

MATERIAL SAFETY DATA SHEET

PENNZOIL® DOT 3 SUPER HEAVY DUTY BRAKE FLUID

1. PRODUCT AND COMPANY IDENTIFICATION

MSDS Number: 1017

Version Date: 8/15/2001

Product Name: PENNZOIL® DOT 3 SUPER HEAVY DUTY BRAKE FLUID

Product Use: Brake fluid

Synonyms: PENNZOIL® SUPER HEAVY DUTY BRAKE FLUID

Company Information

SOPUS Products
P.O. Box 4427
Houston, TX 77210-4427
USA

Phone Numbers

Medical Emergency: 1-800-546-6040

Transportation Emergency (USA): 1-800-424-9300

Transportation Emergency (International):

1-703-527-3887 (Call Collect)

MSDS Assistance: 1-800-546-6227

Fax On Demand: 1-800-546-6227

Technical Assistance: 1-800-458-4998

Customer Service: 1-800-468-8397

Fax Number: 713-217-3181

Internet Address: www.MSDS.PZLQS.com

2. COMPONENT INFORMATION

Component	CAS No.	Weight Percent Range	Hazardous in Blend
GLYCOL ETHERS	NONE	50 - 80	Yes
LUBRICITY ADDITIVE	MIXTURE	10 - 35	No
MODIFIER/COUPLERS	MIXTURE	< 10	No
CORROSION INHIBITOR	MIXTURE	< 1	No

This product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Hazards:

Flammable/Combustible -- **Acute Toxin** X **Chronic Toxin** X **Carcinogen** --

Pressure -- **Reactive** -- **Exposure Limit** -- **Target Organ** X **Other** --

Other: This product contains glycol ethers, polyglycols, and glycols.

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview

WARNING: HARMFUL IF SWALLOWED. EYE IRRITANT.

NFPA Ratings: **Health** 2 **Flammability** 1 **Reactivity** 0

Primary Route of Exposure: **Skin** X **Inhalation** -- **Eye** --

Health Effect Information

Eye Contact: Avoid eye contact. This product is moderately irritating to the eyes upon direct contact. This product has a low vapor pressure and is not expected to present a hazard to the eyes at ambient conditions. Exposure to mists and vapors may be irritating to the eyes.

Skin Contact: Avoid prolonged and repeated skin contact. This product may cause mild to moderate skin irritation upon direct contact. Prolonged and repeated contact may result in skin irritation. May be absorbed through skin. See Section 11 - Toxicological Information. A single dermal exposure is not harmful, but prolonged and repeated skin contact with large quantities of ingredients in this product may cause drowsiness.

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Inhalation: Avoid prolonged inhalation of mist or vapors. This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Acute and chronic overexposures may be irritating to the respiratory tract. Severe intoxication may lead to drowsiness, dullness, numbness, and headache followed by dizziness, weakness, and nausea.

Ingestion: Do not ingest. Ingestion of large quantities may be fatal. See Section 11 - Toxicological Information. Ingestion of large, single doses of chemicals similar to those present in this product can be harmful, even fatal.

Medical Conditions Aggravated by Exposure: No information available

Other: No information available

4. FIRST AID INFORMATION

Eye Contact: Immediately flush eyes with large amounts of water and continue flushing until irritation subsides.

Skin Contact: Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention.

Inhalation: This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. If vapor or mist is generated when the material is heated or handled, remove victim from exposure.

Ingestion: If person is conscious, give large quantities of water immediately. Induce vomiting. Seek immediate medical attention.

Notes to Physician: No information available

Other: No information available

5. FIRE AND EXPLOSION INFORMATION

Flammable Properties

Flash Point: 272 F, 133.3 C

Test Method: ASTM D-93 (P.M.C.C.)

Flammable Limits in Air

Upper Percent: No data available

Lower Percent: No data available

Autoignition Temperature: No data available

Test Method: No information available

NFPA Classification: Class III-B combustible liquid

Extinguishing Media: Use water spray (fog), dry chemical, foam, or carbon dioxide.

