



Material Safety Data Sheet

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

Product Name: Lucas DOT 3 Brake Fluid

Product Description: Polyethylene glycol ethers and Additives

Product Number: 10825, 10826

Intended Use: Brake and Clutch Systems

COMPANY IDENTIFICATION

Supplier: Lucas Oil Products Inc.

302 North Sheridan St.

Corona, ca. 92880 USA

Only Representative: H2 Compliance

Rubicon Building, CIT-Campus

Bishopstown, Cork, Ireland

Contact: Bart O'Keefe (bart.okeeffe@h2compliance.com)

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Telephone #: +353-21-4209048

UUID: ECHA-8d7a53b7-a805-4e93-8958-2b88e9cd3092

SECTION 2

COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	EC #	Concentration
Triethylene glycol monobutyl ether	143-22-26	205-592-6	<2
Triethylene glycol monomethyl ether	112-35-6	203-962-1	<27
Polyethylene glycol methy ether	9004-74-4	N/A	<17
Tetraethylene glycol	112-60-7	203-989-9	<4
Tetraethylene glycol monobutyl ether	1559-34-8	216-322-1	<2
Diethylene glycol	111-46-6	203-872-2	<3
Diethylene glycol monobutyl ether	112-34-5	203-961-6	<1

SECTION 3

HAZARDS IDENTIFICATION

This material is not considered to be hazardous according to regulatory guidelines.

POTENTIAL HEALTH EFFECTS

Low order of toxicity. Excessive exposure may result in eye, skin, or respiratory irritation. **WARNING:** Causes moderate to severe eye irritation.

NFPA Hazard ID:	Health: 1	Flammability: 1	Reactivity: 0
HMIS Hazard ID:	Health: 2	Flammability: 1	Reactivity: 0

SECTION 4

FIRST AID MEASURES

INHALATION

Remove exposed person to fresh air. If respiratory symptoms develop seek medical attention.

SKIN CONTACT

Wash skin with mild soap and water for at 15 minutes. Remove contaminated clothing. Contact medical attention if irritation persists.

EYE CONTACT

Flush thoroughly with water for at least 15 minutes. If irritation occurs, seek medical attention.

INGESTION

If a large quantity (several ounces) has been swallowed, and if patient is fully conscious, give two glasses of water. Induce vomiting in the presence of experienced medical an/or first-aid personnel.

SECTION 5

FIRE FIGHTING MEASURES

FIRE CLASSIFICATION: Class IIIB combustible liquid

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Extinguish fires with water spray or apply alcohol type all-purpose foam for large fires. For small fires use carbon dioxide or dry chemical media.

SPECIAL FIRE FIGHTING PROCEDURES: Do not direct a solid stream of water or foam into burning pools. This may cause frothing and increase fire intensity.

Inappropriate Extinguishing Media: None

FLAMMABILITY PROPERTIES

Flash Point-PMCC: >250°F

SECTION 6

ACCIDENTAL RELEASE MEASURES

SPILL MANAGEMENT

Land Spill: Stop source of ignition. Prevent additional discharge of material, if possible to do so safely. Contain and/or clean up with sand or earth on land.

ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, drains or sewers.

SECTION 7**HANDLING AND STORAGE****HANDLING**

Keep container tightly closed. Eating, drinking and smoking should be prohibited in areas where this material is handled. Wash hands and face before eating.

STORAGE

Store in a cool well ventilated place, away from heat and/or incompatible materials. Note: Do not use aluminum, copper, galvanized iron, galvanized steel, Viton, neoprene, nitrile or natural rubber with glycol ethers.

SECTION 8**EXPOSURE CONTROLS / PERSONAL PROTECTION****ENGINEERING CONTROLS:**

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection:

No special requirements under ordinary conditions of use and with adequate ventilation.

Hand Protection:

Wear protective gloves (polyvinyl chloride coated).

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection:

No skin protection is ordinarily required under normal conditions of use.

SECTION 9**PHYSICAL AND CHEMICAL PROPERTIES**

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Liquid

Color: Pale Yellow

Odor: Mild Ether

Density: 8.99 pounds/gallon

Flash Point-PMCC: 250°F

Autoignition Temperature: 590°F

Boiling Point: >450°F

pH: 8.6

Solubility in Water: Soluble in water

Viscosity cSt at 100°C: Greater than or equal to: 2.0

Equilibrium Reflux Boiling Point: 478°F

Wet Equilibrium Reflux Boiling Point: 339°F

SECTION 10

STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions. Will not polymerize.

CONDITIONS TO AVOID: Excessive heat.

MATERIALS TO AVOID: Acetaldehyde, acids, chlorine, ethylene oxide, isocyanates, strong oxidizing agents, calcium hypochlorite, zinc and mineral oil.

HAZARDOUS DECOMPOSITION PRODUCTS: May form carbon dioxide and carbon monoxide.

SECTION 11

TOXICOLOGICAL INFORMATION

Component	CAS #	LD 50	Carcinogenicity
Triethylene glycol monobutyl ether	143-22-26	Oral Rat: 5,300 mg/kg Skin Rabbit: 3,540 mg/kg	No
Triethylene glycol monomethyl ether	112-35-6	Oral Rat: 11.8 g/kg Skin Rabbit: 7.4 g/kg	No
Polyethylene glycol methyl ether	9004-74-4	Oral Rat: 22-40 g/kg Skin Rabbit: 20 g/kg	No
Tetraethylene glycol	112-60-7	Oral Rat: 29 g/kg Skin Rabbit: 20 g/kg	No
Tetraethylene glycol monobutyl ether	1559-34-8	No Data	No
Diethylene glycol	111-46-6	Oral Rat: 12,600 mg/kg Oral Mouse: 23,700 mg/kg Skin Rabbit: 11,900 mg/kg	No
Diethylene glycol monobutyl ether	112-34-5	Oral Rat: 5,080 mg/kg Oral Mouse: 2,406 mg/kg Skin Rabbit: 2,764 mg/kg	No

IMMEDIATE HEALTH EFFECTS

Eye Irritation: Expected to be a mild to moderate eye irritation hazard.

Skin Irritation: Expected to be a mild skin irritation hazard.

SECTION 12

ECOLOGICAL INFORMATION

This material is not expected to be readily biodegradable. No data on ecotoxicity

SECTION 13**DISPOSAL CONSIDERATIONS**

Disposal must be in accordance with current applicable regional, national and local laws and regulations

SECTION 14**TRANSPORT INFORMATION****U.S. D.O.T.**

DOT Shipping Name: Brake fluid, other than petroleum

DOT Hazard Class: Not Regulated

DOT Identification Number: Not Regulated

DOT Packing Group: Not Regulated

IMO/IMDG Shipping Name: Brake fluid, other than petroleum

IMO/IMDG Hazard Class: Not Regulated

IMO/IMDG Identification Number: Not Regulated

IMO/IMDG Packing Group: Not Regulated

SECTION 15**REGULATORY INFORMATION**

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this material is not classified as hazardous.

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Triethylene glycol monobutyl ether	143-22-26	205-592-6	<2
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EPCRA 311/312 CATEGORIES:

Immediate (Acute) Health Effects: Yes

Delayed (Chronic) Health Effects: Yes

Fire Hazard: Yes

Sudden Release of Pressure Hazard: No

Reactivity Hazard: No

SARA 302:	None
SARA 313:	None
TSCA:	All components of this product are on the TSCA Inventory
EINECS:	All components of this product are on the EINECS inventory
Pennsylvania RTK:	None
Massachusetts RTK:	None
California Prop 65:	None

SECTION 16	OTHER INFORMATION
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