

Material Safety Data Sheet

HE-500

MSDS No.

Date of Preparation: 02/2000

Revision:0

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: HE-500 Vacuum Pump Oil

Chemical Formula:

CAS Number: 64741-88-4

Other Designations: Fatty diester & additives

General Use: Highly Refined Lubricating Oil, Vacuum pump oil

Kurt J. Lesker Co. 1515 Worthington Ave. Clairton, PA 15025 Phone (412)233-4200, Emergency –
CHEMTREC 800-424-9300

HMIS

H 2

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PPE†

†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Barium dinonyl naphthalene sulfonate	25619-56-1	5
Fatty diester & additives		95

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Fatty diester	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

Section 3 - Physical and Chemical Properties

Physical State: Liquid

Appearance and Odor: amber-red, bland odor

Odor Threshold: N/A

Vapor Pressure: less than 0.1

Vapor Density (Air=1): >1 (Air=1.0) No Data

Formula Weight:

Density:

Specific Gravity (H₂O=1, at 4 °C): .922

pH: N/A

Water Solubility: less than 0.1

Other Solubilities:

Boiling Point: Not Available

Freezing/Melting Point: N/A

Viscosity: < or = to 100 sus @ 100° F

Refractive Index: N/A

Surface Tension: N/A

% Volatile: N/A

Evaporation Rate: Nil

Section 4 - Fire-Fighting Measures

Flash Point: 400 °F (204 °C)

Flash Point Method: Cleveland Open Cup - COC

Burning Rate: Not Available

Autoignition Temperature: Not Available

Flammability Classification: NFPA Class IIIB Combustible Liquid

Extinguishing Media: Water Spray, Foam, Dry Chemical, Water may cause frothing

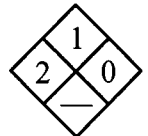
Unusual Fire or Explosion Hazards: None

Hazardous Combustion Products: Products of combustion may contain carbon monoxide, carbon dioxide, oxides of barium and oxides of sulfur. Do not enter enclosed or confined spaces without proper protective equipment including respiratory protection.

Fire-Fighting Instructions: Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water may be used to flush spills away from exposures. Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode and protective clothing.

NFPA



Section 5 - Stability and Reactivity

Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization cannot occur.

Chemical Incompatibilities: Incompatible with strong oxidizing agents

Conditions to Avoid: Heat, sparks, and flame.

Hazardous Decomposition Products: carbon dioxide, carbon monoxide, barium oxides and sulfur oxides.

Section 6 - Health Hazard Information

Potential Health Effects

Primary Entry Routes: The product, as with many petroleum products, may cause minor skin, eye, and lung irritation, but good hygienic practices can minimize these effects. Normal use of this product does not result in generation of an oil mist. However if an oil mist is generated, overexposure can cause minor and reversible irritation to the eyes, skin, and especially the lungs. Proper PPE and sufficient ventilation can provide adequate protection. Ingestion and skin absorption are routes as well.

Target Organs:

Acute Effects

Inhalation: Prolonged exposure to elevated mist or vapor levels can cause severe lung damage.

Eye: This material may cause moderate transient eye irritation.

Skin: This material may cause moderate transient skin irritation.

Ingestion: May cause diarrhea

Carcinogenicity: Data not available

Medical Conditions Aggravated by Long-Term Exposure: Data not available

Chronic Effects: Data not available

Emergency and First Aid Procedures

Inhalation: If inhaled, remove to fresh air. If not breathing, give CPR. If breathing is difficult, give oxygen. Call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Skin Contact: Wash skin with soap and water. If irritation develops and persists, consult a physician.

Ingestion: Call a physician immediately..

After first aid, get appropriate in-plant, paramedic, or community medical support.

Note to Physicians: None

Special Precautions/Procedures: None

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures:

Small Spills: Absorb with an inert material such as sand, soil or vermiculite; sweep up and dispose of in accordance with all applicable federal, state, and local regulations.

Large Spills

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Cleanup: Recover free liquid for reuse or reclamation. Soak up with sawdust, sand, oil dry or other absorbent material

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Disposal: Do not flush to surface water or sanitary sewer systems. Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Disposal Regulatory Requirements:

Container Cleaning and Disposal: Empty drums should be completely drained, properly bunged, and properly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner.

Ecological Information: Not Available

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.??): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112; this material is covered by the CERCLA petroleum exclusion.

CERCLA Reportable Quantity (RQ), Not applicable

SARA 311/312 Codes:

SARA Toxic Chemical (40 CFR 372.65): barium compounds 5% by weight

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910.????)

State Regulations:

California "Prop 65": Ingredients not subject to act.

Pennsylvania Worker & Community Right to Know Act: Ingredients not subject to act.

Canadian Regulations:

This is not a WHMIS Controlled Product.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: None normally required except in emergencies or when conditions cause excessive airborne levels of mists or vapors. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (fires, storage tanks, etc.), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

Handling Precautions: Avoid contact with skin and eyes. Do not swallow.

Storage Requirements: Keep in cool dry place. Avoid excessive heat or open flames. Keep container tightly closed when not in use.

DOT Transportation Data (49 CFR 172.101):

Not regulated by D.O.T.

Revision Notes:

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