# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Commission Regulation (EU) 2020/878 and Regulation (EC) No. 1272/2008

**Issuing Date** 18-May-2023 **Revision Date** 18-May-2023 **Revision Number** 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Code(s)** AEL

**Product Name** AMSOIL 100% Synthetic European Motor Oil LS SAE 5W-30

**Synonyms** None

**Pure substance/mixture** Mixture

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** Engine oil

**Uses advised against** Avoid formation of mists

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

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

**For further information, please contact**
**E-mail address** compliance@amsoil.com

### 1.4. Emergency telephone number

**Emergency telephone** CHEMTREC (Italy): 39-0245557031
CHEMTREC International: +1 703-741-5970

| **Emergency telephone - §45 - (EC)1272/2008** | |
|---|---|
| **Europe** | **112** |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

*Regulation (EC) No 1272/2008*
This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

### 2.2. Label elements

**Hazard statements**
Not classified
EUH210 - Safety data sheet available on request

### 2.3. Other hazards

The product does not contain any substance(s) classified as PBT or vPvB.

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

| Chemical name | Weight-% | REACH registration number | EC No (EU Index No) | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|---|---|---|---|---|---|---|---|
| Hydrogenated base oil<br>64742-54-7 | 20-30 | No data available | (649-467-00-8)<br>265-157-1 | Carc. 1B (H350) (*L) | - | - | - |
| Hydrogenated base oil<br>64742-54-7 | 20-30 | No data available | (649-467-00-8)<br>265-157-1 | Carc. 1B [*L](H350) | - | - | - |
| Hydrogenated base oil<br>72623-86-0 | 1-5 | No data available | (649-482-00-X)<br>276-737-9 | Asp.Tox.1 (H304) | - | - | - |
| Hydrogenated base oil<br>72623-87-1 | 1-5 | No data available | (649-483-00-5)<br>276-738-4 | Asp.Tox.1 (H304) | - | - | - |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethyl butyl and iso-Pr) esters, zinc salts<br>84605-29-8 | <1.0 | No data available | 283-392-8 | Skin Irrit. 2 (H315)<br>Eye Dam. 1 (H318)<br>Aquatic Chronic 2 (H411) | Skin Irrit. 2 :: C>=6.25%<br>Eye Dam. 1 :: C>12.5%<br>Eye Irrit. 2 :: 10%<C<=12.5 % | - | - |
| Hydrogenated base oil<br>92062-09-4 | <1.0 | No data available | (649-247-00-1)<br>295-523-6 | Carc. 1B (H350) | - | - | - |
| Aryl polyolefin<br>132983-38-1 | <1.0 | No data available | No information available | No data available | - | - | - |
| Vinyl acetate<br>108-05-4 | <0.001 | No data available | (607-023-00-0)<br>203-545-4 | Acute Tox. 4 (H332)<br>Carc. 2 (H351)<br>STOT SE 3 (H335)<br>Flam. Liq. 2 (H225)<br>[C] | - | - | - |

**Additional information**
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.

**Full text of H- and EUH-phrases: see section 16**

*Acute Toxicity Estimate*

*If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components*

| Chemical name | Oral LD50 mg/kg | Dermal LD50 mg/kg | Inhalation LC50 - 4 hour - dust/mist - mg/L | Inhalation LC50 - 4 hour - vapour - mg/L | Inhalation LC50 - 4 hour - gas - ppm |
|---|---|---|---|---|---|
| Hydrogenated base oil 64742-54-7 | 15000 | 5000 | No data available | No data available | No data available |
| Hydrogenated base oil 64742-54-7 | 15000 | 5000 | No data available | No data available | No data available |
| Hydrogenated base oil 72623-86-0 | 5000 | 2000 | 2.18 | No data available | No data available |
| Hydrogenated base oil 72623-87-1 | 5000 | 2000 | No data available | No data available | No data available |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8 | 3100<br>3200 | 2000 | 2.3 | No data available | No data available |
| Vinyl acetate 108-05-4 | 2900 | 2335 | No data available | 12.956 | No data available |

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

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

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

**Symptoms** May cause gastrointestinal discomfort if consumed in large amounts. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. May cause temporary eye irritation. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation in susceptible persons.

**Effects of Exposure** No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO2), 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.

