



**SAFETY DATA SHEET**

**1. Product And Company Identification**

SDS ID: SDS012  
 PRODUCT NAME: Prestone ® High Performance DOT 4 Brake Fluid  
 PRODUCT NUMBER: AS800, AS800Y, AS801, AS800P, AS801Y, 77439-PDQ-6, 77447, 77439  
 FORMULA NUMBER: 2054-44, 2013B, 2811-47

<b>MANUFACTURER:</b> Prestone Products Corporation 69 Eagle Rd. Danbury, CT 06810	<b>CANADIAN OFFICE:</b> Prestone Canada 33 MacIntosh Blvd. Concord, ON L4K 4L5	<b>MEXICO OFFICE:</b> ASG Operations Mexico S. de R.L. de C.V. Carretera Mexico Cuautitlan, Kilometro 31.5, Nave Industrial 5, Loma Bonita, Cuautitlan, Mexico, 54800
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**MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:**

(888)269-0750 (in the US and Canada)  
 01-800-715-4135 (in Mexico)

**TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):**

CHEMTREC 1-800-424-9300 (in the US and Canada) +1 703 741-5970 (outside the US and Canada)

PRODUCT USE: Automobile brake fluid – consumer product  
 RESTRICTIONS ON USE: None identified

**2. Hazards Identification**

**GHS/HAZCOM 2012 Classification:**

Health	Physical
Eye Irritant Category 2 Specific Target Organ Toxicity – Repeated Exposure Category 2 Reproductive Toxicity Category 2	Not Hazardous

**Label Elements**



**Warning!**

H319 Causes serious eye irritation.  
 H361 Suspected of damaging the unborn child.  
 H373 May cause damage to kidneys and liver through prolonged or repeated ingestion.

**Prevention:**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe mist or vapors.  
 P264 Wash exposed skin thoroughly after handling.  
 P280 Wear protective gloves, protective clothing, and eye protection.

**Response:**

P308+P313 If exposed or concerned: Get medical advice.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



P373+P313 If eye irritation persists: Get medical attention..

P314 Get medical advice if you feel unwell.

**Storage:**

Store locked up.

**Disposal:**

P501 Dispose of contents and container in accordance with local and national regulations.

**3. Composition/Information on Ingredients**

Component	CAS No.	Amount
Triethylene glycol monoethyl ether	112-50-5	0-50%
Triethylene glycol monoethyl ether borate ester	30989-05-0	0-40%
Triethylene glycol monomethyl ether	112-35-6	0-30%
Polyethylene glycol monomethyl ether	9004-74-4	0-30%
Triethylene glycol monobutyl ether	143-22-6	0-20%
Diethylene glycol	111-46-6	1-10%
Diethylene glycol monobutyl ether	112-34-5	0-10%
Tetraethylene glycol	112-60-7	0-10%
Pentaethylene glycol	4792-15-8	0-5%
Triethylene glycol	112-27-6	0-5%
Polyethylene glycol monobutyl ether	9004-77-7	0-15%
Diisopropanolamine	110-97-4	0-5%
Diethylene glycol monoethyl ether	111-90-0	0-5%

**The exact concentrations are a trade secret.**

**4. First Aid Measures**

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

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

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

**INGESTION:** If swallowed, get immediate medical advice by calling a Poison Control Center or emergency room. If advice is not available, take victim and product container to the nearest emergency treatment center or hospital. Do not attempt to give anything by mouth to an unconscious person.

**MOST IMPORTANT SYMPTOMS:** Eye contact may cause severe irritation with redness and tearing. May cause mild skin irritation or sensitization. Harmful if absorbed through the skin. Breathing high concentrations of vapors or mists may cause irritation, headache, dizziness, drowsiness, nausea, loss of sense of balance and visual disturbances. Swallowing may cause gastrointestinal disturbances including irritation, abdominal pain, back pain, nausea, vomiting, diarrhea, headache, dizziness, drowsiness, nausea, visual disturbances, decreased urine production, malaise, unconsciousness and liver or kidney damage. May cause chronic effects.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:** Seek immediate medical attention for large ingestions.

