Recochem Inc.
Your Partner in Formulating Solutions

210-001

Safety Data Sheet

Brake Fluid DOT 3

SECTION 1. IDENTIFICATION

Product Identifier	Brake Fluid DOT 3
Other Means of Identification	15-810, 15-811, 15-813, 15-814, 15-818, 35-810AS, 35-810CQ, 35-810PC, 35-810PRES, 35-811AS, 35-811CQ, 35-811PRES, 35-811SO, 35-811WM, 35-813AS, 35-813CQ, 35-813SO, 35-813WM, 35-814AS, 35-814CQ, 35-814PRES, 35-814SO, 35-816C, 35-818AS, 35-818CQ, 85-818, 35-811CERT, 35-814CERT, 35-818CERT
Recommended Use	Please refer to Product label.
Restrictions on Use	None known.
Manufacturer/Supplier Identifier	Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory Department, 905-878-5544, www.recochem.com
Emergency Phone No.	CANUTEC, 613-996-6666, 24 Hours
SDS No.	1515
Date of Preparation	May 04, 2017

SECTION 2. HAZARD IDENTIFICATION

Classification

Specific target organ toxicity (repeated exposure) - Category 2

Label Elements

Signal Word:
Warning

Our P/N:
BF350
BF1
BF4
BF20.

Hazard Statement(s):

H373 May cause damage to organs (blood, kidneys, liver, respiratory system) through prolonged or repeated exposure.

Precautionary Statement(s):

Prevention:

P260 Do not breathe fume, mist, vapours, spray.

Response:

P314 Get medical advice or attention if you feel unwell.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:
Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Triethylene glycol butyl ether	143-22-6	10-30		
Poly(oxy-1,2-ethanediyl), alpha-butyl- omega -hydroxy-	9004-77-7	10-30		
Diethylene glycol	111-46-6	1-5		
Trisodium phosphate	7601-54-9	1-5		
Diisopropanolamine	110-97-4	1-5		
Sodium hydroxide	1310-73-2	0.5-1.5		
Diethylene glycol monomethyl ether	111-77-3	0.5-1.5		

Notes

Use of Generic SDS:
If the concentration or actual concentration range of an ingredient of a particular hazardous product in the series is different from the concentration or actual concentration range disclosed for the rest of the series, either the concentration or the actual concentration range must be indicated beside that ingredient under item 3 (Composition/Information on ingredients) of the SDS. Furthermore, if any other specific information element(s) (such as flash point, numerical measure of toxicity, etc.) for a particular hazardous product in the series differs from that of the other products in the series (without affecting the classification), the information element relevant to that hazardous product must be disclosed on the SDS with an indication to which hazardous product each relates.

Source: Health Canada - Technical Guidance on the Requirements of the Hazardous Products Act and the Hazardous Products Regulations WHMIS 2015 Supplier Requirements - pg 117

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse with lukewarm, gently flowing water for 5 minutes.

Eye Contact

Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Does not burn.

In a fire, the following hazardous materials may be generated: toxic chemicals.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

No special precautions are necessary. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Other Information

Report spills to local health, safety and environmental authorities, as required.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10)

and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	**TWA**	**STEL**	**TWA**	**Ceiling**	**8-hr TWA**	**TWA**
Triethylene glycol butyl ether	Not established	Not established	Not established	Not established		
Diethylene glycol					10 mg/m3	
Trisodium phosphate	Not established	5 mg/m3	Not established	Not established		
Diisopropanolamine	Not established	Not established	Not established	Not established		
Sodium hydroxide	Not established	2 mg/m3	2 mg/m3	2 mg/m3		

Appropriate Engineering Controls

General ventilation is usually adequate.

Individual Protection Measures

Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

Skin Protection

Not required, if used as directed.

Respiratory Protection

Not normally required if product is used as directed. For non-routine or emergency situations: wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Light amber. Particle Size: Not applicable
Odour	Ethereal
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	Not available (melting); -51 °C (-60 °F) (freezing)
Initial Boiling Point/Range	260 °C (500 °F)
Flash Point	138 °C (280 °F) (closed cup)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	6
Relative Density (water = 1)	1.04 (estimated) at 20 °C
Solubility	Not available in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available

Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)

Other Information

Physical State	Liquid
Molecular Formula	Not applicable
Molecular Weight	Not applicable
Bulk Density	Not available
Surface Tension	Not available
Critical Temperature	Not available
Electrical Conductivity	Not available
Vapour Pressure at 50 deg C	Not available
Saturated Vapour Concentration	Not available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Water, moisture or humidity. Do not allow product to become dry. Prolonged exposure to high temperatures.

