



# 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 11-Sep-2022

Revision Date 11-Sep-2022

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Synthetic Two-Stroke Oil

### Other means of identification

**Product Code(s)** HPM

**Synonyms** None

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

**Recommended use** Lubricating 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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

### Label elements

#### **Warning**

#### **Hazard statements**

Causes skin irritation.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust, fume, gas, mist, vapors and spray. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection and face protection.

**Precautionary Statements - Response**

Specific treatment (see supplemental first aid instructions on this label).

**Eyes**

IF IN EYES: 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 and attention.

**Skin**

IF ON SKIN: Wash with plenty of water and soap. If skin irritation occurs: Get medical advice and attention. Take off contaminated clothing and wash it before reuse.

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Precautionary Statements - Disposal**

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

**Other information**

Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

### 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)
2-EH Dimerate	-	10-30	-	-
Hydrogenated base oil	64742-47-8	7-13	-	-
Hydrogenated base oil	64742-48-9	7-13	-	-
Polyolefin alkyl phenol alkyl amine	PROPRIETARY	5-10	-	-
Hydrogenated base oil	64742-95-6	1-5	-	-
Benzene, 1,2,4-trimethyl-	95-63-6	0.1-1	-	-

\*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

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. Get medical attention if irritation or other symptoms occur.
<b>Inhalation</b>	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

<b>Symptoms</b>	May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization in susceptible persons. May cause gastrointestinal discomfort if consumed in large amounts. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.
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### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating gases and vapors. Containers can burst or explode when heated, due to excessive pressure build-up.
<b>Hazardous combustion products</b>	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	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

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b><u>Methods and material for containment and cleaning up</u></b>	
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	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. Prevent product from entering drains.
<b>Reference to other sections</b>	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

<b>Advice on safe handling</b>	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. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. Avoid contact with used product. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Do not reuse empty containers. Protect from physical damage. Keep out of the reach of children. Store away from incompatible materials. See section 10 for more information. Store in accordance with local regulations.
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## 8. Exposure controls/personal protection

### Control parameters

<b>Exposure Limits</b>	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> .
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Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 10 ppm	-	TWA: 25 ppm TWA: 125 mg/m <sup>3</sup>

<b>Biological occupational exposure limits</b>	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.
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### Appropriate engineering controls

<b>Engineering controls</b>	Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	If there is a risk of contact: Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	If there is a risk of contact: Wear suitable gloves. Impervious 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.

<b>Skin and body protection</b>	If there is a risk of contact: Wear suitable protective clothing. Long sleeved clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>Environmental exposure controls</b>	Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.
<b>General hygiene considerations</b>	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

Physical state	Liquid
Color	Blue
Odor	Hydrocarbons
Odor threshold	No information available

#### Property

#### Values

#### Remarks • Method

pH		No data available
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flash point	104 °C / 219.2 °F	Cleveland Open Cup ASTM D 92
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Vapor density		No data available
Relative density	0.8670	No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity	37.3 cSt at 40 °C 7.3 cSt at 100 °C	ASTM D445
Dynamic viscosity		No data available

#### Other information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available
Pour Point	-55°C [ASTM D 97]
Fire Point	104°C (COC) [ASTM D 92]
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	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>	Strong acids. Strong bases. Strong oxidizing agents.
<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. May cause irritation of respiratory tract. May cause drowsiness or dizziness.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

<b>Symptoms</b>	Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization in susceptible persons. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.
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### Acute toxicity

#### Numerical measures of toxicity

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

<b>ATEmix (dermal)</b>	49,524.20 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	54.30 mg/l
<b>ATEmix (inhalation-vapor)</b>	695.60 mg/l

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrogenated base oil	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h
Hydrogenated base oil	> 6000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	> 8500 mg/m <sup>3</sup> ( Rat ) 4 h
Hydrogenated base oil	= 8400 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	= 3400 ppm ( Rat ) 4 h
Benzene, 1,2,4-trimethyl-	= 3280 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 18 g/m <sup>3</sup> ( Rat ) 4 h

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

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	The supplier declares that it can be shown that the substance(s) contain less than 3% DMSO extract as measured by IP 346.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	May cause drowsiness or dizziness. May cause respiratory irritation.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	Due to the viscosity, this product does not present an aspiration hazard.

**12. Ecological information**

**Ecotoxicity** Toxic to aquatic life with long lasting effects. Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrogenated base oil 64742-47-8	-	LC50: =45mg/L (96h, Pimephales promelas) LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss)	-	-
Hydrogenated base oil 64742-48-9	-	LC50: =2200mg/L (96h, Pimephales promelas)	-	-
Hydrogenated base oil 64742-95-6	-	LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	-	EC50: =6.14mg/L (48h, Daphnia magna)
Benzene, 1,2,4-trimethyl- 95-63-6	-	LC50: 7.19 - 8.28mg/L (96h, Pimephales promelas)	-	EC50: =6.14mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Benzene, 1,2,4-trimethyl- 95-63-6	3.63

**Mobility in soil** No information available.

**Other adverse effects** No information available.

**13. Disposal considerations****Waste treatment methods**

**Waste from residues/unused** Dispose of waste in accordance with environmental legislation, Dispose of in accordance

**products** with local regulations.

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

## 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 %
Benzene, 1,2,4-trimethyl- - 95-63-6	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 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.

#### US State Regulations

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Cumene - 98-82-8	Carcinogen
Naphthalene - 91-20-3	Carcinogen
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive
Ethylbenzene - 100-41-4	Carcinogen
Toluene - 108-88-3	Developmental

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Benzene, 1,2,4-trimethyl- 95-63-6	X	X	X
Benzene, 1,3,5-trimethyl- 108-67-8	-	X	-
Cumene 98-82-8	X	X	X
Dipropylene Glycol Monomethyl Ether 34590-94-8	X	X	X
Diphenylamine 122-39-4	X	X	X
Naphthalene 91-20-3	X	X	X
Benzene 71-43-2	X	X	X
n-Propylbenzene 103-65-1	X	X	X
Xylene 1330-20-7	X	X	X
Toluene 108-88-3	X	X	X
Ethylbenzene 100-41-4	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) (AEGL(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  
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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<b>Revision Note</b>	Initial 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**