



Issue Date 01-24-2020

Revision Date 12-31-2019

SAFETY DATA SHEET

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name: ENIGINE OIL TREATMENT

Other means of identification

Common Name: VTP-4001
UN/ID No Not Regulated
Synonyms None
Product Categories Additive, Lubricant, Automotive

Recommended use of the chemical and restrictions on use

Sale and Use Restrictions Not applicable
Recommended Use Restricted to professional users.
Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier Address

Valor
61400 American Lane, Suite 130
Bend, Oregon 97702-9409

Emergency telephone number

Company Phone Number Valor: (541) 815-9145
Emergency Telephone CHEMTREC 1-800-424-9300


2. HAZARDS IDENTIFICATION

Classification

Skin sensitization	Category 1
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Label elements

Emergency Overview

<p>Warning</p> <p>Hazard statements May cause an allergic skin reaction</p> 	<p>Appearance Oil</p>	<p>Physical state Liquid</p>	<p>Odor Hydrocarbons</p>
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Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response

Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed
 - Harmful to aquatic life with long lasting effects
 - Harmful to aquatic life
- 23.78 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Trade Secret
Hydrotreated Heavy Paraffinic Oil	64742-54-7	30-85	*
Mineral Oil	64742-58-1	0-50	*
Aliphatic Petroleum Distillates	64742-65-0	0-50	*
Highly Refined Mineral Oil (C15-C50)	MIXTURE	5-12	*
Benzenamine, N-Phenyl-,Reaction Products With 2,4,4-Trimethylpentene	68411-46-1	1-2	*
Alkyl diphenylamine	184378-08-3	1-2	*
Ethylene-Propylene Copolymer	PROPRIETARY	0.3-0.8	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures**

Skin contact	Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. Get medical attention if symptoms occur.
Eye contact	Immediately flush eyes for at least 15 minutes. Get medical attention.
Ingestion	If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	Drowsiness, Dizziness, Coughing and/ or wheezing; Eye irritation. Skin irritation: May cause allergic skin reaction.
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Indication of any immediate medical attention and special treatment needed

Self-protection of the first aider	Avoid contact with skin. See Section 8 for information on appropriate personal protective equipment.
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5. FIRE-FIGHTING MEASURES**Suitable extinguishing media:**

Use water spray (fog), foam, dry chemical or CO₂.

Small Fire	Dry chemical or CO ₂ .
Large Fire	Water spray or fog; Foam.
Explosive properties:	Risk of explosion if heated under confinement: Fire or intense heat may cause violent rupture of packages.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Product is or contains a sensitizer: May cause sensitization by skin contact.

Hazardous combustion products Aldehydes, Hydrocarbons, Carbon monoxide, carbon dioxide (CO₂), and phosphorus oxides; Oxides of sulfur, Nitrogen oxides (NO_x), Metal oxides.

Specific methods:

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge May be ignited by heat, sparks or flames.

Special firefighting procedures:

No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Dike to collect large liquid spills. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not use water jet. Water may cause frothing of heated materials. Move containers from fire area if you can do it without risk. Water mist may be used to cool closed containers. Avoid spreading burning liquid with water used for cooling purposes. Do not allow run-off from fire-fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment. Evacuate personnel to safe areas. Avoid contact with skin, eyes and clothing.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions: Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for Containment Dike far ahead of spill; use dry sand to contain the flow of material. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations.

Methods for clean-up: Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Dike to collect large liquid spills: Dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling: Do not store at temperatures above 120°F (50°C). Keep containers tightly closed in a cool, well-ventilated place.

Conditions for safe storage, including any incompatibilities

Technical measures/precautions: Eye wash and safety shower should be easily accessible. Ensure adequate ventilation.

Materials to avoid: Strong acids, Strong oxidizing agents, Chlorates, Peroxides, Nitrates, Strong reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
Hydrotreated Heavy Paraffinic Oil 64742-54-7	5 mg/m ³ TWA (mist) 10 mg/m ³ STEL (mist)	5 mg/m ³	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Mineral Oil 64742-58-1	5 mg/m ³ (mist)	5 mg/m ³ (mist)	-
Aliphatic Petroleum Distillates 64742-65-0	TWA: 5 mg/m ³ inhalable particulate matter excluding metal working fluids, highly & severely refined	Not established	IDLH: 2500 mg/m ³ TWA: 5 mg/m ³ STEL: 10 mg/m ³
Highly Refined Mineral Oil (C15-C50) MIXTURE	5 mg/m ³ TLV, 10 mg/m ³ STEL	5 mg/m ³ PEL	-
Benzenamine, N-Phenyl-, Reaction Products With 2,4,4-Trimethylpentene 68411-46-1	STEL: No data TWA: 10 mg/m ³	Not established	-
Alkyl diphenylamine 184378-08-3	-	Not established	-
Ethylene-Propylene Copolymer PROPRIETARY	-	Not established	-

Appropriate engineering controls

Engineering measures: Ensure adequate ventilation. Eye wash and safety shower should be easily accessible.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear normal work clothing, Chemical resistant gloves (consult with the specific manufacturer to confirm performance).

