

U.S. Oil Co., Inc.**Analytical Laboratory**

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Phone 920-735-8298

PRODUCT NO.: 160

MATERIAL SAFETY DATA SHEET

PRODUCT TRADE NAME: 150 Hydraulic Oil
Enerpac Product Name: **Enerpac HF Hydraulic Oil**
Enerpac Part No.: CM40885
GENERIC/CHEMICAL NAMES:
PREPARATION/REVISION DATE: 10/16/97
REVISED FROM (DATE): 6/13/97
EMERGENCY PHONE #: (920)-735-8298
NFPA CODE: Health: 1 Fire: 1 Reactivity: 0
HMIS CODE: Health: 1 Fire: 1 Reactivity: 0

SECTION 1 - HAZARDOUS INGREDIENTS

This material is not known to contain greater than 0.1% of any carcinogen required to be listed under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

	OSHA PEL	ACGIH TLV
Refined heavy paraffinic distillate (Cas #64741-88-4)	5 mg/m ³	5 mg/m ³

SECTION 2 - FIRE AND EXPLOSION HAZARDS

FLASH POINT: 408° F
UPPER FLAMMABLE LIMIT: ND
LOWER FLAMMABLE LIMIT: ND
EXTINGUISHING MEDIA:
CO₂, dry chemical, foam, water spray, water fog

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self contained breathing apparatus with full face piece. Cool exposed containers with water spray. Avoid breathing fumes.

UNUSUAL FIRE & EXPLOSION HAZARDS:

Toxic fumes may be evolved on burning or exposure to heat. Pressure may increase in overheated closed containers. Store below 120°F.

SECTION 3 - HEALTH HAZARD DATA

« ACUTE EXPOSURE »

- ORAL TOXICITY:** Low order of acute oral toxicity. May cause irritation of the gastrointestinal tract, nausea and vomiting. Aspiration into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.
- EYE IRRITATION:** Eye irritant. Based on data from components or similar material.
- SKIN IRRITATION:** Skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- DERMAL TOXICITY:** The LD50 in rabbits is > 2000 mg/kg. Based on data from components or similar materials.
- INHALATION TOXICITY:** No data available to indicate product or components may be a toxic inhalation hazard.
- RESPIRATORY IRRITATION:** If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed respiratory irritation should not be a problem.
- DERMAL SENSITIZATION:** No data available to indicate product or components may be a skin sensitizer.
- INHALATION SENSITIZATION:** No data available to indicate product or components may be a respiratory sensitizer.

« CHRONIC EXPOSURE »

- CHRONIC TOXICITY:** No data available to indicate product or components present at greater than 1% are chronic health hazards.
- CARCINOGENICITY:** No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
- MUTAGENICITY:** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- REPRODUCTIVE TOXICITY:** No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
- TERATOGENICITY:** Birth defects have been observed in animal studies conducted on 2-ethyl hexanol (less than 1% of this product). However, since significant maternal toxicity was also observed, these studies do not establish any risk to humans at occupation exposure levels.

« ADDITIONAL INFORMATION »

OTHER: No other health hazards known.

EXPOSURE LIMITS: See Hazardous Ingredients Section for any applicable exposure limits for components.

SECTION 3A - EMERGENCY FIRST AID PROCEDURES

SKIN: Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.

EYE: Flush with water at least 15 minutes. Get medical attention if eye irritation develops or persists.

INHALATION: Remove exposed person to fresh air if adverse effects are observed.

ORAL: DO NOT INDUCE VOMITING! If conscious, give 2 glasses of water. Get immediate medical attention.

ADDITIONAL: Note to physician: treat symptomatically.

SECTION 4 - SPECIAL PROTECTION INFORMATION

VENTILATION PROCEDURE: Use local exhaust ventilation to control dust.

GLOVE PROTECTION: Neoprene or Nitrile Gloves Recommended.

EYE PROTECTION: Safety glasses recommended.

RESPIRATORY PROTECTION: Normally not required, mask or respiratory for mists.

CLOTHING RECOMMENDATION: As needed to prevent repeated or prolonged contact.

SECTION 5 - PHYSICAL DATA

VAPOR PRESSURE: ND
PH: ND
SPECIFIC GRAVITY: ND
LB/GAL: 7.24 ext.
API GRAVITY: 31.3
WATER SOLUBILITY: Insoluble
PERCENT VOLATILE: ND
VAPOR DENSITY: ND
EVAPORATION RATE: ND
ODOR: ND
APPEARANCE: ND
VISCOSITY: 29-31 cSt @ 40°C 5.1 ref. cSt @ 100°C

SECTION 6 - STABILITY

STABILITY: Stable

INCOMPATIBILITY: Oxidizing agents and acids.

POLYMERIZATION: Will not occur.

THERMAL DECOMPOSITION: Smoke, carbon monoxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and short chain alkyl mercaptans may also be released. Under combustion conditions, oxides of the following elements will be formed: Phosphorus, Sulfur, Zinc.

SECTION 7 - SPILL OR LEAK PROCEDURES

SPILL PROCEDURES: Prevent entry into sewers and waterways. Pick up free liquid for recycle or disposal. Absorb small amounts with an inert material.

WASTE DISPOSAL: Dispose according to current local, state and federal regulations. Materials may become hazardous waste through use. If permitted, incineration may be practical. Consider recycling.

SECTION 8 - SPECIAL PRECAUTIONS

SPECIAL PRECAUTIONS: Keep containers closed when not in use. Do not handle or store near high heat or flames. Avoid breathing oil mists, wash skin thoroughly with soap and water after handling.

SECTION 9 - TRANSPORTATION AND LABELING

DOT PROPER SHIPPING NAME:
DOT HAZARD CLASS:
DOT ID NUMBER (UN NO.):
IMO CLASS:
ICAO CLASS:
CERCLA HAZARDOUS SUBSTANCES:
PRECAUTIONARY LABELS:

SECTION 10 - OTHER REGULATORY INFORMATION

U.S. TSCA INVENTORY:	N.D.
OTHER TSCA REG.:	N.D.
EEC EINECS:	N.D.
JAPAN MITI:	N.D.
AUSTRALIA:	N.D.
SWITZERLAND:	N.D.
SARA EXT. HAZ. SUBST.:	N.D.
SARA SECTION 313:	N.D.
CAL. PROP. 65.:	N.D.

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N.A. = Not Applicable N.D. = Not Determine