



## MATERIAL SAFETY DATA SHEET

---

### SECTION I - SUPPLIER INFORMATION

---

Product Name: Pitt Penn Premium DOT 3 Brake Fluid  
Product Number: 301007, 301007F, 301050, 301015F, 301061, 301070, 301070X & 301075  
Bulk Stock Number: 022400

Chemical Name: Mixture  
CAS Number: Mixture

Supplier's Name & Address: Pitt Penn Oil Co.  
426 Freeport Road  
P.O. Box 296  
Creighton, PA 15030  
(724) 226-2712

Emergency Phone Number: Chem Tel, Inc. 1-800-255-3924 (24 hours)

Current Issue Date: August 1, 2003  
Date of Origination: April 14, 2000

---

### SECTION II - HAZARDOUS INGREDIENT INFORMATION

---

| <u>Ingredient</u>                    | <u>CAS #</u> | <u>PEL/TLV</u>   | <u>Wt. %</u> |
|--------------------------------------|--------------|------------------|--------------|
| Triethylene Glycol Monobutyl Ether   | 143-22-6     | Not Established  | 20 - 26      |
| Triethylene Glycol Monomethyl Ether  | 112-35-6     | Not Established  | 17 - 21      |
| Diethylene Glycol                    | 111-46-6     | Not Established  | 13 - 18      |
| Tetraethylene Glycol                 | 112-60-7     | Not Established  | 9 - 15       |
| Polyethylene Glycol                  | 25322-68-3   | Not Established  | 8.6 - 14     |
| Tetraethylene Glycol Monobutyl Ether | 1559-34-8    | Not Es tablished | 8 - 12       |
| Polyehylene Glycol Monomethyl Ether  | 9004-74-4    | Not Established  | 4 - 8        |
| Triethylene Glycol Monoethyl Ether   | 112-50-5     | Not Established  | 3 - 6        |
| Diethylene Glycol Monomethyl Ether   | 111-77-3     | Not Established  | 0 - 5        |
| Triethylene Glycol                   | 112-27-6     | Not Established  | 2 - 5        |
| Diethylene Glycol Monobutyl Ether    | 112-34-5     | Not Established  | 1 - 4        |
| Pentaethylene Glycol                 | 4792-15-8    | Not Established  | 1 - 3        |
| Diethylene Glycol Monoethyl Ether    | 111-90-0     | Not Established  | 0 - 2        |
| Tetraethylene Glycol Monoethyl Ether | 5650-20-4    | Not Established  | 0 - 1        |

#### HAZARDS OVERVIEW

|                         |   |
|-------------------------|---|
| Routes of Entry:        | Inhalation, eyes & skin.  |
| Target Organs:          | Eyes, skin, central nervous system, reproductive system.                                  |
| Irritancy:              | All routes of exposure.   |
| Sensitizing Capability: | None known.   |
| Reproductive Effects:   | May cause adverse reproductive effects and birth defects based on laboratory animal data. |
| Cancer Information:     | Not known to be carcinogenic.   |

#### SHORT-TERM EXPOSURE (ACUTE)

|             |   |
|-------------|---|
| Inhalation: | May produce symptoms of central nervous system depression including headache, dizziness, nausea, loss of sense of balance, drowsiness, and visual disturbances. On the basis of the low vapor pressure of the product, inhalation of vapor is unlikely except at elevated temperatures. |
| Eyes:       | Contact with liquid can cause eye irritation, tearing, blurred vision and transient corneal injury.   |
| Skin:       | May be irritating with prolonged or repeated contact. May be absorbed in toxic amounts through the skin.  |
| Ingestion:  | May cause irritation of the gastrointestinal tract. May produce symptoms of central nervous system depression including headache, dizziness, nausea, loss of sense of balance, drowsiness, and visual disturbances.   |

#### REPEATED EXPOSURE (CHRONIC):

Prolonged or repeated exposure may result in central nervous system and gastrointestinal system disturbances, and possible adverse reproductive effects.

|  |   |
|--|---|
| Synergistic Materials:                     | None known.                                     |
| Medical Conditions Aggravated by Exposure: | Pre-existing disorders affecting target organs. |

