



# Material Safety Data Sheet

## ECO AntiWear Lubricant

All Viscosity Grades: ISO 68, 150, 220, 320, 460, 680, 1000, 1500

**MANUFACTURER:** DSI Ventures, Inc. 1320 Commerce St. Tyler, TX 75702 903-526-7577

**PRODUCT IDENTIFICATION**      **Synonyms:** Hydrocarbon lubricant  
**Chemical Family:** Mixture of vegetable oils, synthetic hydrocarbon oils and antiwear additives

### INGREDIENTS

| CAS Registry No. | % W | % V | Identification                    | Carcinogen per NTP, IARC, OSHA |
|------------------|-----|-----|-----------------------------------|--------------------------------|
| 89958-32-7       | <90 | >90 | natural ester vegetable seed oils | not listed                     |
| Proprietary      | <5  | <5  | Antiwear additive blend           | not listed                     |

### PHYSICAL DATA

|                                  |                                      |                                       |
|----------------------------------|--------------------------------------|---------------------------------------|
| <b>Boiling Point:</b> wide range | <b>Specific Gravity:</b> 0.88        | <b>Vapor Pressure:</b> not determined |
| <b>Percent Solid by wt:</b> 0    | <b>Vapor Density (air=1):</b> 18     | <b>pH:</b> 7.0                        |
| <b>Solubility in water:</b> low  | <b>Percent Volatile ( v/v ):</b> <50 | <b>Appearance:</b> oily liquid        |

### FIRE AND EXPLOSION DATA

**ASTM D-92 Flash/ Fire points:** 260 C minimum

**Recommended fire extinguishing medium:** Vapors may be heavier than air and travel along the ground to a distant ignition source and flash back. Containers may rupture upon heating. Use Dry chemical or CO<sub>2</sub> foam. Use precautions as with any fire involving petroleum-based materials. Firefighters should wear apparatus with full face mask and full protective equipment.

### REACTIVITY DATA

ECO Highly Biodegradable Lubricant Products are stable under normal conditions of use. Products of complete combustion are nitrous oxides, carbon oxide and water.

### HEALTH HAZARD DATA

**Routes of Exposure:**

**ORAL:** Ingestion may cause gastrointestinal distress. Symptoms may include nausea, vomiting and diarrhea.

**SKIN:** Repeated or prolonged contact may result in localized irritation of the skin. May cause allergic reactions in some individuals.

**EYES:** Slightly irritating. Avoid contact.

**INHALATION:** Inhalation of oil mist may cause respiratory irritation. Prolonged exposure may lead to respiratory problems.

**SPECIAL TOXIC EFFECTS:** None

## FIRST AID

**INGESTION:** Do not induce vomiting. Get immediate medical attention.

**SKIN CONTACT:** Remove contaminated clothing. Wash area of contact thoroughly with soap and water. If irritation is present, get medical attention.

**EYE CONTACT:** Flush the eyes immediately with large amounts of water to ensure thorough rinsing. If irritation persists, get medical attention.

**INHALATION:** Remove affected person from source of exposure. Get medical attention if irritation persists.

## PERSONAL PROTECTION INFORMATION

**EYE PROTECTION:** Wear safety glasses or goggles to prevent eye contact. Eye baths should be readily available in the area of handling ECO Lubricants.

**SKIN PROTECTION:** As with any hydrocarbon product, oil-impervious clothing is recommended to prevent skin contact.

**RESPIRATORY PROTECTION:** Use MSHA/NIOSH approved equipment when working in areas of heavy oil mist. Ventilation can be used to control or reduce airborne concentrations of oil.

## ENVIRONMENTAL AND DISPOSAL INFORMATION

**SPILL OR RELEASE TO THE ENVIRONMENT:** Combine and recover any free liquid. With small spills, absorb the fluid with sand or clay absorbent, then flush the area with water. With large spills, contain its flow. A spill of any hydrocarbon fluid to navigable waters that causes a sheen upon the water's surface must be reported immediately to the Coast Guard National Response Center (800-424-8802). Failure to report may result in civil or criminal penalties.

**WASTE DISPOSAL:** ECO Lubricants, when discarded or disposed, may be classified as a hazardous waste. Consult the appropriate authorities in your area to determine the proper disposal means.

**HANDLING AND STORAGE:** Avoid extremes of temperature in storage. Store ECO Lubricants in tightly closed containers in cool, dry, isolated and well ventilated areas, away from sources of ignition or heat. Do not store in unlabeled containers.

This Material Safety Data Sheet has been prepared in order to help the users of ECO Lubricants. The data contained herein is believed to be accurate, but no guarantees are given with regard to fitness of use in a particular situation.

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Completed by David Sundin, Ph.D., Technical Consultant to DSI Ventures, Inc.