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MATERIAL SAFETY DATA SHEET D-GEL

SECTION 1: IDENTIFICATION

Product Name: D-Gel
Product Code: F10
Manufacturer's Name: E-ZOIL Products, Inc.
Address: 234 Fillmore Avenue, Tonawanda, NY 14150 USA
Emergency Phone: 800-633-8253 PERS
Business Phone: 855-693-9645

SECTION 2: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Combustible liquid and vapor. Harmful if inhaled, absorbed through skin, or swallowed. Causes skin and eye irritation.

NFPA RATING: HEALTH: 2; FIRE: 2; REACTIVITY: 1

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER
Solvent naphtha, petroleum, light aromatic	64742-95-6
2 butoxyethanol, ethylene glycol monobutyl ether	111-76-2
2-Propanol	67-63-0

SECTION 4: FIRST AID MEASURES

Individuals contaminated by this product must be taken for medical attention if any adverse effects occur. Rescuers should be taken for medical attention if any adverse effects occur. Medical professionals must be provided with the product label and MSDS.

SKIN EXPOSURE: If this product contaminates the skin, begin decontamination by flushing immediately with soap and water. Flush exposed areas for a minimum of 15 minutes. Remove exposed or contaminated clothing. Seek medical attention immediately.

EYE EXPOSURE: If this product enters the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Flush eyes for a minimum of 15 minutes. Seek medical attention immediately.

INHALATION: If vapors or mists generated by this product are inhaled, remove contaminated individual to fresh air. If breathing is difficult, give oxygen. Seek medical attention immediately.

INGESTION: Seek medical attention immediately. Do not induce vomiting unless directed to do so by qualified medical personnel. Never give anything by mouth to an unconscious person.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible liquid and vapor. Above the flash point, explosive vapor-air mixtures may be formed.

SPECIAL FIRE-FIGHTING PROCEDURES: Firefighters should wear a self-contained, pressure-demand breathing apparatus, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Product can release vapors that form explosive mixtures at temperatures above the flashpoint. Vapors may explode if ignited in a confined area. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated. Use water spray to keep fire-exposed containers cool.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Uncontrolled releases should be responded to by appropriately trained personnel using preplanned procedures. Remove all sources of ignition. Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate protective equipment (see Section 8, Exposure Control/Personal Protection).

SPILLS: Contain and absorb spills with non-combustible, inert absorbent material. Place absorbent material into a container. Dispose of container in accordance with U.S. federal, state, and local hazardous waste disposal regulations or those of Canada (see Section 13, Disposal Considerations).

ENVIRONMENTAL PRECAUTIONS: U.S. Regulations (CERCLA) requires reporting spills and releases into the environment in excess of reportable quantities. Prevent entry into sewers, basements or confined areas, dike if needed.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PROCEDURES: All employees who handle this product should be trained to handle it safely. Avoid direct skin contact, inhalation, or ingestion. Wash thoroughly after handling this product. Do not eat, drink, or smoke while handling this product. Wear appropriate protective equipment (see Section 8, Exposure Control/Personal Protection).

STORAGE AND HANDLING PRACTICES: Store containers in a cool, dry location away from direct sunlight at temperatures between 39°F - 120°F. Keep container tightly closed when not in use. Observe all warnings and precautions listed for this product. Storage areas of this product should be clearly identified, well-illuminated, clear of obstruction and accessible only to trained and authorized personnel. Open containers slowly on a stable surface. Empty drums should be completely drained (triple rinsed), properly bunged, and promptly returned to a drum reconditioner, or disposed of properly.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Use safety glasses or chemical splash goggles when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.133, or appropriate Canadian regulations.

HAND PROTECTION: Use chemically-resistant gloves when handling this product. Maintain eye wash fountain and quick drench facilities in work area. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Canadian regulations.

BODY PROTECTION: Use body protection appropriate for the task (e.g. lab coat, overalls, and boots).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Appearance: Clear color
Odor: Mild odor
Specific Gravity: 0.85
Solubility in Water: Negligible
Flash Point: 109°F (43°C)

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

REACTIVITY: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Keep away from heat sources, open flames and other sources of ignition. Ensure adequate ventilation, especially in confined areas.

INCOMPATIBLE MATERIALS: See Section 7, Handling and Storage for further information.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

SKIN CONTACT: Harmful if in contact with skin. Causes skin irritation.

INHALATION: Harmful if inhaled. May cause respiratory irritation.

