

Date Prepared: 06/04/2020

SAFETY DATA SHEET

1. Product And Company Identification

SDS ID: SDS 842

PRODUCT NAME: Prestone® Max DOT 4 Brake Fluid

PRODUCT NUMBER: AS810 FORMULA NUMBER: 2811-117

MANUFACTURER: CANADIAN OFFICE: MEXICO OFFICE:

Prestone Products Prestone Canada ASG Operations Mexico S. de R.L. de C.V.

Corporation 33 MacIntosh Blvd. Carretera Mexico Cuautitlan, Kilometro 31.5, Nave

69 Eagle Rd. Concord, ON L4K 4L5 Industrial 5,

Danbury, CT 06810 Loma Bonita, Cuautitlan, Mexico, 54800

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 Damage Category 1	Not Hazardous
Toxic to Reproduction Category 2	

Label Elements





DANGER!

H318 Causes serious eye damage.

H361 Suspected of damaging the unborn child.

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves and eye protection.

Response:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor.

P308 + P313 IF exposed or concerned: Get medical attention.

Storage:



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P405 Store locked up.

Disposal:

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

The exact concentrations are a trade secret.

3. Composition/Information on Ingredients

Component	CAS No.	Amount
Triethylene glycol monomethyl ether borate	30989-05-0	15-40%
Triethylene glycol monomethyl ether	112-35-6	15-40%
Triethylene glycol monobutyl ether	143-22-6	20-40%
Triethylene glycol	112-27-6	10-20%
Diethylene glycol	111-46-6	5-10%
Tetraethylene glycol	112-60-7	<10%
Polyethylene glycol monobutyl ether	9004-77-7	<5
Diisopropanolamine	110-97-4	<5%
Diethylene glycol monomethyl ether	111-77-3	<1%
Di-t-butyl-p-cresol	128-37-0	<1%

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 skin irritation or redness develops or persists, seek medical attention.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 30 minutes while holding the eyelids apart. Remove contact lenses, if present and easy to do. Get immediate medical attention.

INGESTION: Do NOT induce vomiting. Get immediate medical attention. If conscious, rinse mouth with a small amount of water and give one glass of water to dilute. Never give anything by mouth to an unconscious or convulsing person.

MOST IMPORTANT SYMPTOMS: Eye contact causes severe irritation. May cause mild skin irritation. Breathing high concentrations of vapors or mists may cause respiratory irritation. Swallowing may cause gastrointestinal disturbances. Suspected of damaging the unborn child.

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

NOTES TO PHYSICIAN: Treatment should be directed at the control of symptoms and clinical condition of the patient.

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.



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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 eye contact. Avoid prolonged skin contact. Avoid breathing vapors and mists. Use with adequate ventilation. Wash exposed skin thoroughly with soap and water after use.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Spills of this product on hot, fibrous insulation may result in spontaneous combustion.

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. Do not add nitrites or other nitro sating agents. Nitrosamine, which may cause cancer, may be formed. Keep containers closed when not in use. Store in a cool, dry area.

NFPA CLASSIFICATION: Not Applicable

8. Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

Triethylene glycol monomethyl ether borate	None Established
Triethylene glycol monomethyl ether	None Established
Triethylene glycol monobutyl ether	None Established
Triethylene glycol	None Established
Diethylene glycol	25 mg/m³ TWA AIHA WEEL
Tetraethylene glycol	None Established
Polyethylene glycol monobutyl ether	None Established
Diisopropanolamine	None Established
Diethylene glycol monomethyl ether	25 mg/m³ TWA AIHA WEEL
Di-t-butyl-p-cresol	None Established
Triethylene glycol monomethyl ether borate	None Established
Triethylene glycol monomethyl ether	None Established
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



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

EYE PROTECTION: Splash proof goggles are recommended to prevent eye contact.

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

APPEARANCE:	Clear colorless to brown liquid	ODOR:	Mild
ODOR THRESHOLD:	Not determined	pH:	8.2
MELTING/FREEZING POINT:	-76°F (-60°C)	BOILING POINT/RANGE:	502°F (261°C)
FLASH POINT:	270°F (132°C) PMCC	EVAPORATION RATE: (Butyl Acetate = 1)	Not determined
FLAMMABILITY (SOLID, GAS)	Not Applicable	FLAMMABILITY LIMITS:	LEL: Not determined UEL: Not determined
VAPOR PRESSURE:	<0.010 mmHg at 20°C (68°F)	VAPOR DENSITY:	Not determined
RELATIVE DENSITY:	1.061	SOLUBILITIES	Water: 1000 g/L at 20°C (68°F)
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Kinematic: 1530 mm2/s at - 40°C (-40°F)

10. Stability and Reactivity

REACTIVITY: Normally unreactive.

CHEMICAL STABILITY: Stable

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

CONDITIONS TO AVOID: Product may oxidize at elevated temperatures. Generation of gas during composition can cause pressure in closed systems.

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:



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INHALATION: None expected from short term exposures at ambient temperatures. At elevated temperatures, product may cause respiratory irritation, headache, dizziness, drowsiness, nausea, loss of sense of balance and visual disturbances.