Fire Fighting Measures

Special Fire Fighting Procedures and Equipment: Water may be ineffective but can be used to cool containers exposed to heat or flame to prevent vapor pressure buildup and possible container rupture. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Unusual Fire and Explosion Conditions: Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

Hazardous Combustion By-Products: No information available

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Other: No information available

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Consult Health Effect Information in Section 3, Personal Protection Information in Section 8, Fire and Explosion Information in Section 5, and Stability and Reactivity Information in Section 10. Remove all sources of ignition.

Regulatory Notifications: Notify appropriate authorities of spill.

Containment and Clean up: Contain spill immediately. Do not allow spill to enter sewers or watercourses. Absorb with appropriate inert material such as sand, clay, etc. Large spills may be picked up using vacuum pumps, shovels, buckets, or other means and placed in drums or other suitable containers.

Other: No information available

7. HANDLING AND STORAGE INFORMATION

Handling: Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106-- Flammable and Combustible Liquids.

Storage: Do not transfer to unmarked containers. Store in closed containers away from heat, sparks, open flame, or oxidizing materials.

Empty Container Warnings

Drums: No information available

Plastic: No information available

Other: No information available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

This product does not contain any components with OSHA or ACGIH exposure limits.

Personal Protective Equipment

Eye/Face Protection: If material is handled such that it could be splashed into eyes, wear plastic face shield or splash-proof safety goggles.

Skin Protection: No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc.) over parts of the body subject to exposure. Launder soiled clothes. Properly dispose of contaminated leather articles including shoes, which cannot be decontaminated.

Respiratory Protection: Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handled, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres.

Personal Hygiene: Consumption of food and beverage should be avoided in work areas where hydrocarbons are present. Always wash hands and face with soap and water before eating, drinking, or smoking.

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Engineering Controls / Work Practices

Ventilation: General room ventilation is normally sufficient to prevent buildup of hazardous concentrations. If vapor or mist is generated when the material is heated or handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specified exposure or flammable limits.

Other: No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light yellow	
Odor: Mild	Vapor Pressure: No data available
Physical state: Liquid	Vapor Density (air=1): No data available
pH: No data available	Percent Volatile by Volume: No data available
Boiling Point: 430 F, 221.1 C	Volatile Organic Content: No data available
Melting Point: Not applicable	Molecular Weight: No data available
Specific Gravity: 1.03	Average Carbon Number: No data available
Pour Point: No data available	Viscosity @ 100 F: No data available
	Viscosity @ 40 C: No data available
Solubility in Water: Soluble in water	
Octanol / Water Coefficient: Log K_{ow} = No data available	

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable

Conditions to Avoid: None

Incompatible Materials to Avoid: May react with strong oxidizing agents.

Other: No information available

11. TOXICOLOGICAL INFORMATION

Primary Eye Irritation: No information available

Primary Skin Irritation: No information available

Acute Dermal Toxicity: No information available

Subacute Dermal Toxicity: No information available

Dermal Sensitization: No information available

Inhalation Toxicity: No information available

Inhalation Sensitization: No information available

Oral Toxicity: The minor components when tested separately (usually by ingestion) caused kidney, liver, gastrointestinal, testicular and central nervous system effects, bladder stones, nausea and vomiting.

Mutagenicity: No information available

Carcinogenicity: No information available

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Reproductive and Developmental Toxicity: No information available

Teratogenicity: No information available

Immunotoxicity: No information available

Neurotoxicity: No information available

Other: No relevant information is available on the major components.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: Practically non-toxic to aquatic organisms; LC50 > 100 mg/L (fish).

Terrestrial Toxicity: No information available

Chemical Fate and Transport: Bioconcentration potential is low; Log Pow < 3.

Other: No information available

13. DISPOSAL INFORMATION

Regulatory Information: All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled.

Waste Disposal Methods: Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible.

