



To Our Customers:

The attached Safety Data Sheet (SDS) was prepared by the vendor of the product you purchased through one of our divisions. We used the manufacturer's electronic document directly or scanned a paper copy and generated a file for our automated SDS delivery system.

All statements, technical information, and recommendations contained therein are solely that of the manufacturer of the product. We at Zep Inc. did not verify the accuracy and completeness of the statements and do not warrant or guarantee the information. We provide vendor SDSs to assist our customers in their compliance efforts. The attached document is in compliance with one of the respective country regulatory requirements noted below:

The OSHA Hazard Communication Standard (in the United States)
The Hazardous Products Regulations (in Canada)

We made every effort to deliver all of the information prepared by the manufacturer. We cannot anticipate all conditions under which this information will be used. If you have any questions about the statements on the SDS, please contact the company shown on the document.

Zep Inc. assumes no liability or responsibility for loss or damage resulting from the improper use or handling of this product, from incompatible product combinations, or from the failure to follow instructions, warnings, and advisories in the manufacturer's product label and Safety Data Sheet.

Sincerely,

Product Stewardship Team
Zep Inc.



SAFETY DATA SHEET

1. Product And Company Identification

SDS ID: SDS847
PRODUCT NAME: Kia High Performance DOT 4 Brake Fluid
PRODUCT NUMBER: AS800, AS800Y, AS801, AS800P, AS801Y, 77439-PDQ-6, 77447, 77439
FORMULA NUMBER: 13436-22, 2046-96, 2054-44, 2013B

MANUFACTURER: Prestone Products Corporation 69 Eagle Rd. Danbury, CT 06810	CANADIAN OFFICE: Prestone Canada 33 MacIntosh Blvd. Concord, ON L4K 4L5	MEXICO OFFICE: 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 Damage Category 1 Skin Irritant Category 2 Specific Target Organ Toxicity – Repeated Exposure Category 2 Reproductive Toxicity Category 2	Not Hazardous

Label Elements



Danger!

H315 Causes skin irritation
H318 Causes serious eye damage.
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.

P302 + P352 IF ON SKIN: Wash with plenty of water and soap.

P332 + P313 If skin irritation occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

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.

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
Mixture of glycol ethers, polyglycols, oxidation inhibitors and corrosion inhibitors	Proprietary	>85%
Diethylene Glycol Butyl Ether	112-34-5	<10%
Diethylene Glycol	111-46-6	<15%
Diethylene Glycol Monomethyl Ether	111-77-3	<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 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 irritation with possible corneal injury. 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
Mixture of glycol ethers, polyglycols, oxidation inhibitors and corrosion inhibitors	None Established
Diethylene Glycol Butyl Ether	10 ppm TWA ACGIH TLV (Inhalable fraction and vapor)
Diethylene Glycol	10 mg/m ³ TWA AIHA WEEL
Diethylene Glycol Monomethyl Ether	10 ppm TWA (Skin) Manufacturer Recommended OEL



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

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
Diethylene Glycol:	LD50: Oral Rat 5,660 mg/kg LD50: Skin Rabbit: 2,700 mg/kg
Diethylene Glycol Butyl Ether:	LD50: Oral Rat 5,660 mg/kg LD50: Skin Rabbit: 2,700 mg/kg

12. Ecological Information

ECOTOXICITY:

Diethylene Glycol: 96 hr LC50 *Pimephales promelas* 75,200 mg/L, 48 hr EC50 *daphnia magna* 62,630 mg/L
Diethylene glycol monobutyl ether: 96 hr LC50 *Lepomis macrochirus* 1,300 mg/L, 48 hr EC50 *daphnia magna* >100 mg/L, 96 hr EC50 *Desmodesmus subspicatus* >10 mg/L

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

16. Other Information

NFPA RATING (NFPA 704) - FIRE: 1 HEALTH: 3 INSTABILITY: 0

REVISION SUMMARY: New SDS

SDS Date of Preparation/Revision: August 10, 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



SDS 847
KIA HIGH PERFORMANCE DOT 4 BRAKE FLUID
Date Prepared: 08/10/2020

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