

# ProTek-EG

MSDS# ProTek-EG

Safety Data Sheet

November 2010

5 pages

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Product Name:

ProTek EG Ethylene Glycol Heat Transfer Fluid

### **Manufactured By:**

Diversitech

6650 Sugarloaf Parkway, Duluth, GA, 30097

**Emergency Phone No.:** 1 800.255.3924 Chem-Tel (Chemical Emergencies)**Phone (For Information):** 1+678.542.3600**Date Revised:** 11/29/2010**Prepared By:** Anthony Jernigan

## 2. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

**Routes of Exposure:** Inhalation, Ingestion, Skin Contact/Absorption, Eye Contact**EYE:** May cause minor eye irritation.**SKIN:** No significant adverse effects are expected under anticipated conditions of normal use. Repeated, prolonged exposure may cause slight flaking, tenderness, and softening of skin.**INGESTION:** Harmful if swallowed Aspiration hazard if swallowed - can enter lungs and cause damage. Can cause liver and kidney damage if swallowed.**INHALATION:** may cause dizziness and drowsiness. If effects do occur, refer to FIRST AID in Section 4.**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** Same as above**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:** Material and/or its emissions may aggravate preexisting eye disease.**OTHER HEALTH INFORMATION: Warning:** Contains ethylene glycol which may cause birth defects based on animal data. This product is not to be used in food, drug, cosmetic or potable water applications.

## 3. INGREDIENTS

Material	CAS#	% BY WT.	Hazard Symbol	Risk Phrases
1,2-ethanediol (Common Name-Ethylene glycol)	107-21-1	90-95	Xn	R22
Phosphoric acid, dipotassium salt	7758-11-4	1-3	Not applicable	

See Section 15 for an explanation of Risk Phrases.

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## 4. FIRST AID MEASURES

**Eyes:** Immediately flush eyes with large amounts of water for 15 minutes, lifting lower and upper lids. Obtain medical attention if pain, blinking, tears or redness persist.

**Skin:** Product is not expected to present a significant skin hazard under anticipated conditions of normal use.

**Inhalation:** If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

**Ingestion:** Drink 3-4 glasses of water and Call the nearest poison control center, or the National Poison Control Hotline **1-800-222-1222** for advice. **Do not induce vomiting unless instructed to do so by a physician.**

**Notes to Physician:** Ethylene glycol (EG) and diethylene glycol (DEG) intoxication may initially produce behavioral changes, drowsiness, vomiting, diarrhea, thirst, and convulsions. EG and DEG are nephrotoxic. End stages of poisoning may include renal damage or failure with acidosis. Supportive measures, supplemented with hemodialysis if indicated, may limit the progression and severity of toxic effects.

FOR ETHYLENE GLYCOL POISONING intravenous ethanol is a recognized antidotal treatment ; other antidotal treatments also exist for EG poisoning. Contact a Poison Center for further treatment information. Aspiration of this product during induced emesis may result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Center for additional treatment information.

## 5. FIRE FIGHTING MEASURES

### Flammable Properties

**Flash Point:** 260°F COC)

### Flammability Limits:

**Lower Flammability Limit:** Not Determined

**Upper Flammability Limit:** Not Determined

**Extinguishing Media:** Use carbon dioxide, dry chemical, alcohol type foam, water spray, water fog to extinguish fires involving this product.

**Special Fire Fighting Procedures:** Wear positive pressure, self-contained breathing apparatus and other protective apparatus as warranted. Fight fire from distance or protected location – heat may build up pressure and rupture closed containers. Liquid may form slippery film. Notify authorities if liquid enters sewers/ public waters.

**Unusual Fire And Explosion Hazards:** Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. Vapors may be heavier than air and travel long distances along ground before igniting and flashing back. Fine sprays and mists may be combustible at temperatures below normal flash point.

**Emergency Contacts:** Chemtel 800-255-3924 (24 hrs/7days)

**6. ACCIDENTAL RELEASE MEASURES:** Prevent flow to sewers and public waters as it may contaminate said water. Restrict usage to prevent slip/fall hazard. Soak up small spills with inert solids. Dike and recover large land spills. Notify appropriate authorities if product enters any waterways.

## 7. HANDLING AND STORAGE

Product on surfaces can cause slippery conditions. Practice reasonable care and cleanliness. Avoid breathing spray mists if generated. Keep out of reach of children. Do not store near food, foodstuffs, drugs or potable water supplies.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory Protection:** No special respiratory protection equipment is recommended under normal conditions of anticipated use with adequate ventilation.

**Ventilation:** Adequate general ventilation is required, local exhaust is recommended if possible.

**Protective Gloves:** Not required.

**Eye Protection:** Safety goggles and face shield. Emergency eyewash should be available. Contact lenses should not be worn when working with this chemical.

