



# Safety Data Sheet

Issue Date: 01-Feb-2018

Revision Date: 01-Feb-2018

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Hybrid Engine Treatment

### Other means of identification

**SDS #** MP-002.HE

### Recommended use of the chemical and restrictions on use

**Recommended Use** Anti-friction engine oil additive.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Muscle Products Corp  
752 Kilgore Road  
Jackson Center, PA 16133  
www.musclelubricants.com

### Emergency Telephone Number

**Company Phone Number** 1-814-786-0166  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Brown liquid

**Physical State** Liquid

**Odor** Mild petroleum

### Classification

Acute toxicity - Inhalation (Vapors)	Category 4
Aspiration toxicity	Category 1

### Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed  
May be harmful in contact with skin

### Signal Word

**Danger**

### Hazard Statements

Harmful if inhaled  
May be fatal if swallowed and enters airways



**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a poison center or doctor/physician if you feel unwell  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do not induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Harmful to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Petroleum distillates, hydrotreated middle	64742-46-7	70-80
Sodium dodecyl benzene sulphonate	25155-30-0	1-10
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	1-10
2, 6-di-tert-butyl-4-methylphenol	128-37-0	<1
Triphenyl phosphite	101-02-0	<1
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	64742-52-5	<1

\*\*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.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
<b>Ingestion</b>	Immediately call a poison center or doctor/physician. Do not induce vomiting.

**Most important symptoms and effects**

<b>Symptoms</b>	May be harmful if swallowed. May be harmful in contact with skin. Harmful if inhaled. May be fatal if swallowed and enters airways.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical. Water can be used to cool containers exposed to fire.

**Unsuitable Extinguishing Media** Do not use a water jet or high-pressure stream.

### Specific Hazards Arising from the Chemical

Not determined.

**Hazardous Combustion Products** Smoke, irritating fumes and vapors, unidentified organic compounds, aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides and oxides of carbon and sulfur. Under combustion conditions, oxides of phosphorus, calcium, sodium sulfur and zinc will form.

### 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 water stream or molten burning material as it may scatter and spread the fire. Take no action involving personal risk or without suitable training. Do not release chemically contaminated water into drains, soil or surface water.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Evacuate personnel to safe areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions** See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for Containment** Stop leak if you can do it without risk.

**Methods for Clean-Up** Contain spilled material. Absorb spill with inert material (i.e. dry sand or earth). Sweep, scoop or vacuum the discharged material. Seal absorbent material in a closed labeled container for disposal. Large spills: Stop spill and dike area to prevent spreading. Pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth or other absorbent material and shoveled into containers. Do not use combustible materials, such as saw dust. Seal containers for later disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin, eyes or clothing. Use adequate ventilation. Do not eat, drink or smoke when using this product. Do NOT take internally. Wash face, hands, and any exposed skin thoroughly after handling. Launder work clothing before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store locked up. Store in a well-ventilated place. Keep container tightly closed. Store away from heat, sparks, flame. Do not reuse containers without proper cleaning or reconditioning. Empty container contains product residue which may exhibit hazards of the product. Store in a closed container away from incompatible materials. Do not store in unlabeled or mislabeled containers.

**Incompatible Materials**

Oxidizing agents. Reducing agent. Acids.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2, 6-di-tert-butyl-4-methylphenol 128-37-0	TWA: 2 mg/m <sup>3</sup> inhalable fraction and vapor	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Severely Hydrotreated Heavy Naphthenic Petroleum Oil 64742-52-5	TWA: 5 mg/m <sup>3</sup> (oil mist) STEL: 10 mg/m <sup>3</sup> (oil mist)	TWA: 5mg/m <sup>3</sup> (oil mist) STEL: none estab.	TWA: none estab. STEL: none estab.

**Appropriate engineering controls****Engineering Controls**

If use generates mist or vapor, local exhaust ventilation is recommended. Additional ventilation or exhaust may be required to maintain air concentrations below exposure limits. Thermal processing operations should be ventilated to control fumes given off during processing. Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment****Eye/Face Protection**

Safety glasses. If potential for splash or mist exists, wear chemical goggles or face shield.

**Skin and Body Protection**

Use nitrile or neoprene gloves. Wear coveralls, apron and /or boots as necessary to minimize contact. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. If handling hot product, ensure gloves, boots and clothing are heat resistant and insulated.

**Respiratory Protection**

Not usually necessary under conditions of normal use. If product is heated or misted, use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

**General Hygiene Considerations**

Laundry contaminated clothing before reuse. Discard leather articles saturated with product. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Mild petroleum
<b>Appearance</b>	Brown liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not determined	
<b>Melting Point/Freezing Point</b>	-22 °C / -7.6 °F	D2386
<b>Boiling Point/Boiling Range</b>	95 °C / 203 °F	D-86
<b>Flash Point</b>	130 °C / 266 °F	(ASTM D-93)
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Liquid-Not applicable	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	4.0 mm Hg @ 25°C (77°F)	
<b>Vapor Density</b>	Not determined	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Specific Gravity</b>	24.8	at 15.6°C (60°F)
<b>Water Solubility</b>	Insoluble in water	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	268 °C / 514.4 °F	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	14.80-20.5 cSt	@ 40°C (104°F)
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

## 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.

### Conditions to Avoid

Heat, flames and sparks. Incompatible Materials.