### 5.2. Special hazards arising from the substance or mixture

**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 vapours.

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

### 5.3. Advice for firefighters

**Specific/special fire-fighting measures** Fires need to be assessed to determine appropriate protocols and safety measures for firefighting, including establishing safe zones, extinguishing media to be used, firefighter protection, and actions to control or extinguish the fire.

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

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

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

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

### 6.2. Environmental precautions

**Environmental precautions** Avoid release to the environment. See Section 12 for additional Ecological Information.

### 6.3. 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.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

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

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with used product. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Wash thoroughly after handling.

**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.

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

**Storage Conditions** Do not reuse empty containers. Empty containers may contain hazardous residues. Use appropriate containment to avoid environmental contamination. Store away from incompatible materials. See section 10 for more information.

**Storage class (TRGS 510)** LGK 10.

**7.3. Specific end use(s)**

**Specific use(s).** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/personal protection

**8.1. 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/m³. Short-term exposure limit (15-minute): 10 mg/m³.

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|---|---|---|---|---|---|
| Vinyl acetate<br>108-05-4 | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | - | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | STEL: 10 ppm<br>STEL: 35.2 mg/m³<br>TWA: 5 ppm<br>TWA: 17.6 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| Vinyl acetate<br>108-05-4 | STEL: 35.2 mg/m³<br>STEL: 10 ppm<br>TWA: 17.6 mg/m³<br>TWA: 5 ppm | TWA: 18 mg/m³<br>Ceiling: 36 mg/m³ | TWA: 5 ppm<br>TWA: 18 mg/m³<br>STEL: 35.2 mg/m³<br>STEL: 10 ppm | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | TWA: 5 ppm<br>TWA: 18 mg/m³<br>STEL: 10 ppm<br>STEL: 35 mg/m³ |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| Vinyl acetate<br>108-05-4 | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 35.2 mg/m³<br>STEL: 10 ppm | TWA: 10 ppm<br>TWA: 36 mg/m³<br>H* | TWA: 10 ppm<br>TWA: 36 mg/m³<br>Peak: 10 ppm<br>Peak: 36 mg/m³<br>* | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | TWA: 17.6 mg/m³<br>TWA: 5 ppm<br>STEL: 35.2 mg/m³<br>STEL: 10 ppm |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| Vinyl acetate<br>108-05-4 | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | TWA: 10 ppm<br>TWA: 35 mg/m³<br>STEL: 15 ppm<br>STEL: 53 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| Vinyl acetate<br>108-05-4 | STEL: 35.2 mg/m³<br>STEL: 10 ppm<br>TWA: 17.6 mg/m³<br>TWA: 5 ppm | skin*<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³<br>TWA: 17.6 mg/m³<br>TWA: 5 ppm | TWA: 5.1 ppm<br>TWA: 18 mg/m³<br>STEL: 10.2 ppm<br>STEL: 36 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | STEL: 30 mg/m³<br>TWA: 10 mg/m³ |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| Vinyl acetate<br>108-05-4 | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm | TWA: 10 ppm<br>TWA: 36 mg/m³<br>Ceiling: 35.2 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm |

| | STEL: 35.2 mg/m³ | STEL: 35.2 mg/m³ | | STEL: 35.2 mg/m³ | STEL: 35.2 mg/m³ |
|---|---|---|---|---|---|
| Chemical name | Sweden | | Switzerland | United Kingdom | |
| Vinyl acetate<br>108-05-4 | NGV: 5 ppm<br>NGV: 18 mg/m³<br>Bindande KGV: 10 ppm<br>Bindande KGV: 35 mg/m³ | | TWA: 10 ppm<br>TWA: 35 mg/m³<br>STEL: 10 ppm<br>STEL: 35 mg/m³ | TWA: 5 ppm<br>TWA: 17.6 mg/m³<br>STEL: 10 ppm<br>STEL: 35.2 mg/m³ | |