SKIN CONTACT: Prolonged or repeated exposure may cause mild irritation with redness and discomfort. Prolonged contact may cause defatting or drying of the skin.

EYE CONTACT: Causes severe irritation and burns with pain, tearing, and redness. May cause permanent eye damage, vision impairment, and blurred vision.

INGESTION: Ingestion may cause abdominal pain, back pain, nausea, vomiting, and diarrhea.

CHRONIC EFFECTS: Prolonged or repeated skin contact with this product may possibly lead to irritation and dermatitis.

REPRODUCTIVE TOXICITY: In animals, diethylene glycol methyl ether is slightly toxic to the fetus at doses nontoxic to the mother following skin contact; birth defects have only been seen following high oral doses.

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

ACUTE TOXICITY VALUES:

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

Triethylene glycol monomethyl ether borate ether LD50: Oral Rat >2000 mg/kg LD50: Skin Rat >2000 mg/kg Triethylene glycol monobutyl ether LD50: Oral Rat 5,300 mg/kg LD50: Skin Rabbit 3,540 mg/kg LD50: Oral Rat 5,660 mg/kg Diethylene glycol LD50: Skin Rabbit: 2,700 mg/kg Triethylene glycol monobutyl ether LD50: Oral Rat >5170 mg/kg LD50: Skin Rabbit: 3540 mg LD50: Oral Rat >10,500 mg/kg Triethylene glycol monomethyl ether LD50: Skin Rabbit: 2,700 mg/kg LD50: Oral Rat >18,000 mg/kg Tetraethylene glycol LD50: Skin Rabbit: 20,000 mg/kg LD50: Oral Rat >2,000 mg/kg Polyethylene glycol monobutyl ether LD50: Skin Rabbit: 3,540 mg/kg Triethylene glycol LD50: Oral Rat >2,000 mg/kg LD50: Skin Rabbit: 16,000 mg/kg Diisopropanolamine LD50: Oral Rat >4,000 mg/kg LD50: Skin Rabbit: >20,000 mg/kg Diethylene glycol monomethyl ether LD50: Oral Rat >7128 mg/kg

LD50: Skin Rabbit 9404 mg/kg

12. Ecological Information

ECOTOXICITY:

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

Diethylene glycol monobutyl ether LC50 Lepomis macrochirus (Bluegill sunfish) 1300 mg/L/96 hr

Triethylene glycol monomethyl ether LC0 Brachydanio rerio >5000 mg/L/96 hr.

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

LC0 Inhalation rat >12 mg/L/6 hr (maximum vapor concentration



Di-t-butyl-p-cresol

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Tetraethylene glycol LC50 Pimephales promelas (fathead minnow) >10,000 mg/L/96 hr. LC50 Daphnia magna (Water flea, neonate) 7746 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

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

EC50 Daphnia magna (Water flea, neonate) >10,000 mg /L/48 hr Diisopropanolamine LC50 Brachydanio rerio (Zebra Fish) >1000 -2200 mg/L/ 96 hr

Diethylene glycol monomethyl ether LC50: Pimephales promelas (Fathead minnow) 5741 mg/L/96 hr

EC50 Daphnia magna 1192 mg/L/ 48 hr LC50: Danio rerio>0.57 mg/L/96 hr.

EC50: Daphnia magna 0.48 mg/L /48 hr.

ErC50 algae >0.4 mg/L/72 hr.

PERSISTENCE AND DEGRADABILITY: Triethylene glycol monobutyl ether: The theoretical BODs for triethylene glycol monobutyl ether are 0, 5, and 24% for 5 days, 10 days, and 20 days, respectively. Diethylene glycol, diethylene glycol monobutyl ether, triethylene glycol monomethyl ether, tetraethylene glycol, and triethylene glycol are readily biodegradable. Diisopropanolamine: Achieved 39% of its theoretical oxygen demand using a sewage sludge following a 20 day incubation period.

BIOACCUMULATIVE POTENTIAL:

Triethylene glycol monobutyl ether: An estimated BCF of 3 was calculated in fish for triethylene glycol monobutyl ether. This BCF suggests the potential for bio concentration in aquatic organisms is low.

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.

Triethylene glycol monomethyl ether: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

Tetraethylene glycol: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

Triethylene glycol: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

Diisopropanolamine: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

MOBILITY IN SOIL: Triethylene glycol monobutyl ether, diethylene glycol, diethylene glycol monobutyl ether, triethylene glycol monomethyl ether, tetraethylene glycol, triethylene glycol and diisopropanolamine are expected to be high mobile in soil.

OTHER ADVERSE EFFECTS: None known

13. Disposal Considerations

Dispose of product 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: Refer to Section 2 for OSHA GHS Classification.



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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

<100%

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.

CALIFORNIA PROPOSITION 65: This product contains the following chemicals regulated under California Proposition 65:

2-methoxyethanol

109-86-4

developmental

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

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on the Canadian Domestic Substances List.

16. Other Information

NFPA Rating: Fire: 1 Health: 3 Instability: 0

REVISION SUMMARY: New SDS

SDS Date of Preparation/Revision: June 4, 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 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 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.