



SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Enhance™ TO-4 Drive Train Fluid

PRODUCT USE: Transmission Fluid

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	85 - 90% 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: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

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.

INGESTION: Clean mouth with water and drink afterwards plenty of water. DO NOT induce vomiting because of danger of aspirating liquid into lungs.

INHALATION: Remove to fresh air.

MOST IMPORTANT SYMPTOMS AND EFFECTS:

SYMPTOMS: Irritating to eyes. May be irritating to skin. Ingestion may cause symptoms of gastrointestinal irritation including abdominal discomfort, nausea, vomiting, and diarrhea.

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.

UNSUITABLE EXTINGUISHING MEDIA: A solid stream of water directed into hot, burning liquid would cause frothing and scattering of burning material.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Product is a non-flammable hydrocarbon mixture. Liquid can burn upon heating to temperatures at or above the flash point. Mist or sprays may be flammable below the products normal flash point.

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

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Persons not wearing proper personal protective equipment should be excluded from area of spill. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Remove all sources of ignition. Spilled material is slippery.

ENVIRONMENTAL PRECAUTIONS: See Section 12

METHODS FOR CONTAINMENT: Prevent further leakage or spillage if safe to do so.

METHODS FOR CLEAN-UP: Absorb with non-flammable suitable absorbent such as sand or earth. Scoop up used absorbent into drums or other appropriate container.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

STORAGE CONDITIONS: Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store near heat, sparks, open flame or strong oxidizing agents. Do not store this material in open or unlabeled containers. "Empty" containers retain product 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.

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: Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Wear safety glasses with side shields (or goggles).

SKIN/BODY PROTECTION: Wear protective gloves and protective clothing.

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: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

Color: Amber

Physical State: Liquid

Odor: Typical petroleum

Odor Threshold: Not determined

pH: Not determined

Vapor Pressure: Not determined

Boiling Point/Boiling Range: Not determined

Solubility: Negligible

Freezing Point: Not determined

Melting Point: Not determined

Pour Point Temperature: Not determined

Viscosity: Not determined

Specific Gravity: Typical 0.86 @ 60°F

Evaporation Rate: Not determined

Decomposition Temperature: Not determined

Partition Coefficient: Not determined

Flash Point: > 204°C / 400°F

Flammability (Solid, Gas): Liquid- Not applicable

Upper Flammability Limits: Not determined

Lower Flammability Limits: Not determined

Auto-Ignition Temperature: Not determined

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.

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

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition of this product may yield oxides of baron, 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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Phenol, dodecyl, sulfurized, calcium salts 68855-45-8	= 1000 mg/kg (Rat)	>5000 mg/kg (Rabbit)	-
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	= 1830 mg/kg (Rat)	>3160 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: The component below belongs to the petroleum family, which has been shown to contain carcinogenic substances depending on the level of refinement. The carcinogen classification need not apply if it can be shown that the substance contains less than 3% dimethyl sulfoxide extract.

Chemical Name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	A2	Group 1	-	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

NUMERICAL MEASURES OF TOXICITY: Not determined

SECTION 12: ECOLOGICAL INFORMATION

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

COMPONENT INFORMATION:

Chemical Name	Algae/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
Phenol, dodecyl, sulfurized, calcium salts 68855-45-8		1000: 96 h Pimephales promelas mg/L LC50 semistatic 1000: 96 h Pimephales promelas mg/L LC50 static		1000: 48 h Daphnia magna mg/ L EC50
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	1.0 - 5.0: 96 h Pseudokirchneriella subcapitata mg/L EC50	100: 96 h Pimephales promelas mg/L LC50 semistatic 25 - 50: 96 h Pimephales promelas mg/L LC50 static		4.0 - 6.0: 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.

CALIFORNIA HAZARDOUS WASTE STATUS:

Chemical Name	California Hazardous Waste Status
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	Toxic

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 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS Number	Weight %	SARA 313 – Threshold Values %
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	68457-79-4	1-5	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA – Reportable Qty	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Phosphorodithioic acid, -alkyl esters, zinc salts		x		

US STATE REGULATIONS:

California Proposition 65

This product does not contain any Proposition 65 chemicals

US STATE RIGHT-TO-KNOW REGULATIONS:

This product does not contain any substances regulated under applicable state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphorodithioic acid, -alkyl esters, zinc salts 68457-79-4	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

Issue Date: 08.06.2019