



# MSDS Document

## Product Enlube EL-ADD-8543

### 1. Chemical Product and Company Identification

#### Product Enlube EL-ADD-8543

**Synonyms:** Anti-Wear Hydraulic Oil Additive

**MSDS ID** EL1169

**Manufacturer**

Engineered Lubricants Co.  
11525 Rock Island Court  
Maryland Heights , MO 63043

**Contact Name**

msds@englube.com

**Phone Number**

(314)872-9540 X3033

**Emergency Phone**

(800)424-9300

**Revision Date** 11/3/2011

<b>Health:</b>	<b>3</b>
<b>Fire:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Specific</b>	

### 2. Composition and Information on Ingredients

<b>Ingredient</b>	<b>CAS Number</b>	<b>Weight %</b>	<b>ACGIH TLV</b>	<b>PEL</b>	<b>STEL</b>
REPORTABLE HAZARDOUS COMPONENTS	1111-11-11				
Zinc, bis[O,O-bis(2-ethylhexyl)phosphorodithioato-kappa.S,.kappa.S']-, (T-4)-	4259-15-8	40% - 50%			
Phosphorous acid, triphenyl ester	101-02-0	1% - 5%			
Phenol	108-95-2	0.1% - 0.9%			

### 3. Hazard Identification

#### APPEARANCE

DARK LIQUID. STRONG ODOR.

#### PHYSICAL HAZARDS

NONE EXPECTED

#### HEALTH HAZARDS

##### Potential Health Effects

##### Eye

Substance causes severe eye irritation. Injury may be permanent.

##### Skin

May cause skin irritation.

### 4. First Aid Information

##### Eye

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel.

##### Skin

Wash with soap and water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.

##### Ingestion

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

##### Inhalation

If breathing is difficult move to fresh air. Call a physician if symptoms develop or persist.

### 5. Fire Fighting Measures

Flash Point	>212 F
FP Method	PMCC

#### Extinguishing Media

CO<sub>2</sub>, dry chemical, or foam.

#### Fire Fighting Instructions

In the event of fire, cool tanks with water spray. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental Release Measures

### Personal Precautions

Use appropriate protective equipment (see Section 8).

### METHODS FOR CONTAINMENT AND CLEAN UP

#### Containment

Stop the flow of material, if this can be done without risk. Prevent entry into waterways, sewers, basement or confined areas.

#### Clean-up

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Clean up spills immediately, observing precautions in Protective Equipment section.

## 7. Handling and Storage

### SAFE HANDLING

#### Handling

Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not enter storage area unless adequately ventilated. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

### SAFE STORAGE

#### Storage

Keep container closed when not in use. Store in a cool dry place.

#### Conditions to Avoid

Exposure to elevated temperatures can cause product to decompose.

DO NOT STORE PRODUCT ABOVE 110 F. MATERIAL WILL DECOMPOSE AND PRODUCE TOXIC FUMES.

## 8. Exposure Controls and Personal Protection

### EXPOSURE LIMITS

#### OIL MIST

OSHA PEL: MIST 5 MG/M3 8 HRS;

ACGIH TLV: MIST 5 MG/M3 8 HRS

#### OSHA PELS:

CAS # 108-95-2, Phenols; 5 ppm TWA

**ACGIH TLV:**

CAS # 108-95-2 Phenols; 5 ppm TWA

**PERSONAL PROTECTION**

**EYES**

Wear tight fitting safety goggles (splash goggles).

**Hand Protection**

Wear impervious gloves.

**Other clothing**

Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

**Respirators**

Wear the following respiratory protection if exposure limits may be exceeded: Wear a NIOSH-certified (or equivalent) respirator as necessary.

**Engineering controls**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

## 9. Physical and Chemical Properties

Physical State	LIQUID
Specific Gravity	1.03
Density lbs/Gal.	8.6
Color/Appearance	DARK COLOR
Odor	STRONG
Solubility	INSOLUBLE
Viscosity	60 cSt @ 100 F

## 10. Stability and Reactivity

**Stability**

Material is stable under normal conditions.

**Conditions to Avoid**

Excessive Heat.

**Incompatible Materials**

Reducing Agents. Strong Acids. Oxidizing Agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

**Thermal Decomposition**

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion Hydrogen sulfide and alkyl mercaptans and sulfides may also be released.

## 11. Toxicological Information

### ACUTE ORAL TOXICITY

LD50 (rat) >2000 mg/m3

### ACUTE INHALATION TOXICITY

NO DATA AVAILABLE. May cause irritation.

### ACUTE DERMAL TOXICITY

LD50 (rat) >2000 mg/m3

### SKIN IRRITATION

Mildly irritating.

