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.

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.

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.

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 conformity with applicable governmental regulations.

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.

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

Boiling point (initial)	n/a
Specific gravity (60°F)	0.89
Density	7.40 lb/gl
Vapor pressure (20°F)	<0.1 mm Hg
Vapor density	>5 (air = 1)
Solubility in water	Negligible
Ph information	n/a
% volatiles by volume	0.00%
Evaporation rate	<0.01 (n-butyl acetate = 1)
Appearance	Bright, clear, amber liquid
Odor	Slight
Odor threshold (PPM)	Not determined

SECTION 10
STABILITY AND REACTIVITY

Stability	Stable
Conditions to avoid	Sources of ignition
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Combustion will product fumes, smoke, carbon monoxide, and other asphyxiants.
Polymerization	Will not occur

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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