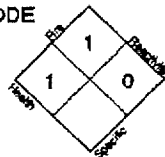




# Material Safety Data Sheet

## PRESTONE® Heavy Duty Brake Fluid

<p>Any questions, please call:</p> <p>First Brands Corporation 83 Wooster Heights Road Building 301 Danbury, CT 06813-1911 Telephone: (203) 731-2300</p>	<p><b>EMERGENCY TELEPHONE</b> (24 Hours)</p> <p><b>CHEMTREC</b> (800) 424-9300 483-7616 in District of Columbia</p>	<p><b>NFPA HAZARD CODE</b></p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>4 = Extreme 3 = High 2 = Moderate 1 = Slight 0 = Insignificant</p> </div>  </div>
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### I. IDENTIFICATION

<b>PRODUCT NAME</b>	PRESTONE® Heavy Duty Brake Fluid
<b>TYPE</b>	Polyglycol/glycol ether mixture
<b>STOCK</b>	AS400, AS401, AS402, AS402-6, AS403, AS455
<b>FORMULA</b>	6060, 435, 6340, 436, 1000

### II. PHYSICAL DATA

<b>BOILING POINT, 760 mm Hg</b>	greater than 430°F
<b>FREEZING POINT</b>	less than -40°F
<b>DENSITY (at 68°F)</b>	8.5-8.7 lbs/gal
<b>VAPOR DENSITY (Air = 1)</b>	greater than 1
<b>VAPOR PRESSURE (at 68°F)</b>	less than 0.1 mm Hg
<b>AEROSOL CONTAINER PRESSURE (at 70°F)</b>	Not applicable
<b>VOLATILES BY VOLUME</b>	nil
<b>SOLUBILITY IN WATER, by Wgt.</b>	100%
<b>EVAPORATION RATE (Butyl Acetate = 1)</b>	less than 0.1
<b>APPEARANCE AND ODOR</b>	Clear, amber liquid with mild odor.
<b>VISCOSITY (Cst 100°C)</b>	1.5-2.1
<b>pH</b>	9.0-9.8

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**III. HAZARDOUS INGREDIENTS**

MATERIAL	%	CAS #	EXPOSURE LIMIT	SOURCE
Proprietary mixture of glycols, glycol ethers and corrosion inhibitors containing some or all the following at >1%; For New Jersey Universal labeling: Contents partially unknown.				
Ethoxytriglycol		112-50-5	none established	(3)
Methoxytriglycol		112-35-6	none established	(3)
Tetraethylene glycol		112-60-7	none established	(3)
2-(2-methoxyethoxy) ethanol		111-77-3	none established	(3)
2-(2-butoxyethoxy) ethanol		112-34-5	none established	(3)
Butoxytriglycol		143-22-6	none established	(3)
Glycol Heavies		25322-68-3	none established	(3)
Polyalkylene glycol		9038-95-3	none established	(3)
Diethylene glycol	0-8%	111-46-6	none established	(3)

**NON-HAZARDOUS INGREDIENTS > 1%**

None

None of the ingredients is listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

The source for exposure limits listed above are:

- (1) OSHA Permissible Exposure Limit (effective 9/89)
- (2) ACGIH Threshold Limit Value (1988-89 Edition)
- (3) Both the OSHA PEL and ACGIH TLV
- (4) Recommended by the Manufacturer

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IV. FIRE AND EXPLOSION HAZARD DATA

Pensky-Martens Closed Cup: 218-275°F

FLASH POINT

FLAMMABLE LIMITS IN AIR, % BY VOLUME

LOWER: Not determined.

UPPER: Not determined.

AUTOIGNITION TEMPERATURE

Not determined.

EXTINGUISHING MEDIA

Water fog, foam, alcohol foam, CO<sub>2</sub> and dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES

Use positive pressure self contained breathing apparatus when entering a confined space.

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

V. HEALTH HAZARD DATA

EFFECTS OF SINGLE OVEREXPOSURE

SWALLOWING

Accidental ingestion of a small amount may cause gastrointestinal discomfort with nausea, vomiting, and diarrhea. A large ingestion may produce central nervous system depression and kidney and liver damage.

SKIN ABSORPTION

A single prolonged exposure is not likely to result in material being absorbed through the skin in harmful amounts. Prolonged or repeated skin exposure to very large amounts of some of the ingredients of this formulation may cause drowsiness.

INHALATION

High concentrations of vapor may cause skin irritation experienced as nasal discomfort and discharge.

SKIN CONTACT

Prolonged or repeated exposure may cause skin irritation.