Incompatible Materials

Strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; very toxic, flammable aldehydes; corrosive, oxidizing nitrogen oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Triethylene glycol butyl ether	Not available	5300 mg/kg (male rat)	3.54 ml/kg bw (rabbit)
Poly(oxy-1,2-ethanediyl), alpha-butyl- omega -hydroxy-	Not available	Not available	Not available
Diethylene glycol	4600 mg/m3 (rat) (30-minute exposure)	12565 mg/kg (rat)	11890 mg/kg (rabbit)
Trisodium phosphate	Not available	4100 mg/kg (rat)	> 7940 mg/kg (rabbit)
Diisopropanolamine	Not available	4765 mg/kg (rat)	8000 mg/kg (rabbit)
Sodium hydroxide	Not available	Not available	1350 mg/kg (rabbit)
Diethylene glycol monomethyl ether	> 50000 mg/m3 (rat) (4-hour exposure)	6830 mg/kg (rat)	9404 mg/kg (rabbit)

LC50: Not applicable.

ATE: 19032.81 mg/kg (Rat)

ATE: 43941.28 mg/kg (Rabbit)

Skin Corrosion/Irritation

May cause mild irritation based on information for closely related chemicals.

Serious Eye Damage/Irritation

Human experience and animal tests show mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

No information was located.

Skin Absorption

No information was located.

Ingestion

May be harmful If large amounts are swallowed based on information for closely related materials. May cause If large amounts are swallowed depression of the central nervous system.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause damage to organs based on studies in people. Harmful effects on the kidneys.
May cause damage to organs based on animal studies. Harmful effects on the liver, irritation of the respiratory system.
May cause respiratory tract injury. Blood tests may show abnormal results.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Triethylene glycol butyl ether	Not Listed	Not designated	Not Listed	Not Listed
Poly(oxy-1,2-ethanediyl), alpha-butyl- omega -hydroxy-	Not Listed	Not designated	Not Listed	Not Listed
Diethylene glycol	Not Listed	Not designated	Not Listed	Not Listed
Trisodium phosphate	Not Listed	Not designated	Not Listed	Not Listed
Diisopropanolamine	Not Listed	Not designated	Not Listed	Not Listed
Sodium hydroxide	Not Listed	Not designated	Not Listed	Not Listed
Diethylene glycol monomethyl ether	Not Listed	Not designated	Not Listed	Not Listed

Reproductive Toxicity

Development of Offspring

Not known to harm the unborn child.

Sexual Function and Fertility

May cause effects on sexual function and/or fertility based on limited evidence.

Effects on or via Lactation

Not known to cause effects on or via lactation.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS.
This section is not required by OSHA HCS 2012.

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
Triethylene glycol butyl ether	2400 mg/L (Pimephales promelas (fathead minnow); 96-hour; static)			
Poly(oxy-1,2-ethanediyl), alpha-butyl- omega -hydroxy-	Not available			
Diethylene glycol	75200 mg/L (Pimephales promelas (fathead minnow); 96-hour; fresh water)	10000 mg/L (Daphnia magna (water flea); 48-hour)		Not available
Trisodium phosphate	88300 ug/L (Western Mosquito Fish; 24 hr; fresh water; static)	Not available		
Diisopropanolamine	> 1000-2200 mg/L (Zebra Fish; 96-hour; static)	Not available		
Sodium hydroxide	125 mg/L (Western Mosquito Fish; 96-hour)	40.38 mg/L (Daphnia magna (water flea); 48-hour)		
Diethylene glycol monomethyl ether	5741 mg/L (Pimephales promelas (fathead minnow); 96-hour)	1191 mg/L (Daphnia magna (water flea); 48-hour)		

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
Triethylene glycol butyl ether	Not available		Not available	
Poly(oxy-1,2-ethanediyl), alpha-butyl- omega -hydroxy-	Not available		Not available	
Diethylene glycol	Not available		Not available	Not available
Trisodium phosphate	Not available		Not available	
Diisopropanolamine	Not available		Not available	
Sodium hydroxide	Not available		Not available	
Diethylene glycol monomethyl ether	Not available		Not available	

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Environmental Hazards	Not applicable
Special Precautions	Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Proof of Dangerous Goods Classification

Date of Classification	March 13, 2017
Technical Name	not Regulated
Classification	not Regulated

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Custom Regulatory 1

Consumer Product Safety Improvement Act of 2008 General Conformity Certification
The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

SECTION 16. OTHER INFORMATION

SDS Prepared By	Compliance and Regulatory Department
Phone No.	905-878-5544
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
Additional Information	We are committed to uphold the Industry Consumer Ingredient Communication Voluntary Initiative. Please send us your request by visiting our website at www.recochem.com. Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without

respect to order of predominance.

Disclaimer

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