MATERIAL SAFETY DATA SHEET

SECTION 1:
CHEMICAL PRODUCT & COMPANY INFORMATION

Product trade name ........... E P Lube #95
Primary application .... Industrial gear oil
CAS number ............. Complex mixture
Synonyms ................. None
Chemical family .......... Petroleum hydrocarbon oil
                      plus multifunctional additives
Manufacturer ............. O. F. Zurn Company
                      2736 North Broad Street
                      Philadelphia, PA 19132
Information Phone # .... (215) 229-5268
Emergency Phone # ....... (215) 229-5268
Preparer ................. John-Ballinger
Revision Date ............ 1/1/95

SECTION 2:
COMPOSITION/INFORMATION ON INGREDIENTS

All components of this product at a weight concentration of 1% or greater are listed below (0.1% for carcinogens). This list is confidential and is not to be reproduced.

Hydrotreated residual oils
CAS number 64742-57-0  50-70 Percent
OSHA .................. PEL = 5 mg/m³ (mist)
ACGIH ................. TLV = 5 mg/m³ (mist)
                   STEL = 10 mg/m³ (mist)

Solvent refined heavy paraffinic distillate
CAS number 64741-88-4  20-35 Percent
OSHA .................. Pel = 5 mg/m³ (mist)
ACGIH ................. TLV = 5 mg/m³ (mist)
                   STEL = 10 mg/m³ (mist)

Proprietary SIP gear oil additive
CAS number  Mixture  1-5 Percent
OSHA .................. PEL = 5 mg/m³ (mist)
ACGIH ................. TLV = 5 mg/m³ (mist)
                   STEL = 10 mg/m³ (mist)

SECTION 3:
HAZARDS IDENTIFICATION

Emergency Overview
May cause slight irritation of skin and/or eyes.

Potential Health Effects

Primary Routes of Exposure

Inhalation ............... No
Skin ......................... Yes
Eye ......................... No
Ingestion .................. No

Inhalation
No acute effects expected. Vapor inhalation under ambient conditions is normally not a problem. If material is misted or if vapors are generated from heating, overexposure may cause irritation of mucous membranes and the upper respiratory tract.

Skin
No acute effects expected. Prolonged or repeated contact may remove skin oils, possibly leading to irritation and dermatitis.

Eye
No acute effects expected. Prolonged contact may cause irritation.

Ingestion
Material has a low order of acute oral toxicity.

Carcinogenicity
IARC ......................... No
NTP ......................... No
OSHA ......................... No
ACGIH ......................... No
Other ........................ No

Preexisting Medical Conditions Aggravated by Exposure
Skin disorders.

SECTION 4
FIRST AID MEASURES

Inhalation
None normally required. However, if overcome by vapor from hot product, immediately remove from exposure and seek medical attention. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If overexposed to mist, remove from further exposure until excessive mist condition subsides. If respiratory discomfort persists, seek medical attention.
**Skin**

Remove any contaminated clothing and thoroughly wash skin with soap and water. Launder or dry-clean clothing before reuse. If redness or swelling develops, obtain medical assistance. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

**Eye**

Flush with clear water for at least 15 minutes or until irritation subsides. If irritation persists, obtain medical assistance.

**Ingestion**

Induction of vomiting not required. Obtain emergency medical attention.

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**SECTION 5**

**FIRE FIGHTING MEASURES**

**Flash point (minimum)**

390°F

**Method used**

COC

**Flammable limits in air (% volume)**

| Lower explosive limit (LEL) | 0.9 |
| Upper explosive limit (UEL) | 7.0 |

**Fire and Explosion Hazards**

This product can be made to burn (flash point >200°F). Toxic fumes, gases, or vapors may evolve on burning. Container may rupture on heating.

"Empty" containers retain 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. Do not attempt to clean since residue is difficult to remove. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

**Extinguishing Media**

Foam, water spray (fog), dry chemical, carbon dioxide, and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product, depending on size or potential size of fire and circumstances related to the situation.

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**Special Fire Fighting Instructions**

Use water spray, dry chemical, foam, or carbon dioxide to extinguish the fire. Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for men attempting to stop a leak. Water spray may be used to flush spills away from exposures. Minimize breathing of gases, vapor, fumes, or decomposition products. Use supplied air breathing equipment for enclosed or confined spaces or as otherwise needed.

**HMIS Classification**

| Health | 0 |
| Flammability | 1 |
| Reactivity | 0 |
| Personal Protection Index | C |
| Specific Hazard | None listed |

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**SECTION 6**

**ACCIDENTAL RELEASE MEASURES**

Contain spill. Use personal protective equipment stated in Section 8. Recover free product. Add sand, earth, or other suitable absorbent to spill area. Minimize skin contact. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Assure conformance with applicable governmental regulations.

