

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

Product Form: Mixture

Product Name: DOT 3 Brake Fluid

1.2. Intended Use of the Product No additional information available

1.3. Name, Address, and Telephone of the Responsible Party

#### Company

Third Coast Terminals  
 1871 Mykawa  
 Pearland TX. 77581  
 T 281-412-0275

### 1.4. Emergency Telephone Number

Emergency Number : +1-800-424-9300  
 CHEMTREC – TOLL FREE 24 HOUR EMERGENCY TELEPHONE NUMBER

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Eye Dam. 1 H318  
 STOT RE 2 H373  
 Full text of H-phrases: see section 16

### 2.2. Label Elements

#### GHS-US Labeling

#### Hazard Pictograms (GHS-US)



#### Signal Word (GHS-US)

: Danger

#### Hazard Statements (GHS-US)

: H318 - Causes serious eye damage.  
 H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

#### Precautionary Statements (GHS-US)

: P260 - Do not breathe vapors, mist, and spray.  
 P280 - Wear eye protection, protective clothing, and protective gloves.  
 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, a doctor.  
 P314 - Get medical advice/attention if you feel unwell.  
 P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US)

No additional information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Triethylene glycol monobutyl ether	(CAS No) 143-22-6	23 - 35	Eye Dam. 1, H318
Diethylene glycol	(CAS No) 111-46-6	10 - 20	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Triethylene glycol monoethyl ether	(CAS No) 112-50-5	8 - 20	Not classified
3,6,9,12-Tetraoxahexadecan-1-ol	(CAS No) 1559-34-8	9 - 14	Eye Irrit. 2A, H319

# DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules and Regulations

Triethylene glycol monomethyl ether	(CAS No) 112-35-6	3 - 10	Not classified
Tetraethylene glycol	(CAS No) 112-60-7	6 - 10	Not classified
Diethylene glycol monobutyl ether	(CAS No) 112-34-5	1 - 8	Flam. Liq. 4, H227 Eye Irrit. 2A, H319
3,6,9,12,15,18-Hexaoxaicosane	(CAS No) 23601-39-0	2 - 5	Not classified
Polyethylene glycol methyl ether	(CAS No) 9004-74-4	<= 4	Not classified
Diethylene glycol monoethyl ether	(CAS No) 111-90-0	<= 2	Flam. Liq. 4, H227

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes serious eye damage. There are potential chronic health effects to consider.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** May cause gastrointestinal irritation.

**Chronic Symptoms:** May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Alcohol-resistant foam. dry chemical powder. Carbon dioxide. Water spray, fog.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but will burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes or vapors from fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other Information:** Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Keep away from open flames, hot surfaces and sources of ignition. No smoking.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

# DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Do not take up in combustible material such as: saw dust or cellulosic material. Absorb and/or contain spill with inert material, then place in suitable container. Contact competent authorities after a spill.

## 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection. Concerning disposal/elimination after cleaning, see item 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

**Precautions for Safe Handling:** Avoid breathing vapors, mist, and spray.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

### 7.3. Specific End Use(s)

No additional information available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Diethylene glycol monobutyl ether (112-34-5)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm (inhalable fraction and vapor)

### 8.2. Exposure Controls

#### Appropriate Engineering Controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

#### Personal Protective Equipment

: Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



#### Materials for Protective Clothing

: Chemically resistant materials and fabrics.

#### Hand Protection

: Wear chemically resistant protective gloves.

#### Eye Protection

: Chemical safety goggles.

#### Skin and Body Protection

: Wear suitable protective clothing.

#### Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

#### Environmental Exposure Controls

: Avoid release to the environment.

#### Consumer Exposure Controls

: Do not eat, drink or smoke during use.

#### Other Information

: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

#### Physical State

: Liquid

#### Appearance

: Slight yellow to yellow

#### Odor

: Mild odor

#### Odor Threshold

: No data available

#### pH

: 10.6 50/50 (50% ETOH solvent)

#### Evaporation Rate

: No data available

#### Melting Point

: No data available

#### Freezing Point

: -50 °C (-58 °F)

# DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules and Regulations

Boiling Point	: 232 °C (449.60 °F) (at 760 mm Hg)
Flash Point	: 121 °C (249.8 °F) (PMCC)
Auto-ignition Temperature	: 310 °C (590 °F)
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: 1.034
Solubility	: Water: Soluble
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: 1225 cSt at -40 °C (-40 °F); 2.0 cSt at 100 °C (212 °F)

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under normal ambient conditions.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates: Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Not classified

