



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
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 28-May-2021

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Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Anti-Varnish AW Hydraulic Oil

### Other means of identification

**Product Code(s)** HAV46AA

**Synonyms** None

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

**Recommended use** Hydraulic oil

**Restrictions on use** Avoid formation of mists.

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

#### Supplier Address

AMSOIL INC.  
14328-121A Ave  
Edmonton, AB T5L 2T2  
T: 877-830-4769

#### 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

This product is not considered hazardous by either the US 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Workplace Hazardous Material Information System (WHMIS 2015)

### Label elements

#### **Hazard statements**

Not classified.

### Other information

No information available.

### 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) |
|--|------------|----------|--|---|
| Hydrogenated base oil  | 64742-54-7 | 80-100   | -  | -   |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | 84605-29-8 | 0.1-1    | -  | -   |
| 2,6-Di-tert-butylphenol  | 128-39-2   | 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

##### **General advice**

Get medical attention immediately if symptoms occur. 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**

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

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

##### **Symptoms**

May cause temporary eye irritation. May cause gastrointestinal discomfort if consumed in large amounts. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization in susceptible persons.

#### 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.

|   |  |
|---|--|
| <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>     | Use personal protective equipment as required. See section 8 for more information. Ensure adequate ventilation. |
| <b>For emergency responders</b> | Use personal protection recommended in Section 8.   |

### Methods and material for containment and cleaning up

|                                    |  |
|------------------------------------|--|
| <b>Methods for containment</b>     | Prevent further leakage or spillage if safe to do so.  |
| <b>Methods for cleaning up</b>     | Clean contaminated surface thoroughly. After cleaning, flush away traces with water. 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). |
| <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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling. Avoid contact with used product. |
|--------------------------------|---|

### Conditions for safe storage, including any incompatibilities

|                           |   |
|---------------------------|---|
| <b>Storage Conditions</b> | Keep container tightly closed in a dry and well-ventilated place. Protect from physical damage. Do not reuse empty containers. Store away from incompatible materials. See section 10 for more information. |
|---------------------------|---|

## 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> . |
|------------------------|--|

| Chemical name         | ACGIH TLV                            | OSHA PEL | NIOSH |
|-----------------------|--------------------------------------|----------|-------|
| Hydrogenated base oil | TWA: 5 mg/m <sup>3</sup> (inhalable) | -        | -     |

|            |           |  |  |
|------------|-----------|--|--|
| 64742-54-7 | fraction) |  |  |
|------------|-----------|--|--|

**Biological occupational exposure limits****Appropriate engineering controls**

**Engineering controls** 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** Wear suitable gloves. If there is a risk of contact: 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** Handle in accordance with good industrial hygiene and safety practice. 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****Appearance**

|                |                          |
|----------------|--------------------------|
| Physical state | Liquid                   |
| Color          | Straw-colored            |
| Odor           | Mild hydrocarbon         |
| Odor threshold | No information available |

| <b><u>Property</u></b>                  | <b><u>Values</u></b>                   | <b><u>Remarks • Method</u></b> |
|---|--|--------------------------------|
| pH                                      |  | No data available              |
| Melting point / freezing point          |  | No data available              |
| Initial boiling point and boiling range |  | No data available              |
| Flash point                             | 250 °C / 482 °F                        | Cleveland Open Cup ASTM D92    |
| 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                        | 0.8678                                 | 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                     | 44.9 cSt at 40 °C<br>7.0 cSt at 100 °C | ASTM D445                      |
| Dynamic viscosity                       |  | 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>           | -39°C [ASTM D 97]         |
| <b>Fire Point</b>           | 262°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**

|                     |   |
|---------------------|---|
| <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. |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. |

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

|                 |  |
|-----------------|--|
| <b>Symptoms</b> | May cause temporary eye irritation. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization in susceptible persons. |
|-----------------|--|

**Acute toxicity****Numerical measures of toxicity****Component Information**

| Chemical name  | Oral LD50                                    | Dermal LD50             | Inhalation LC50        |
|--|--|-------------------------|------------------------|
| Hydrogenated base oil  | > 15 g/kg ( Rat )                            | > 5000 mg/kg ( Rabbit ) | -                      |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | = 3100 mg/kg ( Rat )<br>= 3200 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 2.3 mg/L ( Rat ) 4 h |
| 2,6-Di-tert-butylphenol  | > 5000 mg/kg ( Rat )                         | > 10 g/kg ( Rabbit )    | -                      |

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

**Skin corrosion/irritation** No information available.

| Component Information   |  |
|---|--|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) |  |
| Method  | OECD Test No. 404: Acute Dermal Irritation/Corrosion |
| Species   | Rabbit   |
| Exposure route  | Dermal   |
| Effective dose  | 0.5 mL   |
| Exposure time   | 4 hours  |
| Results   | Irritant   |

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

| Component Information   |            |
|---|------------|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) |            |
| Species   | Rabbit     |
| Exposure route  | Eye        |
| Effective dose  | 0.1 mL     |
| Results   | Eye Damage |

**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.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name                       | ACGIH | IARC    | NTP   | OSHA |
|-------------------------------------|-------|---------|-------|------|
| Hydrogenated base oil<br>64742-54-7 | A2    | Group 1 | Known | X    |

#### Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

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

Group 1 - Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** No information available.

