



CHAMPION 600 SERIES RACING BRAKE FLUID
MATERIAL SAFETY DATA SHEET



The OSHA Hazard Communication Standard requires Material Safety Data Sheets for all chemicals used by AFCO Performance Group to reduce the incidence of chemically-related occupational illnesses and injuries.

Information contained in the MSDS includes:

- Product name and manufacturer
- Chemical ingredients
- Hazard information
- Safe use guidelines
- Emergency response procedures

1. Product Identification

Champion Brands, LLC
1001 Golden Drive
Clinton, MO 64735
(660) 885-8151

Product line: CHAMPION® 600 Series Racing Brake Fluid
Products: 4059.
CAS: Not applicable (Mixture).
Synonyms: Glycol-Based Brake Fluid.
Recommended use: Disk and drum hydraulic brake fluid.
Restrictions: Do not use where DOT5 is specified.
Created: 26 April 2012.
Revised: 21 February 2018.
Emergency phone: CHEMTREC: (+1) 800-424-9300.

2. Hazards Identification

Appearance: Clear to amber.
Odor: Mild odor.
Classification(s): Eye Irritation, Category 2A.
Reproductive toxicity, Category 2.
Target organs: None specified.
Symbol(s):



Signal Word: **Warning**
Hazard Statement(s): Causes serious eye irritation. Suspected of damaging fertility or the unborn child.
Other hazard(s): Combustible liquid. Repeated exposure may cause dryness of the skin. Vapors may cause respiratory irritation.
Precaution(s): Wear eye and skin protection before handling. Do not breathe mist/vapors/spray. Wear protective gloves/protective clothing. IF IN EYES: Flush with water for 15 minutes and consult a physician. IF exposed or concerned: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
Disposal: Keep out of waterways. Check local, national, and international regulations for proper disposal.
HMIS (estimated): **Health – 2 Fire – 1 Instability – 0**

3. Composition/Information on Ingredients

Hazardous Ingredients:

<i>Component</i>	<i>CAS No.</i>	<i>Conc (wt%)</i>
Triethylene Glycol Monomethyl Ether Borate Ester	30989-05-5	80 – 90
Monoethanolamine	141-43-5	0 - 2
2,6-Di-tert-butyl-p-cresol (BHT)	128-37-0	< 1.0
Diethylene glycol monomethyl ether	111-77-3	< 1.0

4. First Aid Measures

Eyes: Remove contact lenses, if worn. Rinse with running water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention.

Skin: Remove affected clothing and launder before reuse. Wash affected area for at least 15 minutes with soap and running water. Prolonged or repeated exposure may cause defatting of the skin – symptoms include redness, dryness, cracking.

Inhalation: Remove exposed person to fresh air immediately. Restore or assist breathing, if necessary. Get medical attention immediately if symptoms of CNS depression or intoxication develop.

Ingestion: Do NOT induce vomiting. If conscious, give two full glasses of water. If a significant volume has been swallowed, get medical attention immediately.

Additional Info: Not determined.

Specific Treatments: Not determined. Treat symptomatically.

5. Fire Fighting Measures

NFPA (estimated): Health – 1 Fire – 1 Instability – 0

Flash Point: > 121°C / 249°F (calculated).

Extinguishing Media: For small fires use alcohol foam, dry chemical or CO₂. For large fires apply large (flooding) quantities of water from as far away as possible in a spray or mist.

Unsuitable Media: Water jet may be ineffective.

Firefighting Procedures: Wear a self-container breathing apparatus if necessary based on concentrations of smoke. Material will produce primarily oxides of carbon as combustion products.

Unusual Hazards: Not Determined.

6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Ventilate if released in a confined area. Avoid breathing mists/vapors/spray. Product may present slipping hazard if left on the floor. Beware of vapors pooling in low areas to explosive concentrations.

Environmental precautions: Avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways or groundwater.

Methods for removal: Use pump to remove bulk liquid. Residual liquid can be absorbed on inert material. Dispose of contaminated adsorbent as hazardous waste. Wash the area with water after excess product and adsorbent is removed.

7. Handling and Storage

Max. Handling Temp: Not determined.

Procedures: Use in a well ventilated area. Avoid breathing mists/vapors/spray. Avoid handling hot product where possible. Use appropriate personal protective equipment to avoid contact with skin and eyes. Note the location of nearest emergency shower and eye wash station before use. Store with the lid tightly closed in a cool, dry, well-ventilated place. Product is hygroscopic and effectiveness may diminish if opened product is stored for long periods of time. Dispose of spilled or used material in accordance with local, regional, national, and international regulations.

Max Store Temp: Do not store or handle at elevated temperatures.

8. Exposure Controls/Personal Protection

Exposure Limits –

US Guidelines by component:	<i>Monoethanolamine (CAS # 141-43-5)</i>	
	ACGIH TWA:	3 ppm.
	ACGIH STEL:	6 ppm..
	OSHA TWA:	3 ppm.
	OSHA STEL:	6 ppm.
	NIOSH TWA:	3 ppm.
	NIOSH STEL:	6 ppm.