### Eye

Substance causes severe eye irritation. Injury may be permanent.

### SKIN SENSITIZATION

#### Skin

May cause sensitization.

### Chronic Effects

Information provided based upon components of the mixture.

### CAS # 101-02-0

Triphenyl phosphite produced neurotoxic effects in experimental animals.

### GERM CELL MUTAGENICITY

NO DATA AVAILABLE.

### Carcinogenicity

The major components of this product are not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

### REPRODUCTIVE TOXICITY

This product contains para-dodecylphenol. Rats given high daily doses of this by mouth experienced adverse reproductive effects.

## 12. Ecological Information

Environmental hazard.

### General

This information is given based on data available for the material, components of the material, and similar materials.

### **ECOTOXICITY EFFECTS**

Harmful to fish and other water organisms. LC50 & EC50: 1-10 mg/L.

### **PERSISTENCE AND DEGRADABILITY**

Product is not readily biodegradable. Product components have the potential for bioconcentration.

## **13. Disposal Considerations**

### **Waste Disposal Method**

According to local, state, and federal regulations.

## **14. Transportation Information**

### **LAND (DOT)- NON-BULK**

#### **UN NUMBER**

UN3082

#### **PROPER SHIPPING NAME**

Environmentally Hazardous Substance, liquid, n.o.s. (Butylated Phenol, Zinc alkyldithiophosphate)

#### **CLASS**

9

#### **PACKING GROUP**

III

#### **DOT PROPER SHIPPING LABEL**

UN3082, Environmentally Hazardous Substance, liquid, n.o.s. (Butylated Phenol, Zinc alkyldithiophosphate), 9, III, Marine Pollutant (Butylated Phenol, Zinc alkyldithiophosphate)

### **LAND (DOT) BULK**

UN3082, Environmentally Hazardous Substance, liquid, n.o.s. (Butylated Phenol, Zinc alkyldithiophosphate), 9, III, Marine Pollutant (Butylated Phenol, Zinc alkyldithiophosphate)

### **SEA (IMDG)**

UN3082, Environmentally Hazardous Substance, liquid, n.o.s. (Butylated Phenol, Zinc alkyldithiophosphate), 9, III, Marine Pollutant (Butylated Phenol, Zinc alkyldithiophosphate)

## **AIR (IATA)**

UN3082, Environmentally Hazardous Substance, liquid, n.o.s. (Butylated Phenol, Zinc alkyldithiophosphate), 9, III, Marine Pollutant (Butylated Phenol, Zinc alkyldithiophosphate)

## **15. Regulatory Information**

### **SARA (311/312) REPORTABLE HAZARD CATEGORIES**

#### **SARA Sections 311 and 312**

Immediate (Acute) Health Hazard: YES.

Delayed (Chronic) Health Hazard: NO Fire Hazard: NO. Reactive Hazard: NO. Sudden

Release of Pressure Hazard: NO.

### **SARA (313) TOXIC RELEASE INVENTORY**

From 40-50% Zinc Compounds; contains 5.7% Zinc.

### **Comprehensive Environmental Response and Liability Act (CERCLA)**

This material is not subject to any special reporting under the requirements of CERCLA.

### **IARC**

No components present at 0.1% or greater are listed on IARC.

### **U.S. STATE RIGHT TO KNOW**

#### **CALIFORNIA PROP 65**

Warning! this product contains a chemical known to the state of California to cause cancer, and/or birth defects, and/or reproductive harm. <0.1 ppm arsenic, <0.1 ppm cadmium, <1 ppm lead.

### **UNITES STATES INVENTORY (TSCA 8b)**

#### **U.S. Toxic Substances Control Act TSCA**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

### **INTERNATIONAL INVENTORY STATUS**

#### **CANADA INVENTORY**

All components listed.

#### **EUROPE INVENTORY**

All components listed.

#### **JAPAN INVENTORY (ENCS)**

All components listed.

#### **AUSTRALIAN INVENTORY (AICS)**

All components listed.

#### **KOREA INVENTORY (KECI)**

All components listed.

#### **CHINA INVENTORY (IECSC)**

All components listed.

#### **PHILIPPINES INVENTORY (PICCS)**

All components listed.

### **16. Other Information**

#### **Disclaimer**

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#### **LEGEND**

DOT- Department of Transportation; IMDG-International Maritime Dangerous Goods; IATA- International Air Transport Association; SARA-Superfund Amendments and Reauthorization Act; CERCLA-Comprehensive Environmental Response, Compensation, and Liability Act; EPCRA-Emergency Planning and Community Right-to-Know Act; IARC-International Agency for Research on Cancer. STOT-Specific Target Organ Toxicity.