



# SAFETY DATA SHEET

US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Issuing Date 20-Nov-2022

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Revision Number 1

## 1. Identification

### Product identifier

**Product Name** AMSOIL Signature Series SAE 0W-20, 0W-30, 0W-40 100% Synthetic Motor Oil

### Other means of identification

**Product Code(s)** ASM, AZO, AZF

**Synonyms** None

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

**Recommended use** Engine oil

**Restrictions on use** Avoid formation of mists

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

#### Initial supplier identifier

AMSOIL INC.  
Bay Adelaide Centre, East  
Tower  
22 Adelaide St. W  
Toronto, ON, Canada M5H 4E3  
T:+1 877-822-5172

#### Manufacturer Address

AMSOIL INC.  
One AMSOIL Center  
Superior, WI 54880, USA  
T: +1 715-392-7101

**E-mail** compliance@amsoil.com

### Emergency telephone number

**Emergency telephone** CHEMTREC: Within USA and Canada: 1-800-424-9300  
Outside the USA and Canada: +1 703-741-5970  
(collect calls accepted) 24/7

## 2. Hazard(s) identification

### Classification

Reproductive toxicity	Category 2
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### Label elements

#### **Warning**

#### **Hazard statements**

Suspected of damaging fertility or the unborn child.



**Precautionary Statements - Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection.

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant.

**Other information**

Causes mild skin irritation.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Reaction products of 1-decene, hydrogenated	68649-12-7	5-10	-	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	1-5	-	-
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	1-5	-	-

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

**Chemical Additions**

The classification as a carcinogen does not apply as it can be shown that the substance(s) contain(s) less than 3% DMSO extract as measured by IP 346.

### 4. First-aid measures

**Description of first aid measures**

**General advice**

Show this safety data sheet to the doctor in attendance.

**Inhalation**

Remove person to fresh air and keep comfortable for breathing.

**Eye contact**

Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Skin contact**

Wash skin with soap and water. Take off contaminated clothing. Get medical attention if

irritation develops and persists.

**Ingestion** Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

**Self-protection of the first aider** Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Prolonged contact may cause redness and irritation. May cause temporary eye irritation. May cause gastrointestinal discomfort if consumed in large amounts. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical** Containers can burst or explode when heated, due to excessive pressure build-up. Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous combustion products** Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required. See section 8 for more information. Ensure adequate ventilation.

**For emergency responders** Use personal protection recommended in Section 8.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

**Reference to other sections** For additional information see: Section 8: Exposure controls/personal protection; Section 12: Ecological information; Section 13: Disposal considerations.

**7. Handling and storage**

**Precautions for safe handling**

**Advice on safe handling** Avoid contact with used product. Wash hands thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Do not reuse empty containers. Store away from incompatible materials. See section 10 for more information. Store locked up.

**8. Exposure controls/personal protection**

**Control parameters**

**Exposure Limits** Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m<sup>3</sup>. Short-term exposure limit (15-minute): 10 mg/m<sup>3</sup>.

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering controls** Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** If there is a risk of contact: Wear safety glasses with side shields (or goggles).

**Hand protection** If there is a risk of contact: Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

**Skin and body protection** If there is a risk of contact: Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** Avoid release to the environment.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

<b>Appearance</b>	
Physical state	Liquid
Color	Amber
<b>Odor</b>	Mild hydrocarbon
<b>Odor threshold</b>	No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>		No data available
<b>Melting point / freezing point</b>		No data available

<b>Initial boiling point and boiling range</b>		No data available
<b>Flash point</b>	220 - 222 °C / 428 - 431.6 °F	Cleveland Open Cup ASTM D 92
<b>Evaporation rate</b>		No data available
<b>Flammability</b>		No data available
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>		No data available
<b>Lower flammability or explosive limits</b>		No data available
<b>Vapor pressure</b>		No data available
<b>Vapor density</b>		No data available
<b>Relative density</b>	0.8545 - 0.855	No data available
<b>Water solubility</b>		No data available
<b>Solubility(ies)</b>		No data available
<b>Partition coefficient</b>		No data available
<b>Autoignition temperature</b>		No data available
<b>Decomposition temperature</b>		No data available
<b>Kinematic viscosity</b>	47.1 - 84.6 cSt at 40 °C 8.8 - 14.8 cSt at 100 °C	ASTM D445
<b>Dynamic viscosity</b>		No data available

