

**MATERIAL SAFETY DATA SHEET**

REVISION NO

REVISION DATE: 04.30.00

**SECTION I – SOURCE AND NOMENCLATURE**

**Manufacturer's Name**

LuBoron, LLC

**Address**

1147 River Road  
Charlottesville, VA 22901

**Chemical Family**

HYDROCARBONS/BORON

**Emergency Telephone No.**

(866) 582-6766

**Trade Name and Synonyms**

GEAR FLUID TREATMENT/GEAR LUBRICANT ADDITIVE

**Chemical Formula:** Mixture

**Chemical Name:** Mixture/Telomer & Hydrocarbon w/Boron

**SECTION II – OSHA REGULATED INGREDIENTS**

CAS Regulation No: Mixture – Product Number 4197700020.

Product and Components Entered on EPA's TSCA Inventory: NO.

<b><u>Ingredients</u></b>	<b><u>CAS No.</u></b>	<b><u>\$ by Wt.</u></b>	<b><u>OSHA PEL</u></b>	<b><u>ACGIH TLV</u></b>
Parraffinic hydrocarbons	64742-96-7	>55	NE	NE
Olefinic hydrocarbons	Various	<5	NE	NE
Aromatic hydrocarbons	Various	>27	NE	NE
Sulfur	7704-34-9	<10ppm	NE	NE
Boron & derivatives	<150,000ppm		NE	NE

**SECTION III – PHYSICAL DATA**

**Boiling Point:** 340-690F(171-366)

**Viscosity:** 96 cSt @ 104 F (40C)

**Solubility in Water:** Insoluble

**Vapor Pressure:** mmHG @ 25 C <1

**Evaporation Rate:** (Butyl Acetate =1): <3

**Stability:** Stable under normal cond.

**Vapor Density:** (Air=1): > heavier than air

**Percent Volatile by Volume:** 42

**Specific Gravity:** (H2O=1): 0.87 @ 60/60F  
(16/16C)

**Appearance/Odor**

AMBER BROWN LIQUID/MILD ODOR

**SECTION IV - FIRE AND EXPLOSION DATA**

**Flash Point (coc):** > 370F (>190C) (Estimated)

**Autoignition temperature:**

ULE – not established

**Flammable Limits (N/A):** LEL – not established  
> 500F.

**Fire Extinguishing Media**

CO 2, DRY CHEMICAL, FOAM, OR CARBON DIOXIDE

**Special Fire Fighting Procedures:** Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA – approved, self-contained breathing apparatus and other protective equipment and/or garments described in Section IX if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment. Do not spray water directly on fire – product will float and could be reignited on surface of water.

**Fire and Explosion Hazards:** Carbon and various oxides formed when burned.

[www.luboron.com](http://www.luboron.com)

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## SECTION V – HEALTH HAZARD DATA

**Recommended Exposure Limits:** Not Established

**Acute Effects of Overexposure:**

- Eyes: MAY CAUSE MILD IRRITATION WITH STINGING AND REDNESS OF THE EYES.
- Skin: MAY CAUSE SEVERE IRRITATION. REPEATED OR PROLONGED CONTACT MAY CAUSE DEFATTING OF THE SKIN, RESULTING IN DERMATITIS.
- Inhalation: MAY CAUSE IRRITATION TO NOSE, THROAT, OR LUNGS, HEADACHE, NAUSEA, DIZZINESS, NERVOUSNESS MAY OCCUR.
- Ingestion: MAY CAUSE IRRITATION TO INTESTINES, MAY CAUSE HEADACHE, NAUSEA, UNCONSCIOUSNESS. IF SWALLOWED, MAY BE ASPIRATED, RESULTING IN INGLAMMATION AND POSSIBLE FLUID ACCUMULATION IN THE LUNGS.

**Sub chronic and Chronic Effects of Overexposure:** Inhalation of vapors may cause carboxyhemoglobinemia. Chronic exposure to carbon monoxide causes fatigue, poor memory, loss of sensation in fingers, visual disturbances and insomnia. Carboxyhemoglobinemia is frequently misdiagnosed as flu.

**Other Health Effects:** No known applicable information.

**Health Hazard Categories:**

	Animal	Human		Animal	Human
Known Carcinogen	_____	_____	Toxic	_____	_____
Suspect Carcinogen	_____	_____	Mild Corrosive	_____	_____
Mutagen	_____	_____	Irritant	X	X
Teratogen	_____	_____	Target Organ Toxin	_____	_____
Allergic Sensitizer	_____	_____	Specify	_____	_____

**Emergency and First-Aid Procedures**

- Eye: FLUSH EYES WITH RUNNING WATER FOR AT LEAST 15 MINUTES.  
IF IRRITATION OR ADVERSE SYMPTOMS DEVELOP, SEEK MEDICAL ATTENTION.
- Skin: IMMEDIATELY WAS SKIN W/SOAP AND WATER FOR AT LEAST 15 MINUTES.  
IF IRRITATION OR ADVERSE SYMPTOMS DEVELOP, SEEK MEDICAL ATTENTION.
- Inhalation: REMOVE FROM EXPOSURE. IF BREATHING IS DIFFICULT, GIVE OXYGEN IF BREATHING CEASES, ADMINISTER ARTIFICIAL RESPIRATION FOLLOWED BY OXYGEN. SEEK IMMEDIATE MEDICAL ATTENTION.
- Ingestion: DO NOT INDUCE VOMITING, SEEK IMMEDIATE MEDICAL ATTENTION.