---

#### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

---

|                                     |  |
|-------------------------------------|--|
| Boiling Point:                      | >450 °F (232 °C)                                   |
| Vapor Pressure (mm Hg):             | Not determined                                     |
| Vapor Density (air=1):              | Not determined                                     |
| Solubility in Water:                | Soluble  |
| Appearance/Odor:                    | A yellow to amber liquid with typical glycol odor. |
| Specific Gravity (water=1)          | 1.05 at 60°F                                       |
| Melting Point:                      | Not determined                                     |
| Evaporation Rate (Butyl Acetate=1): | Not determined                                     |
| Percent Volatile by Weight:         | Not determined                                     |

---

SECTION IV - FIRE AND EXPLOSION DATA

---

Flash Point (method used): >121 °C (PMCC)  
Flammable Limits: Not determined.  
Extinguishing Media: Water spray, dry chemical, alcohol, foam or CO<sup>2</sup>.  
Special Fire Fighting Procedures: Use NIOSH/OSHA approved self-contained breathing apparatus where this material is involved in a fire.  
Unusual Fire and Explosion Hazards: Not applicable.

---

SECTION V - REACTIVITY DATA

---

Solubility: Stable  
Hazardous Decomposition: Will not occur  
Conditions to Avoid: Not applicable  
Compatibility (materials to avoid): Strong oxidizers  
Hazardous Decomposition or By-Products: Carbon dioxide/carbon monoxide

---

SECTION VI - HEALTH HAZARD DATA/FIRST AID

---

EMERGENCY AND FIRST AID PROCEDURES:

Ingestion: **DO NOT INDUCE VOMITING!** Seek medical attention.  
Eyes: Rinse with water for at least 15 minutes. If irritation persists, seek medical attention.  
Skin: Flush with water and wash with soap.  
Inhalation: Remove to fresh air. If breathing stops administer mouth to mouth resuscitation. Seek medical attention.

---

SECTION VII - PRECAUTIONS FOR SAFE HANDLING

---

Precautions to be Taken in Handling and Storage: The usual precautions pertaining to the handling of petroleum liquids must be observed. Store away from food stuffs.  
Protection Against Fire and Explosion: Fires should be extinguished with water, powder extinguishants, or carbon dioxide. Large fires should be extinguished with alcohol-resistant foam or a water spray. All adjoining tanks must be kept cool with a spray of water.

---

SECTION VIII - SPECIAL PROTECTION AND CONTROL MEASURES

---

Respiratory Protection (specify type): A NIOSH approved respirator for organic vapor should be worn if needed.  
VENTILATION: Local Exhaust: If needed, control vapor at elevated temperatures.  
Mechanical: Recommended.  
Special: Not applicable.  
Other: Not applicable.

Protective Gloves: Impervious; such as rubber, neoprene or vinyl.  
Eye Protection: Goggles with side shields or face shield.  
Other Protective Clothing or Equipment: Protective footwear, have eyewash fountain nearby.  
Work/Hygienic Practices: Usual

---

SECTION IX - HANDLING OF SPILLS AND LEAKS

---

Procedures for Clean-up: Wear goggles, overalls, impervious gloves and boots. Add dry absorbent, shovel or sweep up. Place in an approved D.O.T. container and seal. Wash all contaminated clothes before use.

Waste Disposal Method: Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate Federal, State, and Local regulatory councils to ascertain proper disposal procedures. Do not flush into sewage system.

---

SECTION X - TOXICOLOGICAL/ECOLOGICAL INFORMATION

---

Triethylene Glycol Monobutyl Ether

|                          |                  |          |
|--------------------------|------------------|----------|
| Acute Oral LD50:         | (rat)            | 6.7 g/kg |
| Acute Dermal LD50:       | (rabbit)         | 3.5 g/kg |
| Primary Skin Irritation: | (rabbit, 24 hr.) | mild     |
| Primary Eye Irritation:  | (rabbit)         | severe   |

Triethylene Glycol Monomethyl Ether

|                          |                 |           |
|--------------------------|-----------------|-----------|
| Acute Oral LD50:         | (rat)           | 11.8 g/kg |
| Acute Dermal LD50:       | (rabbit)        | 7.4 g/kg  |
| Primary Skin Irritation: | (rabbit, 24 hr) | mild      |