**Other information**

<b>Explosive properties</b>	No information available.
<b>Oxidizing properties</b>	No information available.
<b>Softening point</b>	No information available
<b>Pour Point</b>	-53(-50)°C [ASTM D 97]
<b>Fire Point</b>	238-244°C (COC) [ASTM D 92]
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	No information available

**10. Stability and reactivity**

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	None known based on information supplied.
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

**11. Toxicological information**

**Information on likely routes of exposure**

**Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes mild skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Prolonged contact may cause redness and irritation. May cause temporary eye irritation. May cause gastrointestinal discomfort if consumed in large amounts. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

**Acute toxicity**

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral) 34,469.70 mg/kg

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Reaction products of 1-decene, hydrogenated	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	> 5000 mg/kg ( Rat )	> 2000 mg/kg (Rat)	-

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

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes mild skin irritation.

Component Information	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Method	OECD Test No. 404: Acute Dermal Irritation/Corrosion
Species	Rabbit
Exposure route	Dermal
Effective dose	0.5 mL
Exposure time	4 hours
Results	Mild skin irritant

**Serious eye damage/eye irritation** No information available.

Component Information	
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene (68411-46-1)	
Method	OECD Test No. 405: Acute Eye Irritation/Corrosion
Species	Rabbit
Exposure route	Eye
Effective dose	0.1 mL
Results	non-irritant

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The supplier declares that it can be shown that the substance(s) contain less than 3% DMSO extract as measured by IP 346.

**Reproductive toxicity** Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** Due to the viscosity, this product does not present an aspiration hazard.

**12. Ecological information**

**Ecotoxicity** Not considered to be harmful to aquatic life. Large or frequent spills may have hazardous effects on the environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene 68411-46-1	EC50: 51mg/L (48h, Daphnia magna)	LC50: >100mg/L (96h, Danio rerio)	-	-
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	-	LC50: 1.0 - 5.0mg/L (96h, Pimephales promelas) LC50: 10.0 - 35.0mg/L (96h, Pimephales promelas)	-	EC50: 1 - 1.5mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulation**

**Component Information**

Chemical name	Partition coefficient
Reaction products of 1-decene, hydrogenated 68649-12-7	5
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene 68411-46-1	6.66

**Mobility in soil** No information available.

**Other adverse effects** No information available.

**13. Disposal considerations**

**Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations, Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**California waste information** This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. Transport information**

**DOT** Not regulated

**TDG** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

#### International Inventories

Contact supplier for inventory compliance status

\*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

#### US Federal Regulations

##### **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	SARA 313 - Threshold Values %
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts - 68649-42-3	1.0

##### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

##### **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 Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	-	X	-	-

##### **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.

#### US State Regulations

##### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
Methyloxirane - 75-56-9	Carcinogen



Naphthalene - 91-20-3	Carcinogen
1,4-dioxane - 123-91-1	Carcinogen
Ethyl acrylate - 140-88-5	Carcinogen

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	X	-	X
Bis(2-ethylhexyl) hydrogen phosphate 298-07-7	X	-	-
Diphenylamine 122-39-4	X	X	X
1,4-dioxane 123-91-1	X	X	X
Butan-1-ol 71-36-3	X	X	X
Ethyl acrylate 140-88-5	X	X	X
Ethylene oxide 75-21-8	X	X	X
Methyloxirane 75-56-9	X	X	X
Phosphoric acid 7664-38-2	X	X	X
Naphthalene 91-20-3	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**Key or legend to abbreviations and acronyms used in the safety data sheet**

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA                      TWA (time-weighted average)                      STEL                      STEL (Short Term Exposure Limit)  
Ceiling                      Maximum limit value                      \*                      Skin designation

**Key literature references and sources for data used to compile the SDS**

- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AELG(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)
- Japan GHS Classification
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
- NIOSH (National Institute for Occupational Safety and Health)
- National Library of Medicine's ChemID Plus (NLM CIP)
- National Toxicology Program (NTP)
- New Zealand's Chemical Classification and Information Database (CCID)
- Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

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Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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**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**