

## **MATERIAL SAFETY DATA SHEET**

**PRODUCT NAME:** Engine Stop-Leak - ESL/44

Manufactured by:

Justice Brothers, Inc.  
2734 East Huntington Drive  
Duarte, CA 91010

Emergency Health Information: (800) 424-9300  
Emergency Spill Information: (800) 424-9300  
CHEMTREC, U.S.A.

Hazard Ratings:

NFPA Code: Health: 2 Fire: 3 Reactivity: 0

HMIS Code: Health: 3 Fire: 3 Reactivity: 0

### **SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION**

Components:

Methanol (CAS 67-56-1) ACGIH TLV 200 ppm, STEL 250 ppm; OSHA TWA 200 ppm, STEL 250 ppm.

Methyl acetone (CAS 78-93-3) OSHA/ACGIH STEL 300 ppm, PEL 200 ppm, TLV 200 ppm.

Propylene Glycol Monomethyl Ether (CAS 107-98-2) STEL 150 ppm, PEL 100 ppm, TLV 100 ppm.

Mineral oil (CAS 8012-95-1) ACGIH TLV 5 mg/M3, STEL 10 mg/M3.

Lube oil additive D--containing a polymer (trade secret, the product is not hazardous as defined in 29 CFR 1910.1200). Recommended workplace exposure if misting occurs: 5 mg/M3.

Butyl oxitol (CAS 111-76-2) OSHA PEL/TWA 50 ppm, ACGIH TEL/TWA 25 ppm, TLV/STEL 75 ppm.

2-Pentanol, 4-Methyl (CAS 108-11-2) OSHA PEL/TWA 25 ppm, ACGIH TEL/TWA 25 ppm, TLV/STEL 40 ppm.

### **SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS**

Boiling Point: 172°F

Vapor Pressure: 80 mm Hg

Vapor Density: 2 (air = 1)

Solubility in Water: >10% in water

Specific Gravity: 0.86 @ 60°F

% Volatile: >90

Evaporation Rate: 1.4 (n-butyl acetate = 1)

Appearance and Odor: clear liquid with hydrocarbon odor.

### **SECTION 3 - FIRE AND EXPLOSION DATA**

Flash Point: 52°F (P - M)

LEL: 1%

UEL: 30%

**Extinguisher Media:** Dry chemical, carbon dioxide, Halon, foam or water spray is recommended.

**Special Fire Fighting Procedures:** This material is flammable and may be ignited by heat, flame or other sources of ignition.

#### **SECTION 4 - REACTIVITY AND STABILITY**

**Stability:** Stable under normal conditions of storage and handling.

**Materials to Avoid:** Avoid strong acids or bases; selected amines; chlorine, fluorine and other strong oxidizers.

**Hazardous Decomposition Products:** Polymerization will not occur.

Combustion may yield carbon monoxide and/or carbon dioxide. Do not breathe smoke or fumes. Wear appropriate protective equipment.

#### **SECTION 5 - HEALTH HAZARD DATA**

##### **PRIMARY ROUTES OF ENTRY:**

**Inhalation:** May cause irritation of the nose and throat, and signs of nervous system depression (e.g. headache, drowsiness), and adverse effects on vision if high concentrations are inhaled. If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get medical attention immediately.

**Eye Contact:** Direct contact with this liquid or exposure to vapors or mists may cause stinging, tearing, redness and burning sensation. In case of eye contact, flush eyes with plenty of water. Contact a physician immediately.

**Skin:** Can cause skin irritation and vision effects on prolonged or repeated contact. Wash exposed skin with soap and water. Get prompt medical attention.

**Ingestion:** This material has a high degree of toxicity. A large amount (ten or more ounces) can cause mental sluggishness, nausea and vomiting leading to severe illness, and may produce adverse effects on vision with possible blindness or death if treatment is not received. If this material is swallowed, do not induce vomiting. Contact a physician immediately.

#### **SECTION 6 - CONTROL AND PROTECTIVE MEASURES**

**Respiratory:** If airborne concentrations exceed established exposure limits (see Section 1), use a supplied air respirator. Do not use a chemical cartridge respirator.

**Gloves:** The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation.

**Eye Protection:** Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

**Other Protective Equipment:** It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

**Ventilation:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 1), additional ventilation or exhaust systems may be required.

#### **SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES**

**Steps to be taken if Material is Spilled or Released:** Flammable material. Keep all sources of ignition and heat away from spill/release. Stay upwind and isolate hazard area. Wear protective equipment as conditions warrant. Prevent spilled material from entering sewers, storm drains and natural waterways. Spilled material may be absorbed into an appropriate absorbent. Notify fire authorities and appropriate agencies.

**Waste Disposal Methods:** Dispose of product in accordance with local, county, state and federal regulations.

**Precautions to be Taken in Handling and Storage:** This material is flammable and may be ignited by heat, flame, or other sources of ignition. Vapor/air explosion hazard indoors/outdoors or in sewers. If container is not properly cooled, it may explode in the heat of a fire. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 5). Stop spill/release if it can be done without risk. Move undamaged containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

NOTE: The information contained in this Material Safety Data Sheet is furnished without warranty of any kind, expressed or implied. Information in this Data Sheet has been assembled by the manufacturer based on its own studies and on the work of others and is believed to be correct as of the date issued. However, no warranty of any kind is expressed or implied as to the accuracy, completeness, or adequacy of the information obtained herein. The Manufacturer shall not be liable, regardless of fault, to the vendee, the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, or adequacy of the information obtained herein. It is intended to assist in the normal safe usage of the product.