### Incompatible Materials

Oxidizing agents. Reducing agent. Acids.

### Hazardous Decomposition Products

Smoke, irritating vapors, carbon monoxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans may also be release. Under combustion conditions, oxides of phosphorus, calcium, sodium, sulfur and zinc will form.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	May be harmful in contact with skin.
<b>Inhalation</b>	Harmful if inhaled.
<b>Ingestion</b>	May be harmful if swallowed.

### Component Information

<b>Chemical Name</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Petroleum distillates, hydrotreated middle 64742-46-7	= 7400 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 4.6 mg/L ( Rat ) 4 h
Sodium dodecyl benzene sulphonate 25155-30-0	= 500 mg/kg ( Rat ) = 438 mg/kg ( Rat )	-	-
Zinc alkyl dithiophosphate 2215-35-2	= 2000 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	-
2, 6-di-tert-butyl-4-methylphenol 128-37-0	= 890 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Triphenyl phosphite 101-02-0	= 444 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 6.7 mg/L ( Rat ) 1 h
2-Ethylhexanol 104-76-7	1516 - 2774 mg/kg ( Rat )	= 1980 mg/kg ( Rabbit )	-
Petroleum derived calcium salt 61789-86-4	> 5000 mg/kg ( Rat )	> 4000 mg/kg ( Rabbit )	-

### Information on physical, chemical and toxicological effects

#### Symptoms

Please see section 4 of this SDS for symptoms.

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

#### Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
2, 6-di-tert-butyl-4-methylphenol 128-37-0		Group 3		

#### Legend

**IARC (International Agency for Research on Cancer)**

Group 3 IARC components are "not classifiable as human carcinogens"

#### Aspiration hazard

May be fatal if swallowed and enters airways.

### Numerical measures of toxicity

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Harmful to aquatic life with long lasting effects.

### Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated middle 64742-46-7		35: 96 h Pimephales promelas mg/L LC50 flow-through 10000: 96 h Pimephales promelas mg/L LC50 static		
Sodium dodecyl benzene sulphonate 25155-30-0		10.8: 96 h Oncorhynchus mykiss mg/L LC50 static		
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Zinc alkyl dithiophosphate 2215-35-2	1.0 - 5.0: 96 h Pseudokirchneriella subcapitata mg/L EC50	100: 96 h Pimephales promelas mg/L LC50 semi-static 25 - 50: 96 h Pimephales promelas mg/L LC50 static		4.0 - 6.0: 48 h Daphnia magna mg/L EC50
2, 6-di-tert-butyl-4-methylphenol 128-37-0	6: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.42: 72 h Desmodesmus subspicatus mg/L EC50	5: 48 h Oryzias latipes mg/L LC50		

Chemical Name	Chemical Name	Fish	Toxicity to microorganisms	Crustacea
2-Ethylhexanol 104-76-7	11.5: 72 h Desmodesmus subspicatus mg/L EC50	32 - 37: 96 h Oncorhynchus mykiss mg/L LC50 static 7.5: 96 h Oncorhynchus mykiss mg/L LC50 27 - 29.5: 96 h Pimephales promelas mg/L LC50 flow-through 29.7: 96 h Pimephales promelas mg/L LC50 static 10.0 - 33.0: 96 h Lepomis macrochirus mg/L LC50 static		39: 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 semi-static		6.2 - 12: 48 h Daphnia magna mg/L EC50
Severely Hydrotreated Heavy Naphthenic Petroleum Oil 64742-52-5		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
2, 6-di-tert-butyl-4-methylphenol 128-37-0	4.17
Triphenyl phosphite 101-02-0	4.98
2-Ethylhexanol 104-76-7	3.1

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**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
Zinc alkyl dithiophosphate 2215-35-2	Toxic

**14. TRANSPORT INFORMATION**

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

**DOT** Not regulated

**IATA** Not regulated**IMDG**  
**Marine Pollutant** This material may meet the definition of a marine pollutant**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Petroleum distillates, hydrotreated middle	Present	X		Present		Present	X	Present	X	X
Sodium dodecyl benzene sulphonate	Present	X		Present		Present	X	Present	X	X
Petroleum distillates, hydrotreated heavy paraffinic	Present	X		Present			X	Present	X	X
2, 6-di-tert-butyl-4-methylphenol	Present	X		Present		Present	X	Present	X	X
Triphenyl phosphite	Present	X		Present		Present	X	Present	X	X
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	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**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium dodecyl benzene sulphonate 25155-30-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**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

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc alkyl dithiophosphate - 2215-35-2	2215-35-2	<5	1.0

**CWA (Clean Water Act)**



Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium dodecyl benzene sulphonate	1000 lb			X
Zinc alkyl dithiophosphate		X		

### US State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium dodecyl benzene sulphonate 25155-30-0	X	X	X
Zinc alkyl dithiophosphate 2215-35-2	X		X
2, 6-di-tert-butyl-4-methylphenol 128-37-0	X	X	X
2-Ethylhexanol 104-76-7		X	X

## 16. OTHER INFORMATION

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	1	1	-
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2*	1	0	Not determined

**Chronic Hazard Star Legend**

\* = Chronic Health Hazard

**Issue Date:** 01-Feb-2018  
**Revision Date:** 01-Feb-2018  
**Revision Note:** Original release

#### 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**