

MATERIAL SAFETY DATA SHEET

MSDS No.: 15012, 15032, 15000, 15005, 15055

DATE: July 14, 2005

Star brite  
4041 S.W. 47 Avenue  
Ft. Lauderdale, FL 33314

SECTION 1: IDENTIFICATION

<b>PRODUCT NAME:</b>	Star brite Super Heavy Duty Brake Fluid DOT 3	<b>HMIS (USA)</b>	
<b>Manufacturer:</b>	Star brite	Health Hazard *	2
<b>Address:</b>	4041 S. W. 47 Avenue	Fire Hazard	1
	Ft. Lauderdale, FL 33314	Reactivity	0

**EMERGENCY TELEPHONE:** (800) 424-9300 or (703) 527-3887 CHEMTREC

**INFORMATION:** (954) 587-6280

**CHEMICAL NAME:** DOT 3 Brake Fluid

**CAS NUMBER:** Mixture

**Synonyms:** Proprietary Mixture of Glycol Ethers, Polyglycols, Glycols, Oxidation Inhibitors and Corrosion Inhibitors

**CHEMICAL FAMILY:** Brake Fluids

**CHEMICAL FORMULA:** Mixture

SECTION 2: COMPOSITION

<b>CAS NUMBER / NAME</b>	
71243-41-9	Poly (oxy-1, 2- ethanediyl) , .alpha.-hydro.-omega.-hydroxy-, ester with boric acid (H3B03), methyl ether

**EXPOSURE LIMITS**

PEL: Not Established	ND
TLV: Not Established	43-47

**COMMON NAMES:**  
Polyethylene glycol monomethyl borate ester

Listed on (List Legend Below):  
00 19 23 36 50  
\*1 = OSHA 2 = IARC 3 = NTP 4 = Others N/L = Not Listed See Section 11 for more information

9004-74-4	Poly (oxy-1,2-ethanediyl) , . alpha.-methyl-.omega.-hydroxy-
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**EXPOSURE LIMITS**

PEL: Not Established	ND
TLV: Not Established	10-18

**COMMONS NAMES:**  
POLYETHYLENE GLYCOL MONOMETHYL ETHER

Listed On (List Legend Below):  
00 19 22 23 50

143-22-6	Ethanol, 2-[2-(2-butoxyethoxy) ethoxy]-
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**EXPOSURE LIMITS**

PEL: Not Established	ND
TLV: Not Established	2-4

**COMMON NAMES:**  
TRIETHYLENE GLYCOL MONOBUTYL ETHER

Listed on (List Legend Below):  
00 02 19 22 23 25 50 51

**SECTION 2: COMPOSITION cont'd**

112-27-6 Ethanol, 2, 2' - [1 ,2-ethanediylbis (oxy) ] bis-

**EXPOSURE LIMITS**

PEL: Not Established

ND

TLV: Not Established

0-2

**COMMON NAMES:**

TRIETHYLENE GLYCOL

Listed On (List Legend Below):

00 12 22 23 50 51

**SECTION 3: HAZARD IDENTIFICATION****Emergency Overview**

This material is NOT HAZARDOUS by OSHA Hazard Communication definition.

**Signal Word:**

WARNING!

**Physical and Health****Hazards:**

May cause irritation by all routes of exposure.

**Physical State:**

Liquid.

**Color:**

Amber.

**Odor:**

Mild, aromatic.

**Potential Health Effects****Routes of Exposure:**

Ingestion, Skin Contact, Eye Contact, Inhalation

**Signs and Symptoms****of Acute Exposure:**

SEE SUMMARY BELOW

**\* DOT 3 Brake Fluid**

This product may cause eye, skin and respiratory tract irritation. High concentrations may cause central nervous system (CNS) depression. Ingestion would likely cause gastrointestinal tract irritation.

**Skin Contact:**

May be irritating to the skin. May be absorbed through the skin and produce toxic effects such as CNS depression.

**Inhalation:**

Vapors or mists from this material can irritate the nose, throat and lungs, and cause signs and symptoms of central nervous system (CNS) depression, depending on the concentration and duration of exposure.

**Eye Contact:**

May be irritating to the eyes.

**Ingestion:**

May cause irritation of the gastrointestinal tract:

**Chronic Health****Effects Summary:**

SEE SUMMARY BELOW

**\* DOT 3 Brake Fluid**

Prolonged or repeated exposure may result in CNS and gastrointestinal system disturbance, and possible adverse reproductive effects.

**Conditions****Aggravated by****Exposure:**

Any pre-existing conditions affecting skin, eyes, central nervous system or reproductive system.

**SECTION 4. FIRST AID MEASURES**

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 3 of this MSDS.

**Inhalation:**

**Eye Contact:** Wash eyes with clean low-pressure water. If irritation persists, seek medical advice.

**Skin Contact:** Immediately flush affected area with plenty of water while removing contaminated clothing. Wash contaminated clothing before reuse. **IF IRRITATION OCCURS, GET MEDICAL ATTENTION.**

**Ingestion:** Have conscious person drink several glasses of water or milk. **INDUCE VOMITING** by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat.

**SECTION 5: FIRE FIGHTING MEASURES NFPA: Health 1; Fire 1; Reactivity 0; Other****Flammability**

**Classification:** OSHA/NFPA Class IIIB combustible liquid.

**Flash Point / Method:** 121° C (250° F)  
PMCC

**Auto-Ignition**

**Temperature:** (590° F)

**Flammable Limits:**

**LOWER:** Not determined

**UPPER:** Not determined

**Hazardous**

**Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>) gives off irritating and /or toxic gases in a fire.

**Special conditions to**

**Avoid:** Keep away from sparks, heat and open flame.

**Extinguishing Media:**

SMALL FIRE: Use dry chemical, CO<sub>2</sub>, water spray or regular foam, LARGE FIRE: Use water spray, water fog or foam. **DO NOT** use straight streams.

**Fire Fighting****Instructions:**

Protective Equipment/Clothing: Wear a NIOSH approved positive pressure self-contained breathing apparatus and firefighter turnout gear.

Instruction: Fight from a maximum distance or use unmanned hose holders or monitor nozzles. Containers can build up pressure if exposed to heat; cool with flooding quantities of water until well after the fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of vessel. **ALWAYS** stay away from the ends of tanks. Always stay away from the ends of tanks.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Release Response:** Contain spill with dike to prevent entry into sewers or waterways. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spills, soak up with absorbent material and place in properly labeled containers for disposal. All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

**Reportable Quantities:** See Section 15: Regulatory information.

**SECTION 7: HANDLING AND STORAGE**

**Handling:** Containers, even those that have been emptied, will retain product residue and vapor and Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin and clothing. Do not enter storage area unless adequately ventilated. Metal containers involved in the transfer of this material should be grounded and bonded.

**Storage:** Store containers in a cool, dry, ventilated, fire resistant area away from sources of ignition and incompatible materials. Keep container tightly closed and properly labeled.

**SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep

**Personal Protection**

**Inhalation:** A respiratory protection program that meets OSHA 's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use.

**Skin:** Wear chemical resistant gloves such as rubber, neoprene or vinyl. Appropriate protective clothing should be worn to prevent skin contact.

**Eyes:** Wear safety glasses. Chemical goggles should be worn if there is risk of exposure.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Boiling Point/Range:** 232 ° C (450 ° F)                      **pH:** Not applicable.

**Vapor Pressure:** Not determined.                      **Viscosity:** Not determined.

**Specific Gravity:** Solid/Liquid: 1.05 (water=1)                      **Water Solubility:** Soluble in water.

**Vapor:** Not Determined.

**Octanol/Water Partition**                      **Melting/Freezing Point:** -50 ° C (-58 ° F)

**Evaporation Rate:** Not determined.                      **Coefficient in Kow:** Specific value not available.

**SECTION 10: STABILITY AND REACTIVITY**

- Chemical Stability:** Stable.
- Conditions to Avoid:** Avoid contact with strong oxidizers and all sources of ignition.
- Incompatibility with:** Oxidizers.
- Hazardous Products of Decomposition:** Carbon Monoxide and Carbon dioxide. Toxic vapors are generated when heated.
- Hazardous Polymerization:** Will not occur.
- Reactions with Air and Water:** Does not react with air or water.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**Summary:** This substance appears to be of low toxicity, except for possible mild irritant effects in humans. A high dose may produce central nervous system depression. but there are no reports of adverse health effects from occupational exposure.

**Component**

\* DOT 3 Brake Fluid

**LD50 (ORAL):** Rat 2000 MG/KG

**ACUTE ORAL EFFECTS:** Major effects of acute exposure include, but are not limited to: headaches nausea and vomiting loss of coordination and/or blurred vision

**ACUTE INHALATION EFFECTS:** Due to low vapor pressure, significant exposure by inhalation appears unlikely. However, exposure to high concentrations of mist, aerosol, or vapors at elevated temperatures may cause irritation, coughing and discomfort in the nose, throat and chest.

**REPRODUCTIVE/DEVELOPMENTAL EFFECTS:** Some minor components have been shown not to interfere with reproduction, although slightly toxic to the offspring or decreased pup weights were observed in the animal studies.

**SECTION 12: ECOLOGICAL INFORMATION**

- Ecotoxicity:** Low to moderate toxicity is expected to aquatic and terrestrial organisms.
- Environmental Fate:** There is limited information available on environmental fate and effects. Due caution should be exercised to avoid the accidental release of this material to aquatic and terrestrial environments.
- Bioaccumulation:** This mixture is not expected to appreciably bioconcentrate.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Disposal of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts. The materials resulting from clean-up operations may be hazardous wastes and therefore, subject to specific regulations.

**SECTION 14: TRANSPORT INFORMATION**

Call for information

**SECTION 15: REGULATORY INFORMATION**

**TSCA:** All components of this product are listed on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) Export Notification rule, they will be listed below.

TSCA 12(b) Component

Listed under TSCA Section

**SARA-Section 313**

**Emissions Reporting:** This product contains no SARA 313 Atoxic chemicals@ above threshold levels.

Component

Reportable Threshold

**SARA-Section 311/312:** This product is classified into the following hazard categories:

Immediate Health                  Delayed Hazard.

**CERCLA Hazardous Substances and their**

**Reportable Quantities:**

Component

Reportable Quantity

**California Prop. 65:**

Proposition 65 requires manufacturers or distributors of consumer products into the State of California to provide a warning statement if the product contains ingredients for which the State has found to cause cancer, birth defects or other reproductive harm. If this product contains an ingredient listed by the State of California to cause cancer or reproductive toxicity it will be listed below.

**SECTION 16. OTHER INFORMATION**

**Disclaimer of Liability:** The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.