**Note to Physician:** Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

## SECTION VI – HEALTH CLASSIFICATION

This product meets the following hazard definition(s) as defined by the occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

<input checked="" type="checkbox"/> Combustible Liquid	<input type="checkbox"/> Flammable Aerosol	<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Compressed Gas	<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric
<input type="checkbox"/> Flammable Gas	<input checked="" type="checkbox"/> Health Hazard (Section V)	<input type="checkbox"/> Unstable
<input type="checkbox"/> Flammable Liquid	<input type="checkbox"/> Organic Peroxide	<input type="checkbox"/> Water Reactive
<input type="checkbox"/> Flammable Solid		

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1210.

**Additional Comments; SARA 313:** This product contains the following chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. (See SARA 313 Section B): NONE

## SECTION VII – REACTIVITY DATA

**Stability:** STABLE

**Conditions To Avoid:** NOT ESTABLISHED

**Incompatibility (Materials to Avoid):** OXYGEN AND STRONG OXIDIZING AGENTS

**Hazardous Polymerization:** WILL NOT OCCUR

**Conditions to Avoid:** NOT ESTABLISHED

**Hazardous Decomposition of Products:** CARBON AND VARIOUS HYDROCARBONS FORMED WHEN BURNED

## SECTION VIII – SPILL, LEAK, AND DISPOSAL PROCEDURES

**Precautions Required if Material is Released or Spilled:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Take up small spills with dry chemical absorbents. Large spills may be taken up with pump or vacuum and finished off with dry chemical absorbent. May require excavation of contaminated soil.

**Water Disposal (Insure Conformity with all Applicable Disposal Regulations):** Incinerate or place in permitted waste-management facility.

## SECTION IX – HANDLING AND STORAGE PRECAUTIONS

Do not get in eyes, on skin, or on clothing. Avoid breathing vapors, mist, fume, or dust. Do not swallow. May be aspirated into lungs. Wear protective equipment and/or garments described in Section IX if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use with adequate ventilation.

Keep away from heat, sparks, and flames. Store in well-ventilated area. Store in closed container. Bond and ground during transfer.

## SECTION X – PERSONAL PROTECTION INFORMATION

**Ventilation Requirements:** USE ADEQUATE VENTILATION.

### **Protective Equipment**

Eye: FOR SPLASH PROTECTION, USE CHEMICAL GOGGLES AND FACE SHIELD.

Skin: USE GLOVES RESISTANT TO THE MATERIAL BEING USED (i.e. NEOPRENE OR NITRILE RUBBER). USE PROTECTIVE GARMENTS TO PREVENT EXCESSIVE SKIN CONTACT.

Respirator: NOT GENERALLY REQUIRED UNLESS NEEDED TO PREVENT RESPIRATORY OF SPILL OR LEAK RESULTING IN UNKNOWN CONCENTRATION. USE NIOSH/MSHA – APPROVED SUPPLIED AIR RESPIRATOR.

**NOTE:** The Personal Protection Information shown above is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

## SECTION XI – PROTECTION REQUIRED FOR WORKING ON CONTAMINATED EQUIPMENT

Contact immediate supervisor for specific instructions before work is initiated. Wear protective equipment and/or garments described in Section VIII if exposure conditions warrant.

## SECTION XII – D.O.T. TRANSPORTATION

<b>Shipping Name:</b>	Gear Lube		
<b>Hazard Class:</b>	Not designated as a hazardous material by the federal D.O.T.		
<b>Hazardous Substance/RQ:</b>	NA		
<b>ID Number:</b>	NA	<b>Packing Group:</b>	NA
<b>Label:</b>	None	<b>Marking:</b>	Gear Lubricant
<b>Shipping Description:</b>	Gear Lubricant	<b>Packaging References:</b>	NA

**NOTE:** This product may be reclassified as a combustible liquid when shipped domestically by land only. If reclassified as a combustible liquid, this product is unregulated by D.O.T. when shipped in nonbulk quantities.

## SECTION XIII – RCRA CLASSIFICATION

UNADULTERATED PRODUCT AS A WASTE

Prior to disposal, consult your environmental contact to determine if TLCP (Toxicity Characteristic Leaching Procedure, EPA, Test Method 1311) is required. Reference 40 CFR Part 261.

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