**NOTES TO PHYSICIAN:** This product contains a small amount of diethylene glycol. It is estimated that the lethal oral dose of diethylene glycol in adults is 1.0-1.2 ml/kg. Diethylene glycol may cause an elevated anion-gap metabolic acidosis and renal tubular injury. Liver injury may occur, but not as severe as kidney injury. The signs and symptoms in diethylene glycol poisoning are those of metabolic acidosis, CNS depression and kidney injury. Urinalysis may show albuminuria, hematuria and oxaluria. The current medical management of diethylene glycol poisoning includes elimination of diethylene glycol,



correction of metabolic acidosis and prevention of kidney injury. It is essential to have immediate and follow-up urinalysis and clinical chemistry. There should be particular emphasis on acid-base balance, and liver and kidney function tests. For severe and/or deteriorating cases, hemodialysis may be required. Dialysis should be considered for patients who have severe metabolic acidosis, or compromise of renal function. There is no conclusive evidence that ethanol treatment will be beneficial. Consult your poison control center.

**5. Firefighting Measures**

**SUITABLE EXTINGUISHING MEDIA:** Use water spray or fog, foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** A solid stream of water or foam directed into hot, burning liquid can cause frothing. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Burning may produce carbon monoxide, carbon dioxide, and nitrogen oxides.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHERS:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

**6: Accidental Release Measures**

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Wear appropriate protective clothing and equipment (See Section 8).

**METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP:** Collect with absorbent material and place in appropriate, labeled container for disposal.

**7. Handling and Storage**

**PRECAUTIONS FOR SAFE HANDLING:**

Avoid contact with eyes, skin and clothing. Wash exposed skin with soap and water after use. Avoid breathing vapors and mists. Use with adequate ventilation.

Empty containers retain product residue and may be hazardous. Do not cut, weld, drill, etc. containers, even empty. Do not reuse empty containers unless properly cleaned.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**  
 Keep away from excessive heat and open flames. Keep containers closed when not in use. Do not add nitrites. This product contains amines which can combine with nitrites to form nitrosamines. Many nitrosamines have been found to cause cancer in laboratory animals. Store in a cool, dry area.

**NFPA CLASSIFICATION:** Not Applicable

**8. Exposure Controls / Personal Protection**

**EXPOSURE GUIDELINES**

CHEMICAL	EXPOSURE LIMIT
Triethylene glycol monoethyl ether	None Established
Triethylene glycol monoethyl ether borate ester	None Established
Triethylene glycol monomethyl ether	None Established
Polyethylene glycol monomethyl ether	None Established
Triethylene glycol monobutyl ether	None Established
Diethylene glycol	25 mg/m <sup>3</sup> TWA AIHA WEEL



Diethylene glycol monobutyl ether	35 ppm TWA Manufacturer 10 ppm TWA ACGIH TLV (Inhalable fraction and vapor)
Tetraethylene glycol	None Established
Pentaethylene glycol	10 mg/m <sup>3</sup> TWA Manufacturer
Triethylene glycol	None Established
Polyethylene glycol monobutyl ether	None Established
Diisopropanolamine	10 ppm Manufacturer
Diethylene glycol monoethyl ether	None Established

**APPROPRIATE ENGINEERING CONTROLS:** General ventilation should be adequate for normal use. For operations where the product is heated or misted and exposures may be excessive, mechanical ventilation such as local exhaust may be needed to minimize exposure.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** None under normal use conditions. For operations where exposures may be excessive, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**GLOVES:** Impervious gloves such as PVC coated are recommended to prevent prolonged/repeated skin contact.

**EYE PROTECTION:** Chemical safety goggles.

**OTHER PROTECTIVE EQUIPMENT/CLOTHING:** 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 or dry cleaned before re-use.