Respiratory protection Ensure adequate ventilation. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Wash face, hands and any exposed skin thoroughly after handling. Avoid contact with eyes, skin and clothing. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Hydrocarbons
Appearance	Oil	Odor threshold	No information available
Color	Brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	N/A	Not applicable
Melting point/freezing point	No information available	
Boiling point / boiling range	>= 240 °C / 464 °F	(based on components)
Flash point	>= 120 °C / 248 °F	(based on components)
Evaporation rate	Slower than ether	Slower than ether
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No Data Available	
Lower flammability limit	No Data Available	
Vapor pressure	No Data Available	
Vapor density	Heavier than air	
Specific Gravity	0.89	
Water solubility	Insoluble in water	
Solubility in other solvents	No Data Available	
Partition coefficient	No Data Available	
Autoignition temperature	No Data Available	
Decomposition temperature	No Data Available	
Kinematic viscosity	8-9 mm ² /s	@ 100 °C
Dynamic viscosity	No Data Available	
Explosive properties	No Data Available	
Oxidizing properties	No Data Available	

Other information

Softening point	No Data Available
Molecular weight	No Data Available
VOC Content (%)	
VOC Content (%)	0.90
Density	0.89 g/cc
Bulk density	No Data Available

10. STABILITY AND REACTIVITY

Reactivity
Reactivity Stable.

Chemical stability
Possibility of Hazardous Reactions None under normal processing.
 Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials

Materials to avoid: Strong acids, Strong oxidizing agents, Chlorates, Peroxides, Nitrates, Strong reducing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products Aldehydes Hydrocarbons, Carbon monoxide, Carbon dioxide (CO₂), Phosphorus oxides, Sulfur oxides (SO_x), Nitrogen oxides (NO_x), Metal oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	May cause allergic skin reaction.
Inhalation	Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.
Eye contact	Contact with eyes may cause irritation.
Skin Contact	May cause allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrotreated Heavy Paraffinic Oil 64742-54-7	>5000mg/kg (Rat)	>5000 mg/kg (Rabbit)	-
Mineral Oil 64742-58-1	> 2000 mg/kg (Rat)	> 4480 mg/kg (Rabbit)	-
Aliphatic Petroleum Distillates 64742-65-0	-	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h = 2062 ppm (Rat) 4 h
Highly Refined Mineral Oil (C15-C50) MIXTURE	-	-	-
Benzenamine, N-Phenyl-,Reaction Products With 2,4,4-Trimethylpentene 68411-46-1	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	2170 mg/m ³ (rat) 4hr
Alkyl diphenylamine 184378-08-3	>5000 mg/kg(Rat)	>2000 mg/kg (Rabbit)	-
Ethylene-Propylene Copolymer PROPRIETARY	-	-	-

Information on toxicological effects

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause allergic skin reaction. Respiratory Sensitization. Not classified.
Mutagenic effects:	No data available to indicate product or any components present at or greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC, NTP, or OSHA.
Reproductive toxicity	No information available.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Chronic toxicity	Prolonged skin contact may defat the skin and produce dermatitis.
Subchronic toxicity	No information available.
Target Organ Effects	Skin, Eyes, Respiratory system.
Neurological effects	No information available.
Other adverse effects	(CAS#68411-46-1) Benzeneamine, N-Phenyl, reaction products with 2,4,4 trimethylpentene: Adaptive effects were observed after repeated exposure in animal studies. May cause blood effects. May cause damage to liver after repeated high doses, as shown in animal studies.
Aspiration hazard	Risk of serious damage to the lungs (by aspiration).

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity	23.78 % of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .	
ATEmix (oral)	2893 mg/kg
ATEmix (dermal)	7994 mg/kg

ATEmix (inhalation-dust/mist) 30.9 mg/l
ATEmix (inhalation-vapor) 45 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity: Harmful to aquatic life. Chronic Aquatic Toxicity: Harmful to aquatic life with long lasting effects.

24.4 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrotreated Heavy Paraffinic Oil 64742-54-7		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Aliphatic Petroleum Distillates 64742-65-0		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Benzenamine, N-Phenyl-,Reaction Products With 2,4,4-Trimethylpentene 68411-46-1	>100 -72 h mg/L Desmodesmus subspicarius EC50	>71 96h mg/L Brachydanio rerio LC50		=51 48h mg/L EC50 Daphnia magna

Persistence and degradability

NOT READILY BIODEGRADABLE.

Bioaccumulation

Bioaccumulative potential.

Mobility

The product is insoluble and floats on water.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Dispose of in accordance with federal, state and local regulations.

Contaminated packaging

Do not reuse container. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

Federal Regulations

SARA 313

No SARA 313 chemicals are present above the reporting threshold: Zinc Compounds >= 0.1%.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

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). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

State Regulations (RTK)

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Chemical Name	CAS Number	California Proposition 65
Ethylene Glycol	107-21-1	Developmental

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA Rating

Health hazards 1

Flammability 1

Instability 0

Physical and Chemical Properties -

HMIS Rating

Health hazards 1*

Flammability 1

Physical hazards 0

Personal protection B

Chronic Hazard Star Legend

* = Chronic Health Hazard

Prepared by Environmental Health and Safety Department
Issue Date 01-24-2020
Revision Date 12-31-2019

Revision Note

Formula. The Emergency Overview has changed. SEE SECTION 2. This data sheet contains changes from the previous version in section(s): 2,3,5,6,8,11.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet