# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **BG DOT 3 Brake Fluid**

**Other means of identification**

**Formula number** 2

**Product code** 850

**Synonyms** P850-xxxx

**Recommended use** Automotive use

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** BG Products, Inc.

**Address** 740 S. Wichita St.
Wichita, KS 67213
United States

**Telephone** 316-266-8120

**Website** www.bgprod.com

**E-mail** msds@bgprod.com

**Contact person** Product Stewardship

**Emergency phone number** (800) 424-9300
(CHEMTREC)

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

| | |
|---|---|
| Acute toxicity, oral | Category 4 |
| Serious eye damage/eye irritation | Category 1 |

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Danger

**Hazard statement** Harmful if swallowed. Causes serious eye damage.

**Precautionary statement**

**Prevention** Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection.

**Response** If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** 85% of the mixture consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| Triethylene glycol, monobutyl ether | | 143-22-6 | 55 - 85 |
| Diethylene glycol | | 111-46-6 | 20 - 40 |
| Diethylene glycol monobutyl ether | | 112-34-5 | 1 - 20 |
| Triethylene glycol | | 112-27-6 | 1 - 5 |

## 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**Ingestion** Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

**Most important symptoms/effects, acute and delayed** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

**Suitable extinguishing media** Alcohol resistant foam. Powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical** During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions** Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** No unusual fire or explosion hazards noted.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up** Use water spray to reduce vapors or divert vapor cloud drift.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

**Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Diethylene glycol monobutyl ether (CAS 112-34-5) | TWA | 10 ppm | Inhalable fraction and vapor. |

**US. Workplace Environmental Exposure Level (WEEL) Guides**

| Components | Type | Value | Form |
|---|---|---|---|
| Diethylene glycol (CAS 111-46-6) | TWA | 10 mg/m3 | |
| Triethylene glycol (CAS 112-27-6) | TWA | 10 mg/m3 | Aerosol. |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles) and a face shield.

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance**

**Physical state** Liquid.

**Form** Liquid.

**Color** Not available.

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -90.58 °F (-68.1 °C) estimated

**Initial boiling point and boiling range** 446.72 °F (230.4 °C) estimated

**Flash point** > 201.2 °F (> 94.0 °C) Closed Cup

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

| | |
|---|---|
| **Vapor pressure** | 0.09 hPa |
| **Vapor density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | |
| **Solubility (water)** | Not available. |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | 399.2 °F (204 °C) estimated |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other information** | |
| **Density** | 1.04 g/cm3 estimated |
| **Explosive properties** | Not explosive. |
| **Flammability class** | Combustible IIIB estimated |
| **Kinematic viscosity** | 1.8 mm²/s |
| **Kinematic viscosity temperature** | 212 °F (100 °C) |
| **Oxidizing properties** | Not oxidizing. |
| **Percent volatile** | 65.09 % estimated |
| **Specific gravity** | 1.03984 estimated |
| **VOC** | 65.09 % estimated |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **Conditions to avoid** | Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| **Incompatible materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | No hazardous decomposition products are known. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation** | Prolonged inhalation may be harmful. |
| **Skin contact** | No adverse effects due to skin contact are expected. |
| **Eye contact** | Causes serious eye damage. |
| **Ingestion** | Harmful if swallowed. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. |

**Information on toxicological effects**

**Acute toxicity** Harmful if swallowed.

| **Components** | **Species** | **Test Results** |
|---|---|---|
| Diethylene glycol (CAS 111-46-6) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 11890 mg/kg |
| **Oral** | | |
| LD50 | Rat | 12570 mg/kg |

| Components | Species | Test Results |
|---|---|---|
| Diethylene glycol monobutyl ether (CAS 112-34-5) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 2700 mg/kg |
| **Oral** | | |
| LD50 | Rat | 4500 mg/kg |
| Triethylene glycol (CAS 112-27-6) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 22460 mg/kg |
| **Oral** | | |
| LD50 | Rat | 15000 - 22000 mg/kg |
| Triethylene glycol, monobutyl ether (CAS 143-22-6) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 5300 mg/kg |

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye damage.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test Results |
|---|---|---|---|
| Diethylene glycol (CAS 111-46-6) | | | |
| **Aquatic** | | | |
| *Acute* | | | |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | > 32000 mg/l, 96 hours |
| Diethylene glycol monobutyl ether (CAS 112-34-5) | | | |
| **Aquatic** | | | |
| *Acute* | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 1300 mg/l, 96 hours |

| Components | | Species | Test Results |
|---|---|---|---|
| Triethylene glycol (CAS 112-27-6) | | | |
| **Aquatic** | | | |
| *Acute* | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 48.9 - 56 mg/l, 48 hours |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | > 10000 mg/l, 96 hours |

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| Diethylene glycol | -1.47 |
| Diethylene glycol monobutyl ether | 0.56 |
| Triethylene glycol | -1.98 |
| Triethylene glycol, monobutyl ether | 0.02 |

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

**DOT**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Toxic Substances Control Act (TSCA)** All components of the mixture on the TSCA 8(b) inventory are designated “active”.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| Diethylene glycol monobutyl ether (CAS 112-34-5) | Listed. |
| Triethylene glycol, monobutyl ether (CAS 143-22-6) | Listed. |

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Acute toxicity (any route of exposure)
Serious eye damage or eye irritation

**SARA 313 (TRI reporting)**

| Chemical name | CAS number | % by wt. |
|---|---|---|
| Diethylene glycol monobutyl ether | 112-34-5 | 1 - 20 |
| Triethylene glycol, monobutyl ether | 143-22-6 | 55 - 85 |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Diethylene glycol monobutyl ether (CAS 112-34-5)
Triethylene glycol, monobutyl ether (CAS 143-22-6)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Contains component(s) regulated under the Safe Drinking Water Act.

**US state regulations**

**California Proposition 65**

**WARNING:** This product can expose you to DIETHANOL AMINE, which is 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. For more information go to www.P65Warnings.ca.gov.

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

DIETHANOL AMINE (CAS 111-42-2) Listed: June 22, 2012

**California Proposition 65 - CRT: Listed date/Developmental toxin**

Ethylene glycol monomethyl ether (CAS 109-86-4) Listed: January 1, 1989

**California Proposition 65 - CRT: Listed date/Male reproductive toxin**

Ethylene glycol monomethyl ether (CAS 109-86-4) Listed: January 1, 1989

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Diethylene glycol monobutyl ether (CAS 112-34-5)
Triethylene glycol, monobutyl ether (CAS 143-22-6)

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Industrial Chemicals (AICIS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 07-30-2020

**Revision date** 03-24-2022

**Version #** 3.0

**HMIS® ratings**

Health: 3
Flammability: 0
Physical hazard: 0
Personal protection: B

**NFPA ratings**

Health: 3
Flammability: 0
Instability: 0

**NFPA ratings**


**Disclaimer**

BG Products, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information**

Product and Company Identification: Product and Company Identification
Hazard(s) identification: Prevention
Composition / Information on Ingredients: Disclosure Overrides
First-aid measures: First Aid Equipment
Accidental release measures: Personal precautions for emergency responders
Accidental release measures: Personal precautions for non-emergency personnel
Physical & Chemical Properties: Multiple Properties
Transport Information: Material Transportation Information
HazReg Data: International Inventories
GHS: Classification