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MATERIAL SAFETY DATA SHEET

PRODUCT NAME: AW Hydraulic Oil ISO-32
STOCK NUMBER: BO510
Enerpac Product Name: Enerpac HF Hydraulic Oil
Enerpac Part No.: CM40885

Supplier Information:

Moraine Liquid Technologies, Ltd.
1212 W. Second Street
Oconomowoc, WI 53066

Manufacturers Information:

Moraine Liquid Technologies, Ltd.
1212 W. Second Street
Oconomowoc, WI 53066

Emergency Telephone: 1 800 851 0403

Prepared by: Steven Zimmerman Phone: 262 567 7523 Prepare Date: 3/2002

NFPA CODE: HEALTH: 1 FIRE: 1 REACTIVITY: 0

CHEMICAL IDENTITY: Lubricating Oil, Petroleum, Hydrotreated Paraffinic CAS #64742-58-1 99%.

The remainder of the ingredients are additive. Each individual additive is not present in concentrations that would exceed an established OSHA Permissible Exposure Limit or ACGIH Threshold Limit Value or present at concentrations that present a health risk.

SECTION 1 -- HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS: This material does not contain any chemical listed as a carcinogen or potential carcinogen by OSHA, IARC Monographs or National Toxicology Program.

SECTION 2 -- FIRE AND EXPLOSION HAZARDS

FLASH POINT: 376 degrees F

LOWER & UPPER FLAMMABLE LIMIT: N/A

EXTINGUISHING MEDIA: CO2, dry chemical, foam, water spray; water fog.

FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with a full-face piece. Avoid breathing fumes.

UNUSUAL FIRE & EXPLOSION HAZARDS: Toxic fumes may be evolved on burning or exposure to heat. Pressure may increase in overheat closed containers. Not sensitive to mechanical impact or static discharge.

SECTION 3 -- HEALTH HAZARD DATA

ORAL TOXICITY: Greater than 5000 mg/kg in rats. Based on data from components.

EYE IRRITATION: Not expected to cause eye irritation. Based on data from components.

SKIN IRRITATION: Not expected to cause skin irritation. Based on data from components.

TLV: None established. Oil mist = 5 mg/cu meter.

EMERGENCY FIRST AID PROCEDURES

AW Hydraulic Oils

SKIN: Wash skin thoroughly with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse. If product is injected under pressure into or under the skin; or into any part of the body; regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual.

EYES: Flush eyes with plenty of water for 15 minutes. Get medical attention if eye irritation develops or persists.

INHALATION: Remove to fresh air. Get medical attention if breathing difficulty persists.

ORAL: Call a physician. Do NOT induce vomiting. Never give anything to an unconscious person by mouth.

SECTION 4 -- SPECIAL PROTECTION INFORMATION

VENTILATION PROCEDURE: Mechanical ventilation recommended.

EYE PROTECTION: Safety glasses recommended.

GLOVES PROTECTION: Neoprene or Nitrile rubber gloves recommended.

RESPIRATORY: Normally not required. Mask or respiratory for mists.

HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco products. Clean contaminated clothing, shoes and protective equipment before reuse.

SECTION 5 -- PHYSICAL DATA

VAPOR PRESSURE: Less than 0.01 mm Hg @ 20 degrees C

SPECIFIC GRAVITY: .875 approx. (water=1)

DENSITY: 7.3 LB/Gal.

PERCENT VOLATILE: Negligible

EVAPORATION RATE: Not Available

APPEARANCE: Blue liquid

pH: Not applicable

WATER SOLUBILITY: Insoluble

VAPOR DENSITY: Not available

ODOR: Mild Petroleum, oil.

SECTION 6 -- STABILITY

STABILITY: Stable

INCOMPATIBILITY: Avoid oxidizing agents.

POLYMERIZATION: Will not occur.

THERMAL DECOMPOSITION: Oxides of carbon.

SECTION 7 -- SPILL OR LEAK PROCEDURES

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

WASTE DISPOSAL: Disposal should be in compliance with current federal, state, and local laws. Materials may become hazardous waste through use. Consider recycling.

SECTION 8 -- TRANSPORTATION AND LABELING

DOT SHIPPING: Not Regulated
DOT ID NUMBER: None
EPA HAZARDOUS SUBSTANCES: None
PRECAUTIONARY LABELS: In compliance with hazard and right-to-know requirements where applicable.
DOT HAZARD CLASS: Not Regulated

SECTION 9 -- 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.

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