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**SECTION 7**

**HANDLING AND STORAGE**

Keep containers closed when not in use. Do not handle or store near heat, sparks, flame or strong oxidants. NFPA Class IIIB storage.

Minimize breathing of vapor, mist or fumes. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil soaked. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water.

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**SECTION 8**

**EXPOSURE CONTROL/PERSONAL PROTECTION**

**Ventilation**

Use local exhaust to capture vapor, mists or fumes if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup of explosive concentrations of vapor in air. Mechanical ventilation recommended.
**Personal Protective Equipment — Eye**

Use splash goggles or face shield when eye contact may occur.

**Personal Protective Equipment — Gloves**

Use chemical resistant gloves, if needed, to avoid prolonged or repeated skin contact. The following glove materials are acceptable: polyethylene, neoprene, nitrile, polyvinyl alcohol, viton.

**Personal Protective Equipment — Respirator**

Concentration in air determines protection needed. Use only NIOSH certified respiratory protection. Respiratory protection usually not needed unless product is heated or misted. Half mask air purifying respirator with dust/mist filters or HEPA filter cartridges are acceptable to 10 times the exposure limit. Full face air purifying respirator with dust/mist filters or HEPA filter cartridges are acceptable to 50 times the exposure limit. Protection by air purifying respirators is limited. Use a positive pressure demand full face supplied air respirator or SCBA for exposures above 50 times the exposure limit. If exposure is above IDLH (immediately dangerous to life & health) or there is the possibility of an uncontrolled release or exposure levels are unknown, then use a positive pressure demand full face supplied air respirator with escape bottle or SCBA.

**Other**

Use chemical resistant apron or other impervious clothing, if needed, to avoid contaminating regular clothing, which could result in prolonged or repeated skin contact. The following materials are acceptable as protective clothing materials: polyvinyl alcohol (PVA), polyvinyl chloride (PVC), neoprene, nitrile, viton, and polyurethane. Safety shower and eye wash availability recommended.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point (initial)</td>
<td>n/a</td>
</tr>
<tr>
<td>Specific gravity (60°F)</td>
<td>0.89</td>
</tr>
<tr>
<td>Density</td>
<td>7.40 lb/ft³</td>
</tr>
<tr>
<td>Vapor pressure (20°F)</td>
<td>&lt;0.1 mm Hg</td>
</tr>
<tr>
<td>Vapor density</td>
<td>&gt;5 (air = 1)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Negligible</td>
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<tr>
<td>pH information</td>
<td>n/a</td>
</tr>
<tr>
<td>% volatiles by volume</td>
<td>0.00%</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;0.01 (n-butyl acetate = 1)</td>
</tr>
<tr>
<td>Appearance</td>
<td>Bright, clear, amber liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
</tr>
<tr>
<td>Odor threshold (PPM)</td>
<td>Not determined</td>
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### SECTION 10 STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Sources of ignition</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Strong oxidizing agents</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Combustion will produce fumes, smoke, carbon monoxide, and other asphyxiants.</td>
</tr>
<tr>
<td>Polymerization</td>
<td>Will not occur</td>
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</tbody>
</table>

### SECTION 11 TOXICOLOGICAL INFORMATION

**Acute Toxicity**

This product is judged to have a low order of acute oral and dermal toxicity based on available component data.

**Chronic Toxicity**

Prolonged or repeated skin and eye contact may produce irritation. However, based on human experience and available toxicological data, this product is judged to be neither a “corrosive” nor an “irritant” by OSHA criteria.

### SECTION 12 ECOLOGICAL INFORMATION

Aquatic Toxicity ........... No data available.

### SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal Method**

Follow federal, state, and local regulations. This product is not a RCRA hazardous waste if uncontaminated. If “used,” RCRA criteria (ignitability, reactivity, corrosivity, toxicity characteristics) must be determined. Do not flush product to a drain and/or a storm sewer.

**Special Shipping Information**

None.

### SECTION 14 TRANSPORTATION INFORMATION

**DOT**

Proper shipping name.. Petroleum lubricating oil

Hazard class ........... Not regulated

Identification number .. Not regulated

Packing group .......... Not applicable

Label required .......... Not regulated

**IMDG**

Proper shipping name.. No data available

**IATA**

Proper shipping name.. No data available
SECTION 15
REGULATORY INFORMATION

EPA/TSCA Inventory
All components of this product are listed.

SARA 302 Threshold Planning Quantity
Not applicable.

SARA 304/CERCLA 302.4 Reportable Quantity
Not applicable.

SARA 311 Categories
Immediate (acute) health effects ... No
Delayed (chronic) health effects ... No
Fire hazard ..................... No
Sudden release of pressure hazard ... No
Reactivity hazard ................ No

SARA 313 Substances
None.

SECTION 16
OTHER INFORMATION

WHMIS Classification
Not Controlled

Disclaimer
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