EYE CONTACT

May cause moderate eye irritation and possible corneal injury.

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**EFFECTS OF REPEATED OVEREXPOSURE**

There are no known or reported effects from chronic exposure except for effects similar to those experienced from single exposure.

**OTHER EFFECTS OF OVEREXPOSURE**

None currently known.

**MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE**

A knowledge of the available toxicology information and of the physical and clinical properties of this material suggest that overexposure is unlikely to aggravate existing medical conditions.

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARDS**

May contain amines which may react with nitrites to form nitrosamines. Some nitrosamines have been shown to be carcinogenic in laboratory animals. Minor components of this product, when tested separately, have resulted in fetal toxicity in animals studied, and one component caused birth defects in animals following ingestion of large dosages. Some minor components, when tested separately, have been shown not to interfere with reproduction, although one of these minor components was slightly toxic to the offspring of treated female rats.

**EMERGENCY AND FIRST AID PROCEDURES**

**SWALLOWING**

If swallowed, get immediate medical advice by calling a physician, poison control center, or emergency room. If advice is not available, then give 1 or 2 glasses of water or milk and induce vomiting. Take victim and product container to the nearest emergency treatment center or hospital. Do not attempt to induce vomiting or give anything by mouth to an unconscious person.

**SKIN**

Remove contaminated clothing. Wash all affected and exposed areas with soap and water. If irritation or redness develops and persists, seek medical attention.

**INHALATION**

Remove to fresh air if effects occur and seek medical attention.

**EYES**

Exposed eyes should immediately be flushed with copious amounts of water using a steady stream for a minimum of 15 minutes. If irritation, pain, swelling, or tearing develops, seek medical attention.

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**NOTES TO PHYSICIAN**

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.

**VI. REACTIVITY DATA**

**STABILITY** Stable.

**HAZARDOUS POLYMERIZATION**  
Will not occur.

**CONDITIONS TO AVOID** Temperature above 300°C

**INCOMPATIBILITY (Materials to Avoid)**  
Strong oxidizing agents.

**HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS**  
Burning can produce small amounts of oxides of nitrogen, CO, and CO2's.

**VII. SPILL OR LEAK PROCEDURES**

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED**  
Wear suitable personal protective equipment. Collect for disposal. Larger spills may be absorbed on vermiculite or other similar material.

**WASTE DISPOSAL METHOD**  
Incinerate in a furnace where permitted under appropriate federal, state and local regulations.

**VIII. SPECIAL PROTECTION INFORMATION**

(for manufacturing and bulk spill cleanup)

**RESPIRATORY PROTECTION**

None needed under normal use conditions. For operations where the exposures may be excessive, a NIOSH/MSHA approves organic vapor respirator with a dust/mist pre-filter or a supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

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**VENTILATION**

General ventilation should be adequate for normal use. For operations where the material is heated or misted and exposures may be excessive, forced ventilation such as local exhaust may be needed to minimize exposure.

**PROTECTIVE GLOVES**

Chemical resistant such as PVC coated gloves recommended where needed to prevent prolonged/repeated skin contact.

**EYE PROTECTION**

Splash proof goggles recommended.

**OTHER PROTECTIVE EQUIPMENT**

Protective clothing if needed to avoid prolonged/repeated skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.

**IX. SPECIAL PRECAUTIONS**

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

- Eye Irritant: Avoid eye contact.
- Avoid prolonged /repeated skin contact.
- Avoid breathing vapors or mists.
- Wash exposed skin thoroughly with soap and water after use.
- Do not add nitrites or other nitrosating agents. A nitrosamine, which may cause cancer may be formed.
- Keep away from open flames and excessive heat.
- Do not cut or weld on or near empty drums or pails.
- Do not reuse empty drums or pails unless properly cleaned.
- Empty containers contain product residue and may be dangerous.
- Do not cut, weld, drill etc. containers, even empty.

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**OTHER PRECAUTIONS**

Observe all requirements of plant, company or government regulations.

KEEP OUT OF REACH OF CHILDREN.

**X. DEPARTMENT OF TRANSPORTATION**

**HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME**      None

**TECHNICAL NAME**      None

**HAZARD CLASS**      None

**IDENTIFICATION NUMBER**      None

**LABEL(S) REQUIRED**      None

**XI. ENVIRONMENTAL DATA**

**EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW INFORMATION**

This product contains the following chemicals subject to SARA TITLE III, Section 313 reporting:

Chemical Name	CAS#	Weight %
Glycol Ethers		60-75

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This MSDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While First Brands Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which First Brands Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:

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