Other Exposure Limits: Not determined.

Engineering Controls: Use in a well-ventilated area. Local and general ventilation should keep methanol vapor concentration below permissible limits. Where exposure potential exceeds recommended limits, use a NIOSH/OSHA approved supplied air respirator as recommended. Vapors are heavier than air and will tend to accumulate in low-lying areas.

Personal Protective Equipment –

Respiratory:	Use a NIOSH or CEN approved full-face respirator with multi-purpose combination or type ABEK respirator cartridges as a backup to engineering controls. If the respiratory is the only means of protection, use a full-face supplied air respirator
Eye:	Use tightly-fitting chemical splash goggles. Use face shield, especially where splashing is likely to occur.
Gloves:	Use nitrile, butyl, viton, or fluoroelastemer gloves. Even appropriate materials may degrade after prolonged exposure with product.
Clothing:	Use chemical resistant pants and jackets, preferably of butyl or nitrile rubber.
Other:	Locate the nearest eyewash station and safety shower before handling this product. Limit exposure whenever possible.
Hygiene:	Wash thoroughly after handling this product.

9. Physical and Chemical Properties

Appearance:	Colorless to yellow liquid.
Odor:	Mild ether.
Odor threshold:	Not determined.
pH:	7.2.
Melting Point:	< -59°C / -74.2°F.
Initial Boiling Pt:	> 306°C / 582°F.
Flash Point:	146°C / 295°F.
Evaporation Rate	0.01 (nBuOAc = 1).
Upper Flammable Lm:	Not determined.
Lower Flammable Lm:	Not determined.
Explosive Data:	Vapors may form explosive mixtures with air.
Vapor Pressure:	0.01 kPa (0.07 mmHg) @ 20° (68°F).
Vapor Density:	10 (Air = 1).
Volatile Organics:	Not determined.
Density:	1.08 mg/cu. cm @15.6°C.
Solubility:	Miscible in water, alcohol; sparingly soluble in some organic solvents.
K_{ow}:	Not determined.
Viscosity:	2 mm/s ² @ 100°C.
Autoignition Point:	310°C / 590°F.
Decomposition Temp:	Not determined.

10. Stability and Reactivity

Stability:	Material is normally stable at ambient temperatures and pressures.
Decomposition Temp:	Not determined.
Incompatibility:	Keep away from strong oxidizers and strong acids/bases. Keep away from strong reducing agents such as powdered active metals.
Polymerization:	Will not occur.
Thermal Decomposition:	Primarily oxidizes to carbon dioxide in normal combustion conditions. In lower oxygen environments carbon monoxide, formaldehyde, or formic acid may be formed.
Conditions to Avoid:	Vapors may catch fire – keep away from strong oxidizers, acids, bases as well as heat/sparks/open flames/hot surfaces.

11. Toxicological Information

Acute Exposure –

- Eye Irritation:** Expected to cause mild to moderate irritation of the eye if exposed to liquid or in high vapor concentrations. May cause irritation, tearing, or burning of the eyes.
- Skin Irritation:** Expected to be mildly irritating to the skin. Symptoms of irritation may include redness, drying, and cracking of the skin.
- Respiratory Irritation:** High vapor concentrations may cause transient irritation to the respiratory system.
- Dermal Toxicity:** This product can be absorbed through the skin, but is of low order of toxicity. Limit exposure to skin where possible.
- Inhalation Toxicity:** Toxicity is similar to that for oral ingestion, though this exposure mode is far less likely to occur.
- Oral Toxicity:** Low order of toxicity, not expected to cause injury under normal exposure conditions. If a large amount of material is swallowed, target organ effects and metabolic acidosis may occur.
- Aspiration Hazard:** This product has a very low viscosity and may be fatal if aspirated into the airways. Do NOT induce vomiting, as this increases risk of aspiration.

Chronic Exposure –

- Chronic Toxicity:** This product may cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.
- Carcinogenicity:** This product and its components are NOT listed by the IARC, NTP, ACGIH, or OSHA as carcinogens.
- Mutagenicity:** Available information does not suggest that this product is a germ cell mutagen.
- Reproductive Toxicity:** Available information does not suggest that this product is a reproductive toxin.
- Teratogenicity:** Diethylene glycol has produced birth defects in rats at concentrations that are toxic to the mother.

Additional Information –

- Target organ toxicity:** Product is toxic to organs: Kidneys, liver, central nervous system, heart. Metabolic products of diethylene glycol produce acidosis and organ toxicity effects. In some cases, other metabolic abnormalities have been reported such as hyponatremia and hyperkalemia leading to nerve and cardiac damage.
- Synergistic effects:** Though specific data is not available, ethanol is a competing substrate for NAD-dependent alcohol dehydrogenase and may slow the product of harmful metabolic products of diethylene glycol.
- Pharmacokinetics:** No data available.

