

SAFETY DATA SHEET

Signature Series Max-Duty Synthetic Diesel Oil

Section 1. Identification Date Version			: 10/01/2016 : 7
GHS product identifier Code	: Signature Series Max-Duty Synthetic Diesel Oil : DME		
Product type	: Liquid.		
Identified uses	: Diesel Engine Oil. Not to be misted.		
Manufacturer	: AMSOIL INC. One AMSOIL Center Superior, WI 54880 Tel: +1 715-392-7101		
Initial Supplier (Canada)	: AMSOIL INC. Bordner, Ladner, Gervais Scotia Plaza, 40 King St W Toronto, ON, Canada M5H 3Y4 Tel: +1 416-367-6547		
Emergency telephone number (with hours of operation)	: CHEMTREC: Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect cal (24/7)		

Section 2. Hazards identification

OSHA/HCS status	: This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3
GHS label elements	
Signal word	: No signal word.
Hazard statements	: Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: Avoid release to the environment.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazards not otherwise class	sified (HNOC)
Physical hazards not otherwise classified (PHNOC)	: None known.

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Health hazards not
otherwise classified
(HHNOC)
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: None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

<u>CAS number/other ider</u>	<u>ntifiers</u>		
CAS number	: Not applicable.		
Product code	: DME		
Ingredient name		%	CAS number
bis(Nonylphenyl)amine		1 - 5	36878-20-3
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts		1 - 5	70024-69-0
Alcohols, C12-16, ethoxylated		0.1 - 1	68551-12-2
Alkylated phenol		0 - 0.1	121158-58-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures			
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.		
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Maintain an open airway. Get medical attention if symptoms occur.		
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.		
Ingestion	: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.		

Most important symptoms/effects, acute and delayed

Potential acute health effects				
Eye contact	: No known significant effects or critical hazards.			
Inhalation	: No known significant effects or critical hazards.			
Skin contact	: No known significant effects or critical hazards.			

Ingestion	: No known significant effects or critical hazards.			
Over-exposure signs/symptoms				
Eye contact	: No known significant effects or critical hazards.			
Inhalation	: No known significant effects or critical hazards.			
Skin contact	: No known significant effects or critical hazards.			
Ingestion	: No known significant effects or critical hazards.			
Indication of immediate medical attention and special treatment needed, if necessary				
Notes to physician	: Treat symptomatically.			
Specific treatments	: No specific treatment.			
Protection of first-aiders	: No special protection is required.			

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: No special protection is required.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	: Put on appropriate personal protective equipment.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	l	
Protective measures	-	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Avoid contact with used product. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	-	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Under conditions which may generate mists, the following exposure limits are recommended: ACGIH TLV TWA: 5 mg/m³; STEL: 10 mg/m³.

United States

None known.

<u>Canada</u>

Occupational exposure limits None.

Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	1	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Individual protection measur	es	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	1	Not required under normal conditions of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Brown.
Odor	: Mild hydrocarbon.
Odor threshold	: Not available.
рН	Not available.
Melting point	: -40°C (-40°F)
Boiling point	: Not available.
Flash point	: Open cup: 242°C (467.6°F) [Cleveland.]
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.

Relative density	: 0.8607
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic: 0.156 cm ² /s (15.6 cSt) (100°C) Kinematic: 1.124 cm ² /s (112.4 cSt) (40°C)
Volatility	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Alcohols, C12-16, ethoxylated	Eyes - Moderate irritant	Rabbit	-	24 hours 100 µL	-

Sensitization

There is no data available.

Carcinogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure	: Eye contact. Inhalation. Ingestion.
Potential acute health effects	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the phys	sical, chemical and toxicological characteristics
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.

Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
<u>Long term exposure</u>	
Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.
Potential chronic health eff	<u>ects</u>
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
bis(Nonylphenyl)amine Alkylated phenol	3.64 to 7.02 6.1	1730 1601	high high
Mobility in soil			

Mobility in soil

Soil/water partition coefficient (Koc)

: There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

DME

Section 14. Transport information

	DOT	TDG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

AERG : Not applicable

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and the IBC Code

Section 15. Regulatory information

Clean V	States inventory (TSCA 8b): All components are listed or exempted. /ater Act (CWA) 307: Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis orodithioate); Zinc Dialkyldithiophosphate
Clean Air Act Section 112 : Not liste (b) Hazardous Air Pollutants (HAPs)	d
Clean Air Act Section 602 : Not liste Class I Substances	d
Clean Air Act Section 602 : Not liste Class II Substances	d
DEA List I Chemicals : Not liste (Precursor Chemicals)	d
DEA List II Chemicals : Not liste (Essential Chemicals)	d
SARA 302/304	
Composition/information on ingredie	<u>nts</u>
No products were found.	

SARA 304 RQ

: Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure		· · ·	Delayed (chronic) health hazard
Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	No.	No.	No.	Yes.	No.
Alcohols, C12-16, ethoxylated	No.	No.	No.	Yes.	No.
Alkylated phenol	No.	No.	No.	Yes.	Yes.

SARA 313

No products were found.

State regulations Massachusetts

: None of the components are listed.

New York

: None of the components are listed.

New Jersey

- : None of the components are listed.
- Pennsylvania
- : None of the components are listed.

California Prop. 65

No products were found.

<u>Canada</u>

Canadian lists	
Canadian NPRI	: None of the components are listed.
CEPA Toxic substances	: None of the components are listed.
Canada inventory	: All components are listed or exempted.

Section 16. Other information

<u>History</u>

Date of issue mm/dd/yyyy	: 10/01/2016
Date of previous issue	: 10/01/2015
Version	: 7
Prepared by	: AMSOIL INC.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.