



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Enhance™ Heavy Duty Diesel Engine Oil

PRODUCT USE: Premium Heavy-Duty Motor Oil

COMPANY IDENTIFICATION: Enhance™ Lubricants, LLC
1959 Bluff Road
Columbia, SC 29201
www.enhanceoil.com

TRANSPORTATION EMERGENCY RESPONSE: CHEMTREC – 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Not classified as hazardous according to 29 CFR 1910.1200 (2012).

HAZARDS NOT OTHERWISE CLASSIFIED: Not Applicable

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	70-80% wt
If chemical name/CAS No is proprietary and/or weight % is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.		

SECTION 4: FIRST AID MEASURES

EYES: Flush eyes with large amounts of water for at least 15 minutes until irritation subsides. If irritation persist, get medical attention.

SKIN: No treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs and persists, seek medical attention. 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 seek immediate medical attention.

INGESTION: If swallowed, do not induce vomiting. If victim exhibits signs of lung aspiration such as coughing or choking, seek immediate medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

MOST IMPORTANT SYMPTOMS AND EFFECTS:

SYMPTOMS: Expected to be a minor eye irritant. Repeated or prolonged skin contact may cause dermatitis.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Note to Physicians: Treat Symptomatically

SECTION 5: FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

UNSUITABLE EXTINGUISHING MEDIA: While carbon dioxide and inert will extinguish the fire, they can also displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.

SPECIFIC HAZARDS ARISING FROM THE SUBSTANCES OR MIXTURE: This material can burn but will not readily ignite. This material will release vapors when heated above the flashpoint temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flashpoint. Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide. Carbon dioxide (CO₂). Aldehydes. Ketones. Combustion products of sulfur and nitrogen.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Avoid breathing smoke and vapor. Water may be used to cool containers exposed to heat or flame.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Use personal protective equipment as required.

METHODS FOR CONTAINMENT: Remove sources of ignition. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

METHODS FOR CLEAN-UP: Take up small spills with absorbent pads. Large spills may be taken up with pump or vacuum.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Handle in accordance with good industrial hygiene and safety practice.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORAGE CONDITIONS: Store at ambient conditions. Store at atmospheric pressure. Keep container tightly closed. Store in a cool, well-ventilated place. Keep away from heat, sparks, and flame. Empty containers retain product residues. Store away from incompatible materials.

INCOMPATIBLE MATERIALS: This product may react with strong oxidizing agents.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES: This product as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

APPROPRIATE ENGINEERING CONTROLS: Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces. If product is heated above 70 C (155 F) in the presence of water, hydrogen sulfide vapors may be released. Ventilation should be sufficient to keep hydrogen sulfide levels below recommended exposure limits. Eye wash fountains are recommended.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Wear safety glasses. Wear chemical goggles or face shield if splash or mist occurs.

SKIN/BODY PROTECTION: Use impervious gloves for prolonged contact. Wear oil-impervious garments if contact is unavoidable.

RESPIRATORY PROTECTION: If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.

GENERAL HYGIENE CONSIDERATIONS: Use good hygiene when handling petroleum product. Launder contaminated clothing before reuse. Excessive misting may cause slippery floors – wear appropriate footwear.

SECTION: PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Light amber

Physical State: Viscous liquid

Odor: Typical petroleum

Odor Threshold: No data available

pH: No data available

Vapor Pressure: No data available

Vapor Density: >1

Boiling Point/Boiling Range: No data available

Freezing Point: No data available

Melting Point: No data available

Specific Gravity: 0.88

Water Solubility: Insoluble in water

Evaporation Rate: No data available

Decomposition Temperature: Not determined

Partition Coefficient: No data available

Flash Point: 204°C / 400°F ASTM D-92

Flammability: Liquid – not applicable

Upper Flammability Limits: Not determined

Lower Flammability Limits: Not determined

Auto-Ignition Temperature: No data available

Kinematic Viscosity: Not determined

Dynamic Viscosity: Not determined

Explosive Properties: Not determined

Oxidizing Properties: Not determined

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Not reactive under normal conditions.

CHEMICAL STABILITY: Stable under recommended storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: None under normal processing.

HAZARDOUS POLYMERIZATION: Under normal conditions of storage and use, hazardous polymerization will not occur.

CONDITIONS TO AVOID: Avoid formation of mists. Keep away from extreme heat, sparks, open flame and incompatible materials.

INCOMPATIBLE MATERIALS: This product reacts with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition of this product may yield oxides of boron, calcium, magnesium, nitrogen, phosphorus, sulfur including hydrogen sulfide and zinc as well as carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION OF LIKELY ROUTES OF EXPOSURE:

EYE CONTACT: Avoid contact with eyes

SKIN CONTACT: Avoid contact with skin

INHALATION: Do not inhale

INGESTION: Do not ingest

COMPONENT INFORMATION:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum derived calcium salt 61789-86-4	> 5000 mg/kg (Rat)	> 4000 mg/kg (Rabbit)	-

INFORMATION ON PHYSICAL, CHEMICAL AND TOXICOLOGICAL EFFECTS:

SYMPTOMS: See Section 4

DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHROMIC EFFECTS FROM SHORT AND LONG-TERM EXPOSURE:

CARCINOGENICITY: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

COMPONENT INFORMATION:

Chemical Name	Alge/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	-	1000: 48 h Daphnia magna mg/L EC50
Petroleum derived calcium salt 61789-86-4	-	5.7 - 9.7: 96 h Pimephales promelas mg/L LC50 static 1.0 - 10.0: 96 h Pimephales promelas mg/L LC50 semistatic	-	6.2 - 12: 48 h Daphnia magna mg/L EC50

MOBILITY: Not determined

PERSISTENCE/DEGRADABILITY: Not determined

BIOACCUMULATION: Not determined

OTHER ADVERSE EFFECTS: Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL OF WASTES: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

CONTAMINATED PACKAGING: Disposal should be in accordance with applicable regional, national, and local laws and regulations

SECTION 14: TRANSPORT INFORMATION

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT: Not regulated

IMO/IMDG: Not regulated

ICAO/IATA: Not regulated

SECTION 15: REGULATORY INFORMATION**INTERNATIONAL INVENTORIES:**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Petroleum distillates, hydrotreated heavy paraffinic	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US FEDERAL REGULATIONS:**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc alkyl dithiophosphate - 113706-15-3	113706-15-3	<1	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA Hazardous Substances
Zinc alkyl dithiophosphate		X		

US STATE REGULATIONS:

California Proposition 65

This product does not contain any Proposition 65 chemicals

US STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc alkyl dithiophosphate 113706-15-3	X		X

SECTION 16: OTHER INFORMATION

NFPA RATINGS: Health: 1 Flammability: 1 Reactivity: 0 Special Hazards: NA
HMIS RATINGS: Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: NA

DISCLAIMER

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose

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