**9. Physical and Chemical Properties**

<b>APPEARANCE:</b>	Clear light amber liquid	<b>ODOR:</b>	Mild odor
<b>ODOR THRESHOLD:</b>	Not determined	<b>pH:</b>	Not determined
<b>MELTING/FREEZING POINT:</b>	Not determined	<b>BOILING POINT/RANGE:</b>	>392°F (200°C)
<b>FLASH POINT:</b>	> 250°F (>121°C) PMCC	<b>EVAPORATION RATE:</b>	Not determined
<b>FLAMMABILITY (SOLID, GAS)</b>	Not Applicable	<b>FLAMMABILITY LIMITS:</b>	LEL: Not determined UEL: Not determined
<b>VAPOR PRESSURE:</b>	Not determined	<b>VAPOR DENSITY:</b>	>1
<b>RELATIVE DENSITY:</b>	1.05-1.06	<b>SOLUBILITIES</b>	Water: 100%
<b>PARTITION COEFFICIENT (n-octanol/water)</b>	Not determined	<b>AUTOIGNITION TEMPERATURE:</b>	Not determined
<b>DECOMPOSITION TEMPERATURE:</b>	Not determined	<b>VISCOSITY:</b>	Not determined

**10. Stability and Reactivity**

**REACTIVITY:** Normally unreactive

**CHEMICAL STABILITY:** Stable

**POSSIBILITY OF HAZARDOUS REACTIONS:** Reaction with strong oxidizers will generate heat.

**CONDITIONS TO AVOID:** Contact with nitrites or other nitro sating agents may produce nitrosamine, a known animal carcinogen.



INCOMPATIBLE MATERIALS: Strong oxidizing agents, acids and strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition will product carbon monoxide, carbon dioxide, nitrogen oxides, aldehydes, ketones, organic acids.

## 11. Toxicological Information

### POTENTIAL HEALTH EFFECTS:

#### ACUTE HAZARDS:

**INHALATION:** High concentrations of vapors or mists may cause respiratory irritation experienced as nasal discomfort and discharge. At elevated temperatures, product may cause respiratory irritation, headache, dizziness, drowsiness, nausea, loss of sense of balance and visual disturbances. High concentrations of vapors at ambient temperatures may cause lung injury, liver dysfunction or kidney damage.

**SKIN CONTACT:** Contact may cause minor irritation with redness and itching. Prolonged or repeated exposure may cause drying and peeling of the skin. May cause skin sensitization in some individuals. A single prolonged exposure is not likely to result in material being absorbed in harmful amounts. Prolonged or repeated skin exposure to very large amounts may cause central nervous system effects.

**EYE CONTACT:** May cause severe irritation with tearing, blurred vision and possible corneal damage. Permanent eye damage is not expected.

**INGESTION:** Accidental ingestion of a small amount may cause gastrointestinal discomfort with nausea, vomiting and diarrhea. Large amounts may cause central nervous system effects including headache, dizziness, narcosis, slurred speech and blurred vision.

**CHRONIC EFFECTS:** Prolonged or repeated skin contact with this product may possibly lead to irritation and dermatitis. Prolonged or repeated inhalation, ingestion or skin absorption may lead to central nervous system effects, gastrointestinal disturbances and possible adverse blood, kidney, liver and reproductive effects. Diethylene Glycol Monomethyl Ether is slightly toxic to the fetus at doses nontoxic to the mother following skin contact.

**CARCINOGEN:** None of the components is listed as a carcinogen or potential carcinogen by ACGIH, IARC, NTP or OSHA.

#### ACUTE TOXICITY VALUES:

Calculated ATE for product: LD50: >3,333 mg/kg  
LD50: >2,000 mg/kg

Triethylene glycol monoethyl ether	LD50: Oral Rat 10,610 mg/kg LD50: Skin Rabbit: 3,540 mg/kg
Triethylene glycol monomethyl ether	LD50: Oral Rat >10,500 mg/kg LD50: Skin Rabbit: 2,700 mg/kg
Polyethylene glycol monomethyl ether	LD50: Oral Rat 22 mL/kg LD50: Skin Rabbit: >20 mL/kg
Triethylene glycol monobutyl ether	LD50: Oral Rat 5,300 mg/kg LD50: Skin Rabbit 3,540 mg/kg
Diethylene glycol	LD50: Oral Rat 5,660 mg/kg LD50: Skin Rabbit: 2,700 mg/kg
Diethylene glycol monobutyl ether	LD50: Oral Rat 5,660 mg/kg LD50: Skin Rabbit: 2,700 mg/kg
Tetraethylene glycol	LD50: Oral Rat >18,000 mg/kg LD50: Skin Rabbit: 20,000 mg/kg
Pentaethylene glycol	LD50: Oral Guinea pig: 22,500 mg/kg
Triethylene glycol	LD50: Oral Rat >2,000 mg/kg LD50: Skin Rabbit: 16,000 mg/kg