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

**Derived No Effect Level (DNEL) - Workers** No information available

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| Hydrogenated base oil<br>64742-54-7 | - | 0.97 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6]<br>5.58 mg/m³ [5] [6] |
| Hydrogenated base oil<br>64742-54-7 | - | 0.97 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6]<br>5.58 mg/m³ [5] [6] |
| Hydrogenated base oil<br>72623-86-0 | - | 0.97 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6]<br>5.58 mg/m³ [5] [6] |
| Hydrogenated base oil<br>72623-87-1 | - | 0.97 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6]<br>5.58 mg/m³ [5] [6] |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | - | 12.1 mg/kg bw/day [4] [6] | 8.31 mg/m³ [4] [6] |
| Hydrogenated base oil<br>92062-09-4 | - | 5.81 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6] |
| Vinyl acetate<br>108-05-4 | - | 0.42 mg/kg bw/day [4] [6] | 17.6 mg/m³ [4] [6]<br>35.2 mg/m³ [4] [7]<br>17.6 mg/m³ [5] [6]<br>35.2 mg/m³ [5] [7] |
| Calcium long chain alkyl salicylate<br>114959-46-5 | - | 1 mg/kg bw/day [4] [6] | - |
| Hydrogenated base oil<br>64742-65-0 | - | 0.97 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6]<br>5.58 mg/m³ [5] [6] |
| bis(nonylphenyl)amine<br>36878-20-3 | - | 5 mg/kg bw/day [4] [6] | - |
| Hydrogenated base oil<br>64741-88-4 | - | 0.97 mg/kg bw/day [4] [6] | 2.73 mg/m³ [4] [6]<br>5.58 mg/m³ [5] [6] |

**Derived No Effect Level (DNEL) - General Public** No information available.

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| Hydrogenated base oil<br>64742-54-7 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Hydrogenated base oil<br>64742-54-7 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Hydrogenated base oil<br>72623-86-0 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Hydrogenated base oil<br>72623-87-1 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | 0.24 mg/kg bw/day [4] [6] | - | 2.11 mg/m³ [4] [6] |

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| Hydrogenated base oil<br>92062-09-4 | 0.74 mg/kg bw/day [4] [6] | - | - |
| Calcium long chain alkyl salicylate<br>114959-46-5 | 0.5 mg/kg bw/day [4] [6] | - | - |
| Hydrogenated base oil<br>64742-65-0 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| bis(nonylphenyl)amine<br>36878-20-3 | 0.25 mg/kg bw/day [4] [6] | - | - |
| Hydrogenated base oil<br>64741-88-4 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |

**Predicted No Effect Concentration (PNEC)** No information available.

| Chemical name | Freshwater | Freshwater (intermittent release) | Marine water | Marine water (intermittent release) | Air |
|---|---|---|---|---|---|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | 4 µg/L | 45 µg/L | 4.6 µg/L | - | - |
| Vinyl acetate<br>108-05-4 | 0.016 mg/L | 0.126 mg/L | 0.0016 mg/L | - | - |
| Calcium long chain alkyl salicylate<br>114959-46-5 | 1 mg/L | 10 mg/L | 0.1 mg/L | - | - |
| bis(nonylphenyl)amine<br>36878-20-3 | 0.412 mg/L | 1 mg/L | 0.0412 mg/L | - | - |

| Chemical name | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---|---|---|---|---|---|
| Hydrogenated base oil<br>64742-54-7 | - | - | - | - | 9.33 mg/kg food |
| Hydrogenated base oil<br>64742-54-7 | - | - | - | - | 9.33 mg/kg food |
| Hydrogenated base oil<br>72623-86-0 | - | - | - | - | 9.33 mg/kg food |
| Hydrogenated base oil<br>72623-87-1 | - | - | - | - | 9.33 mg/kg food |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | 0.02203 mg/kg sediment dw | 0.002203 mg/kg sediment dw | 100 mg/L | 0.00206 mg/kg soil dw | 10.67 mg/kg food |
| Hydrogenated base oil<br>92062-09-4 | - | - | - | - | 9.33 mg/kg food |
| Vinyl acetate<br>108-05-4 | 0.067 mg/kg sediment dw | 0.0067 mg/kg sediment dw | 6 mg/L | 0.0035 mg/kg soil dw | - |
| Calcium long chain alkyl salicylate<br>114959-46-5 | 4.02 mg/kg sediment dw | 0.402 mg/kg sediment dw | 10 mg/L | 2.62 mg/kg soil dw | - |

| Chemical name | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---|---|---|---|---|---|
| Hydrogenated base oil 64742-65-0 | - | - | - | - | 9.33 mg/kg food |
| bis(nonylphenyl)amine 36878-20-3 | 1 mg/kg sediment dw | 0.1 mg/kg sediment dw | - | - | - |
| Hydrogenated base oil 64741-88-4 | - | - | - | - | 9.33 mg/kg food |

**8.2. Exposure controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

**Eye/face protection** If there is a risk of contact: Chemical safety goggles. Eye protection must conform to standard EN 166.