Other: No information available

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Highway / Rail (Bulk): Not Regulated

Highway / Rail (Non-Bulk): Not Regulated

For US shipments, US DOT law requires the shipper to determine the proper shipping description of the material that is being shipped. The shipping information and description contained in this section may not be suitable for all shipments of this material, but may help the shipper determine the proper shipping description for a particular shipment.

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International Information

Vessel: IMDG Regulated: -- IMDG Not Regulated: X
Air: ICAO Regulated: -- ICAO Not Regulated: X

Other: No information available

15. Regulatory Information

Regulatory Lists Searched: The components listed in Section 2 of this MSDS were compared to substances that appear on the following regulatory lists. Each list is numerically identified. See Regulatory Search Results below.

Health & Safety: 10 - IARC carcinogen, 11 - NTP carcinogen, 12 - OSHA carcinogen, 15 - ACGIH TLV, 16 - OSHA PEL, 17 - NIOSH exposure limit, 20 - US DOT Appendix A, Hazardous substances, 22 - FDA 21 CFR Total food additives, 23 - NFPA 49 or 325

Environmental: 30 - CAA 1990 Hazardous air pollutants, 31 - CAA Ozone depleters, 33 - CAA HON rule, 34 - CAA Toxic substance for accidental release prevention, 35 - CAA Volatile organic compounds (VOC's) in SOCM, 41 - CERCLA / SARA Section 302 extremely hazardous substances, 42 - CERCLA / SARA Section 313 emissions reporting, 43 - CWA Hazardous substances, 44 - CWA Priority pollutants, 45 - CWA Toxic pollutants, 46 - EPA Proposed test rule for hazardous air pollutants, 47 - RCRA Basis for listing - Appendix VII, 48 - RCRA waste, 49 - SDWA - (S)MCLs

International: 50 - Canada - WHMIS Classification of substance, 54 - Mexico - Drinking water - ecological criteria, 55 - Mexico - Wastewater discharges, 56 - US -TSCA Section (12)(b) - export notification

State Lists: 60 - CA - Proposition 65, 61 - FL - Substances, 62 - MI - Critical materials, 63 - MA - RTK, 64 - MA - Extraordinarily hazardous substances, 65 - MN - Hazardous substances, 66 - PA - RTK, 67 - NJ - RTK, 68 - NJ - Environmental hazardous substances, 69 - NJ - Special hazardous substances

Inventories: 80 - Canada - Domestic substances , 81 - European - EINECS, 82 - Japan - ENCS, 83 - Korea - Existing and evaluated chemical substances, 84 - US - TSCA , 85 - China Inventory

Regulatory Search Results:

No components appear on any of the regulatory lists searched.

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory.

SARA Section 313:

<u>Chemical</u>	<u>CAS Number</u>	<u>Percent in Product</u>
GLYCOL ETHERS	NONE	< 100

IARC: No information available

SARA 311 / 312 Categories

Acute: X Chronic: X Fire: -- Pressure: -- Reactive: --
Not Regulated: --

Canadian WHMIS Classification

Class D - Poisonous and infectious material, Division 2B, Toxic Material
Class D - Poisonous and infectious material, Division 2A, Very Toxic Material

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European Union Classification

Hazard Symbols:

No information available

Risk Phrases:

No information available

Safety Phrases:

No information available

Other: No information available

16. OTHER INFORMATION

Health and Environmental Label Language

Front Label:

WARNING: HARMFUL IF SWALLOWED. EYE IRRITANT.

Read carefully other cautions on back.

Back Label:

WARNING: Contains diethylene glycol, glycol ethers and polyglycols.

PRECAUTIONARY MEASURES: Do not store in open or unlabeled containers. Do not ingest.

Avoid contact with eyes. Avoid repeated & prolonged skin contact. Wash thoroughly after handling.

FIRST AID: Ingestion: If swallowed, contact a poison control center or physician. Eye contact: Flush with water for 15 minutes. If irritation persists, call physician. KEEP OUT OF REACH OF CHILDREN.

MSDS Revisions

Previous Version Date: 7/24/1998

Previous Version Information

No information available

Other

No information available

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