<b>Triethylene glycol monobutyl ether (143-22-6)</b>	
LD50 Oral Rat	5300 mg/kg
LD50 Dermal Rabbit	3480 mg/kg
<b>Diethylene glycol (111-46-6)</b>	
LD50 Oral Rat	1120 mg/kg
LD50 Dermal Rabbit	11890 mg/kg
<b>3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)</b>	
LD50 Oral Rat	5175 mg/kg
LD50 Dermal Rat	> 4000 mg/kg
<b>Tetraethylene glycol (112-60-7)</b>	
LD50 Dermal Rabbit	> 20 g/kg
<b>Diethylene glycol monobutyl ether (112-34-5)</b>	
LD50 Oral Rat	3384 mg/kg
LD50 Dermal Rabbit	2700 mg/kg
<b>Polyethylene glycol methylether (9004-74-4)</b>	
LD50 Oral Rat	22 ml/kg
LD50 Dermal Rabbit	> 20 ml/kg
<b>Diethylene glycol monoethyl ether (111-90-0)</b>	
LD50 Oral Rat	6031 mg/kg
LC50 Inhalation Rat	> 5240 mg/m <sup>3</sup> (Exposure time: 4 h)

**Skin Corrosion/Irritation:** Not classified **pH:** 10.6 50/50 (50% ETOH solvent)

**Serious Eye Damage/Irritation:** Causes serious eye damage. **pH:** 10.6 50/50 (50% ETOH solvent)

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** May cause damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:** Not classified

# DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules and Regulations

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** May cause gastrointestinal irritation.

**Chronic Symptoms:** Causes damage to organs through prolonged or repeated exposure.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

<b>Triethylene glycol monobutyl ether (143-22-6)</b>	
LC50 Fish 1	2400 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	2400 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
<b>Triethylene glycol monomethyl ether (112-35-6)</b>	
LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
<b>Diethylene glycol (111-46-6)</b>	
LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)</b>	
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>Tetraethylene glycol (112-60-7)</b>	
LC50 Fish 1	> 1000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>Diethylene glycol monobutyl ether (112-34-5)</b>	
LC50 Fish 1	1300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>Diethylene glycol monoethyl ether (111-90-0)</b>	
LC50 Fish 1	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	3940 - 4670 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	19100 - 23900 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])

### 12.2. Persistence and Degradability

<b>DOT 3 Brake Fluid</b>	
Persistence and Degradability	Not established.

### 12.3. Bioaccumulative Potential

<b>DOT 3 Brake Fluid</b>	
Bioaccumulative Potential	Not established.
<b>Triethylene glycol monobutyl ether (143-22-6)</b>	
BCF fish 1	(no significant bioaccumulation)
Log Pow	0.51 (at 25 °C)
<b>Triethylene glycol monomethyl ether (112-35-6)</b>	
Log Pow	1.13 (at 25 °C)
<b>Diethylene glycol (111-46-6)</b>	
BCF fish 1	100 - 180
Log Pow	-1.98 (at 25 °C)
<b>3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)</b>	
BCF fish 1	(no significant bioaccumulation)
<b>Tetraethylene glycol (112-60-7)</b>	
BCF fish 1	(no bioconcentration expected)
<b>Diethylene glycol monobutyl ether (112-34-5)</b>	
BCF fish 1	(no bioconcentration expected)
<b>Diethylene glycol monoethyl ether (111-90-0)</b>	
Log Pow	-0.8

# DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules and Regulations

**12.4. Mobility in Soil** No additional information available

**12.5. Other Adverse Effects**

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

**Sewage Disposal Recommendations:** Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Additional Information:** Handle empty containers with care because residual vapors are flammable.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

**15.1 US Federal Regulations**

DOT 3 Brake Fluid	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard
<b>Triethylene glycol monobutyl ether (143-22-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
<b>Triethylene glycol monomethyl ether (112-35-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
<b>Diethylene glycol (111-46-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.
<b>3,6,9,12-Tetraoxahexadecan-1-ol (1559-34-8)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Tetraethylene glycol (112-60-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Triethylene glycol monoethyl ether (112-50-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
<b>3,6,9,12,15,18-Hexaoxaicosane (23601-39-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	S - S - indicates a substance that is identified in a proposed or final Significant New Uses Rule.
<b>Diethylene glycol monobutyl ether (112-34-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

# DOT 3 Brake Fluid

Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules and Regulations

<b>Polyethylene glycol methylether (9004-74-4)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory
<b>Diethylene glycol monoethyl ether (111-90-0)</b>
Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 15.2 US State Regulations

<b>Diethylene glycol (111-46-6)</b>
U.S. - Pennsylvania - RTK (Right to Know) List

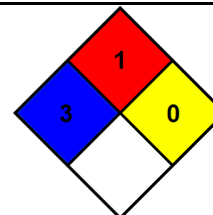
## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 05/18/2015  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 4	Flammable liquids Category 4
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
H227	Combustible liquid
H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

**NFPA Health Hazard** : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.  
**NFPA Fire Hazard** : 1 - Must be preheated before ignition can occur.  
**NFPA Reactivity** : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



**HMIS III Rating**  
**Health** : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given  
**Flammability** : 1 Slight Hazard  
**Physical** : 0 Minimal Hazard

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)