

MATERIAL SAFETY DATA SHEET

Date Issued: 01/01/05

SECTION A - IDENTIFICATION & EMERGENCY INFORMATION

Manufacturer's Name: BP Lubricants USA Inc. Address: 9300 Pulaski Highway
Emergency Telephone Number: 410/574-5000 Baltimore, MD 21220
800/777-1466

PRODUCT NAME: Castrol Starting Fluid
Chemical Name: See Section B

PART NUMBER: 82883

CAS Number: See Section B

Product Appearance & Odor: Clear
Ether Odor

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health - 2 Flammability - 4 Reactivity - 1
Hazard Rating: Least-0 Slight-1 Moderate-2 High-3 Extreme-4

SECTION B - COMPONENTS & HAZARD INFORMATION

<u>COMPONENTS</u>	<u>CAS NO.</u>	<u>ACGIH TLV</u>	<u>CONCENTRATION</u>
Diethyl Ether	60-29-7	400	Approximately 30-35%
Hepthane	142-82-5	400	Less than 55-65%
Carbon Dioxide	124-38-9	5000	Less than 10%
Upper Cylinder Lub.	unknown	Not Estab	Less than 5%

DEPARTMENT OF TRANSPORTATION (DOT) - DOT IDENTIFICATION NUMBER: Engine Starting Fluid, 2.1, UN 1960. For Ocean Freight, Dangerous Goods in Limited Quantities, Class 2, Aerosols UN 1950.

SECTION C - PHYSICAL DATA (THE FOLLOWING DATA ARE APPROXIMATE OR TYPICAL VALUES.)

Boiling Range: Ether 95°F Vapor Pressure (mm Hg): Ether 537

Specific Gravity (H₂O=1): Ether .713 Vapor Density: 2.55

Evaporation Rate: (Butyl Acetate = 1) Ether 37.5 Solubility in Water: Slight

Melting Point: Ether 177 °F

SECTION D - FIRE PROTECTION INFORMATION

FLASH POINT & METHOD: -49°F
method-TCC
lights, and open flames.

AUTOIGNITION TEMPERATURE: Not Determined
HANDLING PRECAUTIONS: Keep away from ignition sources, such as heat, sparks, pilot

UNUSUAL FIRE & EXPLOSION HAZARDS:

Handle as extremely flammable liquid. Cool containers exposed to heat with water. Use air-supplied breathing equipment for enclosed areas.

CONTENTS UNDER PRESSURE.

Flammability Limits (Ether):
Lower: 1.85%Upper: 48%

SECTION E - REACTIVITY DATA

Stability: Stable Conditions to Avoid: Keep away from heat, sparks, or open flames. Do not store above 120°F.

Incompatibility (Materials to avoid): Oxidizers

Hazardous Decomposition or Byproducts: CO, CO₂ may be formed during combustion.

Hazardous polymerization: Will not occur. Conditions to Avoid: None

SECTION F - HEALTH HAZARD DATA

Routes of Entry: Inhalation: Yes Skin: Yes Ingestion: Unusual

Health Hazards (Acute and Chronic): Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

Carcinogenicity: NIP: No IARC Monograph: No OSHA Regulated: No

Signs and Symptoms of Exposure: Headache, dizziness, nausea, and loss of consciousness. Irritating to the skin and eyes.

Medical Conditions Generally Aggravated by Exposure: May cause defatting and drying of skin. May irritate mucous membranes of respiratory tract. Overexposure may cause central nervous system depression.

Emergency and First Aid Procedures: **Inhalation** - Remove to fresh air. If breathing has stopped, give artificial respiration. **Skin Contact** - Wash with soap and water, remove contaminated clothing. **Eye Contact** - Flush with water for 15 minutes. If irritation persists, call physician. **Ingestion** - Do NOT induce vomiting, call physician immediately.

SECTION G - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in case Material is released or spilled: Eliminate sources of heat or ignition and ventilate area. Apply absorbent material to spill area.

Waste Disposal Method: Absorbing material or defective containers should be disposed at RCRA approved TS & D Facility and according to federal, state, and local laws.

Precautions to be taken in handling and storing: Extremely flammable. Store and use away from all heat and ignition sources. Use adequate ventilation. Hazardous Waste Number: U117, D001.

Other Precautions: Contents under pressure. Do not store above 120F. Do not puncture or incinerate.

SECTION H - CONTROL MEASURES

Respiratory Protection (Specify type): Use NIOSH approved organic vapor respirator if ventilation is inadequate.

Ventilation: Local Exhaust: Yes Mechanical (General): If required Special: None Other: None

Protective Gloves: Neoprene, if subjected to exposure.

Eye protection: Chemical goggles or safety glasses

Other protective clothing or equipment: None

Work/Hygiene/Maintenanace Practices: Avoid breathing vapor. Avoid eye and skin exposure. Keep out of reach of children.