



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

Boiling Point: wide range **Specific Gravity:** 0.88 **Vapor Pressure:** not determined
Percent Solid by wt: 0 **Vapor Density (air=1):** 18 **pH:** 7.0
Solubility in water: low **Percent Volatile (v/v):** <50 **Appearance:** 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 CO₂ 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.

Effective Date: December 2009

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