Polyethylene glycol monobutyl ether

LD50: Oral Rat >2,000 mg/kg

Diisopropanolamine

LD50: Skin Rabbit: 3,540 mg/kg

LD50: Oral Rat >4,000 mg/kg

LD50: Skin Rabbit: >20,000 mg/kg

**12. Ecological Information**

**ECOTOXICITY:**

Triethylene glycol monoethyl ether

LC50: Pimephales promelas (Fathead minnow) >10,000 mg/L/96 hr.

EC50 Daphnia magna (Water flea) >10,000 mg/L

Triethylene glycol monomethyl ether

LC0 Brachydanio rerio >5000 mg/L/96 hr.

LC50 Daphnia magna (Water flea, neonate) >10,000 mg /L/48 hr.

Polyethylene glycol monomethyl ether

No data available

Triethylene glycol monobutyl ether

LC50: Pimephales promelas (Fathead minnow) 2400 mg/L/96 hr.

LC50: Daphnia magna 2210 mg/L /48 hr.

Diethylene glycol

LC50 Western mosquitofish >32,000 mg/L/96 hr

Tetraethylene glycol

LC50 Pimephales promelas (fathead minnow) >10,000 mg/L/96 hr.

LC50 Daphnia magna (Water flea, neonate) 7746 mg /L/48 hr.

Pentaethylene glycol

No data available

Triethylene glycol

LC50 Lepomis macrochirus >10,000 mg/L/96 hr.

EC50 Daphnia magna (Water flea, neonate) >10,000 mg /L/48 hr

Polyethylene glycol monobutyl ether

LC50: Scophthalmus maximus >1800 mg/L/96 hr

EC50 Daphnia magna (Water flea) >3200 mg/L/48 hr

EC50: Scenedesmus capricornutum 1075 mg/L/72 hr

Diisopropanolamine

LC50 Brachydanio rerio (Zebra Fish) >1000 -2200 mg/L/ 96 hr

**PERSISTENCE AND DEGRADABILITY:** Diethylene Glycol: Readily biodegradable (>70% in 19days), Diethylene glycol monobutyl ether: Readily biodegradable (95% in 5 days).

**BIOACCUMULATIVE POTENTIAL:** Diethylene glycol: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low. Diethylene glycol monobutyl ether: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

**MOBILITY IN SOIL:** Diethylene Glycol: Diethylene glycol is highly mobile in soil. Diethylene glycol monobutyl ether: Is expected to have very high mobility in soil.

**OTHER ADVERSE EFFECTS:** None known

**13. Disposal Considerations**

Recycle, incinerate, treat or landfill in accordance with all local, state/provincial and federal regulations.

**14. Transport Information**

U.S. DOT HAZARD CLASSIFICATION: Not Regulated

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION: Not Regulated



CANADIAN TDG CLASSIFICATION: Not Regulated

**15. Regulatory Information**

EPA SARA 311/312 HAZARD CLASSIFICATION: Classified as per Section 2 of this SDS.

EPA SARA 313 This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Glycol Ethers	NA	<85%
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PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CALIFORNIA PROPOSITION 65:  **WARNING:** Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**16. Other Information**

NFPA RATING (NFPA 704) - FIRE: 1 HEALTH: 2 INSTABILITY: 0

REVISION SUMMARY: Section 2: Classification and Labeling; Section 3: Composition; Section 8: Occupational Exposure Limits and Eye Protection; Section 11: Acute Toxicity Values; Section 12: Ecotoxicity

SDS Date of Preparation/Revision: August 17, 2020

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

While Prestone Products 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 Prestone Products 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.