**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                            |
|---|----------------------|--|----------------------------|--------------------------------------|
| Hydrogenated base oil<br>64742-54-7                         | -                    | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | -                          | EC50: >1000mg/L (48h, Daphnia magna) |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and | -                    | LC50: =4.5mg/L (96h, Oncorhynchus mykiss)  | -                          | EC50: =23mg/L (48h, Daphnia magna)   |

|  |   |   |   |   |
|--|---|---|---|---|
| iso-Pr) esters, zinc salts<br>84605-29-8 |   |   |   |   |
| 2,6-Di-tert-butylphenol<br>128-39-2      | - | - | - | EC50: =0.45mg/L (48h,<br>Daphnia magna) |

**Persistence and degradability** No information available.

**Bioaccumulation** There is no data for this product.

#### Component Information

| Chemical name  | Partition coefficient |
|--|-----------------------|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | 0.56                  |

**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

| Chemical name         | CAS No     | US TSCA Inventory listing | US TSCA inactive/active designation |
|-----------------------|------------|---------------------------|-------------------------------------|
| Hydrogenated base oil | 64742-54-7 | Present                   | Active                              |
| Diisodecyl adipate    | 27178-16-1 | Present                   | Active                              |

|  |            |         |        |
|--|------------|---------|--------|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | 84605-29-8 | Present | Active |
| Unknown acute tox. - inhalation  | -          |         |        |
| non hazardous ingredient   | -          |         |        |
| 2,6-Di-tert-butylphenol  | 128-39-2   | Present | Active |
| Hydrogenated base oil  | 8042-47-5  | Present | Active |
| Hydrogenated base oil  | 72623-86-0 | Present | Active |
| Hydrogenated base oil  | 64742-52-5 | Present | Active |
| Hydrogenated base oil  | 64742-53-6 | Present | Active |
| O,O,O-triphenyl phosphorothioate   | 597-82-0   | Present | Active |
| Calcium sulfonates   | 64521-08-0 |         |        |
| 2-Ethylhexan-1-ol  | 104-76-7   | Present | Active |
| Hydrogenated base oil  | 64742-46-7 | Present | Active |
| Triphenyl phosphite  | 101-02-0   | Present | Active |
| Maleic anhydride   | 108-31-6   | Present | Active |
| Phenol   | 108-95-2   | Present | Active |
| Naphthalene  | 91-20-3    | Present | Active |
| Ethyl acrylate   | 140-88-5   | Present | Active |
| Benzene  | 71-43-2    | Present | Active |
| 2,6-Di-tert-butyl-p-cresol   | 128-37-0   | Present | Active |
| Ethylbenzene   | 100-41-4   | Present | Active |
| Xylene   | 1330-20-7  | Present | Active |

\*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, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts - 84605-29-8 | 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, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | -                           | 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                        |
|---------------------------|--|
| Naphthalene - 91-20-3     | Carcinogen                                       |
| Ethyl acrylate - 140-88-5 | Carcinogen                                       |
| Ethylbenzene - 100-41-4   | Carcinogen                                       |
| Benzene - 71-43-2         | Carcinogen<br>Developmental<br>Male Reproductive |

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

| Chemical name  | New Jersey | Massachusetts | Pennsylvania |
|--|------------|---------------|--------------|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | X          | -             | X            |
| Hydrogenated base oil<br>64742-53-6  | -          | X             | -            |
| 2-Ethylhexan-1-ol<br>104-76-7  | -          | X             | X            |
| Maleic anhydride<br>108-31-6   | X          | X             | X            |
| Phenol<br>108-95-2   | X          | X             | X            |
| Naphthalene<br>91-20-3   | X          | X             | X            |
| Ethyl acrylate<br>140-88-5   | X          | X             | X            |
| Benzene<br>71-43-2   | X          | X             | X            |
| 2,6-Di-tert-butyl-p-cresol<br>128-37-0   | X          | X             | X            |
| Ethylbenzene<br>100-41-4   | X          | X             | X            |
| Xylene<br>1330-20-7  | 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)  
Ceiling Maximum limit value

STEL  
\*

STEL (Short Term Exposure Limit)  
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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**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**