.