12. Ecological Information

Environmental Toxicity –

Freshwater Fish:	Acute LD50 > 590 mg/L (96h).
Freshwater Invertebrates:	Acute LD50 > 10g/l (48h).
Algae:	Not determined.
Saltwater Fish:	Not determined.
Saltwater Invertebrates:	Not determined.
Bacteria:	Not determined.
Miscellaneous:	Not determined.

Environmental Fate –

Biodegradation:	No data available. Expected to biodegrade rapidly and degrade by photo-oxidative reactions with the air.
Bioaccumulation:	Product is very mobile in soil and water and is somewhat volatile – it is not expected to bioaccumulate.
Soil Mobility:	Product has high mobility in soil, slowly evaporates at environmentally relevant temperatures.
Other Effects:	Not determined.

13. Disposal Considerations

Disposal Considerations

All disposal practices must be in accordance with local, regional, national, and international regulations. Store material for disposal as indicated in Section 7. Disposal by controlled incineration or by secure land fill may be acceptable – review applicable regulations or regulatory bodies before making disposal decisions.

Contaminated Containers or Packaging

Empty containers are likely to contain flammable vapors or explosive mixtures of vapor and air. Do NOT weld, cut, or grind empty containers. Rinse empty containers with water and dispose of in accordance with local, regional, national, and international regulations.

14. Transportation Information

Description shown may not apply to all shipping situations. Consult applicable shipping codes to determine any additional shipping requirements.

US DOT:

UN No: 1993.
UN Proper Name: Combustible liquid, n.o.s. (Brake fluid).
UN Class: CBL.
Packing Group: III.
Marine Pollutant: No.

IMDG: Not dangerous goods.

ICAO/IATA: Not dangerous goods.

15. Regulatory Information

Global Chemical Inventories/Regulations –

USA: All components of this material are on the US TSCA.
Other TSCA Reg.: None known.
EU: Components of this product and similar mixtures are registered under REACH. Consult the European Chemicals Agency regarding REACH registration, reporting, and other legal requirements for methanol solutions before importing to the EU.
New Zealand: May require notification before sale under New Zealand Regulations.
Canada: All components of this product are listed on the Canadian Domestic Substances List (DSL).
Canada WHMIS B3.

Other U.S. Federal Regulations –

SARA Ext. Haz. Subst.: No components listed as Extremely Hazardous Substances list. See 40 CFR 355.
SARA Sect. 313: No components of this product are subject to reporting under SARA Title III, Section 313. See 40 CFR 372.
SARA 311/312 Class: *Acute Hazard* - YES.
Chronic Hazard - YES.
Fire Hazard - YES.
Reactivity Hazard - NO.
CERCLA Haz. Sub.: No components listed. See 40 CFR 302.

State Regulations –

CA Prop 65:

WARNING: This product contains diethanolamine known to the State of California to cause cancer and, ethylene glycol monomethyl ether, which is known to the State of California to cause birth defects or other reproductive harm.

Right to Know Component

Monoethanolamine
(CAS # 141-43-5)

Right to Know States

NJ, PA, MA

16. Other Information

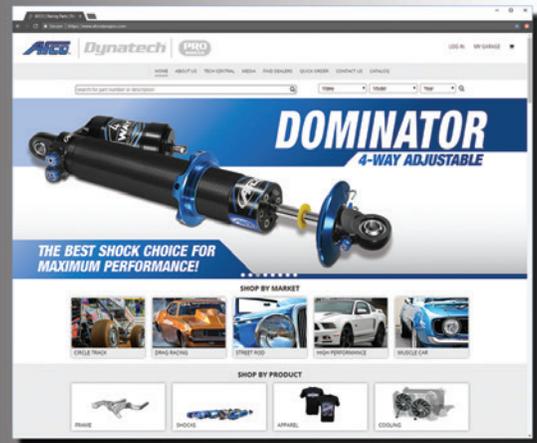
Revision updates may be in many sections and the MSDS should be read in its entirety. Prepared according to the UN Globally Harmonized System for the Classification and Labeling of Chemicals (GHS) by Champion LLC, 1001 Golden Drive, Clinton, Missouri 64735.

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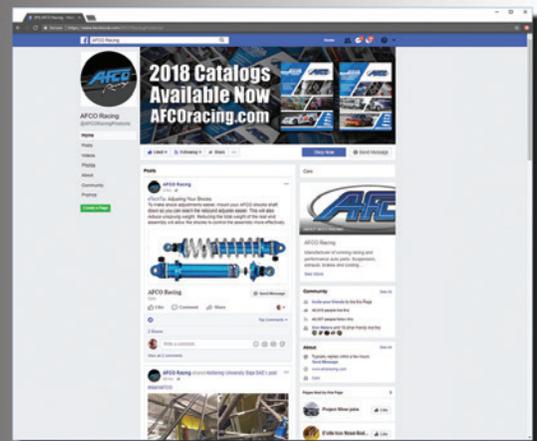
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