**Hand protection** If there is a risk of contact: Gloves must conform to standard EN 374. 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 (EN ISO 6529).

**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.

**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.

**Environmental exposure controls** Avoid release to the environment. Local authorities should be advised if significant spillages cannot be contained.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

**Appearance**

**Physical state** Liquid

**Colour** Amber

**Odour** Mild hydrocarbon

**Odour threshold** No information available

| Property | Values | Remarks • Method |
|---|---|---|
| **Melting point / freezing point** | | No data available |
| **Initial boiling point and boiling range** | | 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 |
| **Flash point** | 228 °C | Cleveland Open Cup ASTM D 92 |
| **Autoignition temperature** | | No data available |
| **Decomposition temperature** | | No data available |
| **pH** | | No data available |
| **pH (as aqueous solution)** | | No data available |

| | | |
|---|---|---|
| **Kinematic viscosity** | 68.4 cSt at 40 °C<br>11.6 cSt at 100 °C | |
| **Dynamic viscosity** | | No data available |
| **Water solubility** | | No data available |
| **Solubility(ies)** | | No data available |
| **Partition coefficient** | | No data available |
| **Vapour pressure** | | No data available |
| **Relative density** | 0.8514 | |
| **Bulk density** | | No data available |
| **Liquid Density** | | No data available |
| **Relative vapour density** | | No data available |
| **Particle characteristics** | | |
| **Particle Size** | | No data available |
| **Particle Size Distribution** | | No data available |

**9.2. Other information**
**Pour Point** -51 --°C [ASTM D 97]

*9.2.1. Information with regards to physical hazard classes*
Not applicable

*9.2.2. Other safety characteristics*
No information available
**Fire Point** 250 --°C [ASTM D 92]

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

**Reactivity** None under normal use conditions.

**10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**
**Sensitivity to mechanical impact** None.
**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**10.4. Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**10.5. Incompatible materials**

**Incompatible materials** None known based on information supplied.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** Ethers. Miscellaneous decomposition products.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Information on likely routes of exposure**

**Product Information** .

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** Specific test data for the substance or mixture is not available.

**Ingestion** Specific test data for the substance or mixture is not available.

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

**Symptoms** May cause temporary eye irritation. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation in susceptible persons.

**Acute toxicity**
**Numerical measures of toxicity**

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Hydrogenated base oil<br>64742-54-7 | > 15 g/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | - |
| Hydrogenated base oil<br>64742-54-7 | > 15 g/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | - |
| Hydrogenated base oil<br>72623-86-0 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | = 2.18 mg/L ( Rat ) 4 h |
| Hydrogenated base oil<br>72623-87-1 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | = 2.18 mg/L ( Rat ) 4 h |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | = 3100 mg/kg ( Rat )<br>= 3200 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 2.3 mg/L ( Rat ) 4 h |
| Vinyl acetate<br>108-05-4 | = 2900 mg/kg ( Rat ) | = 2335 mg/kg ( Rabbit ) | = 3680 ppm ( Rat ) 4 h |

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

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

| Component Information | |
|---|---|
| Hydrogenated base oil (64742-54-7) | |
| Method | OECD Test No. 404: Acute Dermal Irritation/Corrosion |
| Species | Rabbit |
| Exposure route | Dermal |
| Effective dose | 0.5 mL |
| Exposure time | 24 hours |
| Results | non-irritant |

| 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** Based on available data, the classification criteria are not met.

| Component Information | |
|---|---|
| Hydrogenated base oil (64742-54-7) | |
| Species | Rabbit |
| Exposure route | Eye |
| Effective dose | 0.1 mL |
| Exposure time | 72 hours |
| Results | non-irritant |

| 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 sensitisation** Based on available data, the classification criteria are not met.

| Component Information | |
|---|---|
| Hydrogenated base oil (64742-54-7) | |
| Method | OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay |
| Species | Guinea pig |
| Exposure route | Dermal |
| Results | Not a skin sensitiser |

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**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 | European Union |
|---|---|
| Hydrogenated base oil | Not classified |
| Hydrogenated base oil | Carc. 1B |
| Hydrogenated base oil | Carc. 1B |
| Hydrogenated base oil | Carc. 1B |
| Hydrogenated base oil | Carc. 1B |
| Vinyl acetate | Carc. 2 |