**Engineering Controls:** Keep containers closed when not in use.

**Personal Hygiene:** If product handling results in skin contact, wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, or using the toilet facilities. Promptly remove soiled clothing and wash before reuse.

## 9. PHYSICAL PROPERTIES

**Boiling point:** 198 °C (388 °F)

**Freeze point:** -8°F

**Specific gravity (water = 1):** 1.13

**Pounds / gallon:** 9.4

**Vapor pressure @ 20 °C:** <0.1 mm hg

**Vapor density (air = 1):** 2.1

**Water solubility:** miscible

**Evaporation rate (buac = 1):** slight

**Appearance and odor:** Slightly viscous, odorless pink liquid

## 10. STABILITY AND REACTIVITY

**Stability:** Stable

**Conditions To Avoid:** Heat, sparks, open flame.

**Materials To Avoid:** Strong alkalis, strong oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and other toxic vapors.

**Hazardous Polymerization:** Not expected to occur.

## 11. TOXICOLOGICAL INFORMATION

**Skin:** (Draize) Believed to be > .50 - 1.00 /8.0 (rabbit) slightly irritating

**Eyes:** (Draize) Believed to be > 15.00 - 25.00 /110 (rabbit) slightly irritating

**Sensitization:** Not determined.

**Oral:** Animal data does not reflect human toxicity; see Sections 3 & 11

**Inhalation:** Not determined.

**Dermal:** LD50 Believed to be > 1.00 - 2.00 g/kg (rabbit) slightly toxic

### Irritation Index, Estimation Of Irritation (Species)

Oral administration of ethylene glycol to pregnant experimental animals has been shown to cause birth defects in the offspring. These effects were not seen when ethylene glycol was administered by dermal application or by inhalation.

Continuous ingestion of a diet containing 1% or 2% ethylene glycol for two years produced liver and kidney damage, and bladder stones in rats.

## 12. ECOLOGICAL INFORMATION

### Environmental Fate

**Persistence and Biodegradability:** This product is considered to be readily biodegradable and is not expected to persist in the environment

**Potential to Bioaccumulate:** None This product is not expected to bioaccumulate.

**Aquatic Toxicity:** Not determined. Aquatic toxicity rating is believed to be > 100.00 mg/liter practically nontoxic to aquatic organisms.

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## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

To prevent contamination of drinking water supplies, and poisoning of children, aquatic life, wildlife, and farm and domestic animals, ethylene glycol products such as used antifreeze solution, regardless of quantity, should never be discarded onto the ground, into surface waters, or into storm sewers

## 14. TRANSPORT INFORMATION

**Identification Number:** None

**DOT:** Not regulated

**Hazard Class:** None

**Packing Group:** None

**Label Required:** None

**IMDG** Not evaluated

**ICAO** Not classified

**TDG** Not regulated

## 15. REGULATORY INFORMATION

### Risk Phrases:

R-22: Harmful if swallowed.

### Federal Regulations:

#### SARA Title III:

#### Section 302/304 Extremely Hazardous Substances:

Chemical Name	CAS Number	Range in %
None		

None

#### Section 311 Hazardous Categorization:

Acute X Chronic X Fire Pressure Reactive N/A None.

#### Section 313 Toxic Chemical

Chemical Name	CAS Number	Range in %
1,2-ethanediol (Common Name-Ethylene glycol)	107-21-1	95.00-99.99

#### CERCLA 102(a)/DOT Hazardous Substances:

Chemical Name	CAS Number	Range in %	RQ
1,2-ethanediol (Common Name-Ethylene glycol)	107-21-1	95.00-99.99	5000

#### States Right-to-Know Regulations:

Chemical Name:	State Right-To-Know
1,2-ethanediol	FL, IL, MA, NJ, PA, RI CT

**State list:** (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana), MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

#### California Prop. 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity: None

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## INTERNATIONAL REGULATIONS:

### TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

### WHMIS Classification:

Class D, Div 1, Subdiv B: Toxic Class D, Div 2, Subdiv A: Teratogenic

### Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

### EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

### Australian Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

### Japan Inventory Status:

Not determined

## 16. OTHER INFORMATION

	HMIS	NFPA
HEALTH:	2	2
FLAMMABILITY:	1	1
REACTIVITY:	0	0

KEY:0 – Minimal, 1 – Slight, 2 – Moderate, 3 – Serious, 4 – Severe

### Label Warnings:

CAUTION

### Label Precautions:

Contains inhibited ethylene glycol.

Avoid eye contact or prolonged skin contact.

Skin and eye protection are recommended when mixing or using this product.

Do not take internally

Keep Out of Reach of Children

### Label First Aid:

**If Swallowed:** do not induce vomiting. Call the nearest poison control center immediately. Consult the MSDS for additional information.

This information is, to the best of our knowledge and belief, accurate and reliable as of the date completed. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the completeness and suitability of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer any warranty against patent infringement.