Diethylene Glycol

|                          |                |                       |
|--------------------------|----------------|-----------------------|
| Acute Oral LD50:         | (rat)          | 12,500 mg/kg          |
|                          | (human)        | 1,000 mg/kg           |
| Acute Dermal LD50:       | (rabbit)       | 12,000 mg/kg          |
| Acute Inhalation LCLo:   | (mouse, 2 hr.) | 130 mg/m <sup>3</sup> |
| Primary Skin Irritation: | (rabbit)       | mild                  |
| Primary Eye Irritation:  | (rabbit)       | mild                  |

Tetraethylene Glycol

|                          |          |          |
|--------------------------|----------|----------|
| Acute Oral LD50:         | (rat)    | 29 g/kg  |
| Acute Dermal LD50:       | (rabbit) | >20 g/kg |
| Primary Skin Irritation: | (rabbit) | mild     |

Polyethylene Glycol

|                  |       |          |
|------------------|-------|----------|
| Acute Oral LD50: | (rat) | >34 g/kg |
|------------------|-------|----------|

Acute Dermal LD50: (rabbit) >20 g/kg

Tetraethylene glycol Monoethyl Ether

No toxicological information is available on this material, but is expected to be less toxic than triethylene glycol monbutyl ether (CAS # 143-22-6).

Tetraethylene Glycol Monobutyl Ether

No toxicological information is available on this material, but is expected to be less toxic than triethylene glycol monbutyl ether (CAS # 143-22-6).

Pentaethylene Glycol

No toxicological information is available on this material, but is expected to be less toxic than triethylene glycol monbutyl ether (CAS # 143-22-6).

Polyethylene Glycol Monomethyl Ether

Acute Oral LD50: (rat) 22 - 39.8 k/kg  
Acute Dermal LD50: (rabbit) >20 g/kg

Triethylene Glycol Monoethyl Ether

Acute Oral LD50: (rat) 10.6 g/kg  
Acute Dermal LD50: (rabbit) 8.2 g/kg  
Primary Eye Irritation: (rabbit) mild

Diethylene Glycol Monomethyl Ether

Acute Oral LD50: (rat) 9.2 k/kg  
(guinea pig) 4.2 g/kg  
Acute Dermal LD50: (rabbit) 20.2 g/kg  
Primary Eye Irritation: (rabbit) mild

Triethylene Glycol

Acute Oral LD50: (rat) 17.0 g/kg  
(mouse) 18.5 g/kg  
(guinea pig) 14.6 g/kg  
(rabbit) 8.4 g/kg

Diethylene Glycol Monbutyl Ether

Acute Oral LD50: (rat) 6.6 g/kg  
(rabbit) 2.2 g/kg  
Acute Dermal LD50: (rabbit) 4.1 g/kg

Diethylene Glycol Monoethyl Ether

Acute Oral LD50: (rat) 5.5 g/kg

Acute Dermal LD50: (rabbit) 9.0 g/kg

Rat toxicity data (5.0 g/kg/day for 90 days) indicates oxalate crystals in urine, degeneration of the liver and renal tubules, and transient dermatitis. According to a rat inhalation developmental toxicity study, 100 ppm, 7 hr/day on gestation days 7-15, no toxicity was observed in maternal animals or offspring. In mouse drinking water (2.5% w/v) reproduction studies of glycol ether DE, no adverse effects on fertility and reproductive performances were produced.

Ecological Information: Contact Pitt Penn Oil Co. for full report.

---

SECTION XI - TRANSPORTATION DATA

---

D.O.T.: Not regulated  
Reportable Quantity:  
Freight Classification:  
Special Transportation Notes:

---

SECTION XII - REGULATORY INFORMATION

---

All components listed on TSCA inventory.

SARA Title III: Immediate (Acute) and delayed (Chronic) health hazard  
WHMIS (Canada) Hazard Class: D2A  
HMIS Rating: Health - 2 Fire -1 Reactivity -0

---

SECTION XIII - USER INFORMATION

---

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation, and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable Federal, State and Local laws and regulations.

Relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading, this information relates to the material designated and may not be valid for such material used in combination with any other materials or in any process.