EYE CONTACT: Causes serious eye irritation.

INGESTION: Harmful if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

All work practices must be aimed at eliminating environmental contamination.

DANGERS TO THE ENVIRONMENT: This material is not expected to be harmful to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL OF SUBSTANCE: This material must be disposed of in accordance with applicable U.S. federal, state, and local hazardous waste regulations or those of Canada.

CONTAINER DISPOSAL: Empty containers may contain residue. Do not cut, weld, drill or grind on or near container. Dispose of container in accordance with U.S. federal, state, and local hazardous waste disposal regulations or those of Canada.

SECTION 14: TRANSPORT INFORMATION

FOR QUANTITIES OF 450 LITERS (119 GALLONS) OR MORE:

UN NUMBER: NA 1993

SHIPPING NAME: Combustible liquid, n.o.s. (Contains solvent naphtha, petroleum, light aromatic)

CLASS: Combustible

PACKING GROUP: III

FOR QUANTITIES LESS THAN 450 LITERS (119 GALLONS):

Not regulated

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

OSHA: All listed ingredients are classified as hazardous under OSHA regulations (29 CFR 1910.1200).

SARA 311-312 HAZARD CLASSIFICATION(S): Immediate (Acute) health hazard; Delayed (Chronic) health hazard; Fire hazard.

INTERNATIONAL REGULATIONS:

WHMIS (CANADA) STATUS: Controlled

WHMIS (CANADA) HAZARD CLASSIFICATION: B/3, D/1/A, D/2/B

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

SECTION 16: OTHER INFORMATION

Prepared by:

E-ZOIL Products, Inc.

Date of Preparation:

January 1, 2012

Date of Last Revision:

January 1, 2012

SECTION 17: MISCELLANEOUS

Disclaimer of liability: The information in this MSDS is provided without any warranty, expressed or implied. The information was obtained from sources we believe reliable. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

EAST PENN manufacturing co., inc.



**- Material Safety Data Sheet -
Battery Fluid Acid**

SECTION I

<p>Manufacturer's Name: East Penn Manufacturing Co., Inc. Deka Road, Lyon Station, PA 19536</p> <p>Telephone Number for Information: (610) 682-6361</p> <p>Emergency Telephone Number: CHEMTREC: 1-800-424-9300, In Washington D.C. or outside continental U.S., call 1-202-483-7616</p>	<p>Date: January 29, 2007</p> <p>Trade Name: Battery electrolyte, UN2796</p>
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**SECTION II
HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

Hazardous Components Specific Chemical Identity (Common Name (s))	OSHA PEL	ACGIH TLV	Range Percent By Weight
Sulfuric Acid, CAS #7664939	1.00 mg/m ³	1.00 mg/m ³	30-43

**SECTION III
PHYSICAL/CHEMICAL CHARACTERISTICS**

<p>Appearance and Odor: clear, odorless, colorless</p> <p>Boiling Point: approximately 235°F</p> <p>Evaporation Rate (Butyl Acetate=1): less than 1.0</p> <p>Melting Point: N/A</p>	<p>Solubility in Water: completely</p> <p>Specific Gravity (H₂O=1): 1.220-1.325</p> <p>Vapor Density (AIR=1): N/A</p> <p>Vapor Pressure (mm Hg): 13</p>
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**SECTION IV
FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method Used): Not applicable **Flammable Limits: (hydrogen gas)** **LEL:** 4 **UEL:** 74

Extinguishing Media: CO₂, foam, dry chemical

Special Fire Fighting Procedures: Sulfuric acid will not burn but is capable of igniting finely combustible material on contact. Combustibles may be smothered by dry chemical extinguishing media. Wear acid resistant clothing. Fire may produce irritating or poisonous gases.

**SECTION V
REACTIVITY DATA**

Stability: Stable **Condition to Avoid:** Contact with metal may release explosive hydrogen gas.

Incompatibility (Materials to Avoid): Strong alkali materials, carbides, chlorates, nitrates, and picrates, organic acid, acetates, anhydrides, metals.

Hazardous Decomposition or By-Products: Thermal decomposition or combustion may produce a sulfur trioxide and/or sulfur dioxide.

Hazardous Polymerization: will not occur

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**SECTION VI
HEALTH HAZARD DATA**

Route(s) of Entry: Inhalation, skin contact, and ingestion

Carcinogenicity: The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, a substance that is carcinogenic to humans. Inorganic acid mist (sulfuric acid mist) is not generated under normal use of this product within a battery. Misuse of the product such as overcharging, may result in the generation of sulfuric acid mist.