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

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

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 11.2.2. Other information

**Other adverse effects** No information available.

## SECTION 12: Ecological information

**12.1. Toxicity**

**Ecotoxicity** Large or frequent spills may have hazardous effects on the environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Hydrogenated base oil 64742-54-7 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| Hydrogenated base oil 64742-54-7 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| Hydrogenated base oil 72623-86-0 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| Hydrogenated base oil 72623-87-1 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts 84605-29-8 | - | LC50: =4.5mg/L (96h, Oncorhynchus mykiss) | - | EC50: =23mg/L (48h, Daphnia magna) |
| Vinyl acetate 108-05-4 | - | LC50: =14mg/L (96h, Pimephales promelas) LC50: 15.04 - 21.54mg/L (96h, Lepomis macrochirus) LC50: 26.1 - 36.63mg/L (96h, Poecilia reticulata) | - | - |

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation** No information available.

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts | 0.56 |
| Vinyl acetate | 0.73 |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** No information available.

| Chemical name | PBT and vPvB assessment |
|---|---|
| Hydrogenated base oil 64742-54-7 | The substance is not PBT / vPvB |
| Hydrogenated base oil 64742-54-7 | The substance is not PBT / vPvB |
| Hydrogenated base oil 72623-86-0 | The substance is not PBT / vPvB |

| | |
|---|---|
| Hydrogenated base oil<br>72623-87-1 | The substance is not PBT / vPvB |
| Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts<br>84605-29-8 | The substance is not PBT / vPvB |
| Hydrogenated base oil<br>92062-09-4 | The substance is not PBT / vPvB |
| Vinyl acetate<br>108-05-4 | The substance is not PBT / vPvB PBT assessment does not apply |

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

### 12.7. Other adverse effects

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

### 13.1. 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.

**Waste codes / waste designations according to EWC / AVV** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information

**IMDG** Not regulated
**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not applicable
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None
**14.7 Maritime transport in bulk according to IMO instruments** No information available

**RID** Not regulated
**14.1 UN number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not applicable
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None

**ADR** Not regulated
**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated

**14.4 Packing group** Not applicable
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None

**IATA** Not regulated
**14.1 UN number or ID number** Not regulated
**14.2 UN proper shipping name** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not applicable
**14.5 Environmental hazards** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None
**Note:** None

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations**

**Germany**
**Water hazard class (WGK)** strongly hazardous to water (WGK 3)

**European Union**
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorisations and/or restrictions on use:**
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII). This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---|---|---|
| Hydrogenated base oil - 64742-54-7 | Use restricted. See item 28.<br>Use restricted. See item 75. | - |
| Hydrogenated base oil - 64742-54-7 | Use restricted. See item 28.<br>Use restricted. See item 75. | - |
| Hydrogenated base oil - 72623-86-0 | Use restricted. See item 28.<br>Use restricted. See item 75. | - |
| Hydrogenated base oil - 72623-87-1 | Use restricted. See item 28.<br>Use restricted. See item 75. | - |
| Hydrogenated base oil - 92062-09-4 | Use restricted. See item 28.<br>Use restricted. See item 75. | - |
| Vinyl acetate - 108-05-4 | Use restricted. See item 75. | - |

**Persistent Organic Pollutants**
Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**
Not applicable

**EU - Plant Protection Products (1107/2009/EC)**

| Chemical name | EU - Plant Protection Products (1107/2009/EC) |
|---|---|
| Hydrogenated base oil - 72623-86-0 | Plant protection agent |

**International Inventories**
Contact supplier for inventory compliance status

**15.2. Chemical safety assessment**

**Chemical Safety Report** No information available

## SECTION 16: Other information

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

**Full text of H-Statements referred to under section 3**
H225 - Highly flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H340 - May cause genetic defects
H350 - May cause cancer
H351 - Suspected of causing cancer
H372 - Causes damage to organs through prolonged or repeated exposure

**Legend**
ATE: Acute Toxicity Estimate
SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

**Legend Section 8: Exposure controls/personal protection**

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| SCBA | Self-contained breathing apparatus | | |

| Classification procedure | |
|---|---|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |
| Ozone | Calculation method |

**Key literature references and sources for data used to compile the SDS**
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
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
Australian 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)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

| | |
|---|---|
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**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**
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**End of Safety Data Sheet**