Signs and Symptoms of Exposure: Acid contact may cause irritation of eyes, nose and throat. Breathing of mist may produce respiratory difficulty. Contact with eyes and skin causes irritation and skin burns. Sulfuric acid is a **CORROSIVE** chemical.

Medical Conditions Generally Aggravated by Exposure: Pulmonary edema, bronchitis, emphysema, dental erosion, tracheobronchitis, pre-existing lung disease.

Health Hazards (Acute and Chronic):

Short term exposure: Sulfuric acid may cause irritation of eyes, nose, and throat. Prolonged contact may cause chemical burns.

Long term exposure: Repeated contact causes irritation and skin burns. Repeated exposure to mist may cause erosion of teeth, chronic eye irritation and/or chronic inflammation of the nose, throat, and bronchial tubes.

TARGET ORGAN: respiratory system, eyes, skin, & teeth

Emergency and First Aid Procedures:

- 1) If inhaled, immediately remove to fresh air. If difficult breathing persists, obtain medical attention.
- 2) Remove contaminated clothing. Flush contacted area with large amounts of water for at least 15 minutes. Obtain medical attention.
- 3) If swallowed, give large volumes of water. **DO NOT** induce vomiting, obtain medical treatment.
- 4) Eyewash and shower stations should be made available.

**SECTION VII
PRECAUTIONS FOR SAFE HANDLING AND USE**

Steps to be Taken in Case Material is Released or Spilled: Stop flow if possible. Soak up small spills with clay, sand, or diatomaceous earth. Dike large spills. Dilute spill cautiously with five to six volumes of water and gradually neutralize with sodium bicarbonate, soda ash, or lime. When exposure level is not known, wear NIOSH/MSHA approved respirator or SCBA. (Reference DOT Emergency Response Guide #157, UN2796)

Waste Disposal Method: Neutralize and dispose in accordance with local, state, and federal regulations.

Precautions to be Taken in Handling and Storing: Store away from reactive material as defined in Section V, Reactivity Data. Avoid direct contact.

Other Precautions: Sodium bicarbonate, soda ash, sand, or lime should be kept in same general area for emergency use.

**SECTION VIII
CONTROL MEASURES**

Respiratory Protection (Specific Type): NIOSH/MSHA approved, respirator required when PEL is exceeded or employee witnesses respiratory irritation. (See Section VI, Health Hazard Data).

Ventilation: When PEL is exceeded.

Mechanical (general):

Local exhaust: preferred

Special: none

Other: Adequate ventilation to maintain exposure concentrations below the PEL.

Protective Clothing: acid resistant gloves, acid resistant apron

Eye Protection: Mandatory during handling and transfer of acid (recommend chemical goggles). Face shield during transfer of acid.

Work/Hygiene Practices: Good personal hygiene and work practices are mandatory.

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**SECTION IX
OTHER REGULATORY INFORMATION**

NFPA Hazard Rating: Health = 3 Flammability = 0 Reactivity = 2

US DOT:

Proper Shipping Name	Battery Fluid, Acid
Hazard Class/Division	8
I.D. Number	UN2796
Packing Group	II
Label Requirement	Corrosive

RCRA: Spilled sulfuric acid may be a characteristic hazardous waste, EPA hazardous waste number - D002 (corrosivity)

CERCLA (Superfund) and EPCRA (Emergency Planning and Community Right to Know Act):

- a) Reportable Quantity (RQ) for spilled 100% Sulfuric Acid is 1000 lbs.
- b) Sulfuric Acid is a listed "Extremely Hazardous Substance" under EPCRA with a Threshold Planning Quantity (TPQ) of 1000 lbs.
- c) Batteries are subject EPCRA reporting requirements under sections 302/304, 311/312 and 313.
Reporting quantities are as follows:
 - Lead: section 311/312 = 100 lbs.
 - Title III section 313 = 100 lbs.
 - Sulfuric Acid: section 311/312 = 500 lbs.
 - Title III section 313 = 500 lbs.

California Prop 65: Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **WASH HANDS AFTER HANDLING.**

For additional information concerning East Penn Manufacturing Co., Inc. products or questions concerning the content of this MSDS please contact your East Penn representative.

This information is accurate to the best of East Penn Mfg. Co.'s knowledge or obtained from sources believed by East Penn to be accurate. Before using any product, read all warnings and directions on the label.