# SAFETY DATA SHEET

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

**Issuing Date** 16-Aug-2024 **Revision Date** 16-Aug-2024 **Revision Number** 1

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

### 1.1. Product identifier

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

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

**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

**Manufacturer**
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 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

*Classification according to Regulation (EC) No. 1272/2008 [CLP]*
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

**Other hazards** No information available.

**PBT & vPvB** None known

**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) | Notes |
|---|---|---|---|---|---|---|---|---|
| Base Oil<br>72623-87-1 | 15-25 | No data available | 276-738-4<br>(649-483-00-5) | Carc. 1B (H350) (*L) | - | - | - | L |
| Reaction products of 1-decene and 1-dodecene, hydrogenated<br>151006-60-9 | 5-10 | No data available | - | Asp. Tox. 1 (H304) | - | - | - | - |
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | 5-10 | No data available | - | Asp. Tox. 1 (H304) | - | - | - | - |
| Reaction products of 1-decene, 1-dodecene and 1-octene, hydrogenated<br>163149-28-8 | 5-10 | No data available | - | Asp. Tox. 1 (H304) | - | - | - | - |
| Base oil<br>64742-54-7 | 1-5 | No data available | 265-157-1<br>(649-467-00-8) | Carc. 1B (H350) (*L) | - | - | - | L |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>68411-46-1 | 1-<3 | No data available | 270-128-1 | Aquatic Chronic 3 (H412)<br>Repr.2 (H361f) | - | - | - | - |
| Base oil<br>64742-65-0 | 1-2 | No data available | 265-169-7<br>(649-474-00-6) | Carc. 1B (H350) (*L) | - | - | - | L |
| 1,2-Diaminoethane<br>107-15-3 | <0.1 | No data available | 203-468-6<br>(612-006-00-6) | Flam. Liq. 3 (H226)<br>Acute Tox. 4 (H302)<br>Acute Tox. 4 (H312)<br>Skin Corr. 1B (H314)<br>Skin Sens. 1 (H317)<br>Resp. Sens. 1 (H334) | - | - | - | - |

**Additional information**
The supplier declares that it can be shown that the substance(s) contain 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 |
|---|---|---|---|---|---|
| Base Oil 72623-87-1 | 5000 | 2000 | 2.18 | No data available | No data available |
| Reaction products of 1-decene, hydrogenated 68649-12-7 | 5000 | 2000 | No data available | No data available | No data available |
| Base oil 64742-54-7 | 15000 | 5000 | No data available | No data available | No data available |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene 68411-46-1 | 5000 | 2000 | No data available | No data available | No data available |
| Base oil 64742-65-0 | 15000 | 5000 | 2.4 | No data available | No data available |
| 1,2-Diaminoethane 107-15-3 | 866 | 560 | 14.7 | No data available | 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 temporary eye irritation. May cause gastrointestinal discomfort if consumed in large amounts. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness and difficulty breathing.

**Effects of Exposure** None.

**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** 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 hands 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** Keep container tightly closed in a dry and well-ventilated place. Do not reuse empty containers. Store away from incompatible materials. Protect from physical damage. 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 |
|---|---|---|---|---|---|
| 1,2-Diaminoethane<br>107-15-3 | - | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL 40 ppm<br>STEL 100 mg/m³<br>Sk*<br>Sh+ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>Sk* | TWA: 25 mg/m³ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>Skin Sensitisation<br>Respiratory Sensitisation |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| 1,2-Diaminoethane<br>107-15-3 | - | TWA: 25 mg/m³<br>Sk*<br>S+<br>Ceiling: 50 mg/m³ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 20 ppm<br>STEL: 50 mg/m³ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 15 ppm<br>STEL: 35 mg/m³<br>S+ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 20 ppm<br>STEL: 50 mg/m³<br>Sk* |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | - | TWA: 5 mg/m³ | TWA: 5 mg/m³<br>Peak: 20 mg/m³ | - | - |
| 1,2-Diaminoethane<br>107-15-3 | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 15 ppm<br>STEL: 35 mg/m³ | - | respiratory and skin sensitizer | TWA: 10 ppm<br>TWA: 25 mg/m³ | - |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| 1,2-Diaminoethane<br>107-15-3 | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 30 ppm | - | TWA: 10 ppm<br>TWA: 25 mg/m³<br>Sk* | TWA: 2 mg/m³<br>TWA: 0.5 mg/m³ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 15 ppm |

| | | | | | |
|---|---|---|---|---|---|
| | STEL: 75 mg/m³<br>Sens+ | | | | STEL: 35 mg/m³<br>J+ |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| 1,2-Diaminoethane<br>107-15-3 | - | - | - | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 20 ppm<br>STEL: 37.5 mg/m³<br>A+ | TWA: 20 mg/m³<br>STEL: 50 mg/m³<br>Sk* |
| Chemical name | Portugal | Romania | Slovakia | Slovenia | Spain |
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | - | - | - | TWA: 5 mg/m³<br>STEL: 20 mg/m³ | - |
| 1,2-Diaminoethane<br>107-15-3 | TWA: 10 ppm<br>Sk* | TWA: 8 ppm<br>TWA: 20 mg/m³<br>STEL: 12 ppm<br>STEL: 30 mg/m³ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>S+ | - | TWA: 10 ppm<br>TWA: 25 mg/m³<br>Sk*<br>Sen+ |

| Chemical name | Sweden | Switzerland | United Kingdom |
|---|---|---|---|
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | - | TWA: 5 mg/m³ | - |
| 1,2-Diaminoethane<br>107-15-3 | NGV: 10 ppm<br>NGV: 25 mg/m³<br>Vägledande KGV: 15 ppm<br>Vägledande KGV: 35 mg/m³<br>S+ | TWA: 10 ppm<br>TWA: 25 mg/m³<br>STEL: 20 ppm<br>STEL: 50 mg/m³<br>S+ | - |

**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**

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| 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] |
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | - | - | 60 mg/m³ [4] [7] |
| 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] |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>68411-46-1 | - | 0.08 mg/kg bw/day [4] [6] | 0.6 mg/m³ [4] [6] |
| 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] |
| Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)<br>2215-35-2 | - | 12.2 mg/kg bw/day [4] [6] | 8.6 mg/m³ [4] [6] |
| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)<br>4259-15-8 | - | 9.6 mg/kg bw/day [4] [6] | 6.6 mg/m³ [4] [6] |
| 1,2-Diaminoethane<br>107-15-3 | - | 3.6 mg/kg bw/day [4] [6] | 25 mg/m³ [4] [6] |

**Notes**
**[4]** Systemic health effects.

**[5]** Local health effects.
**[6]** Long term.
**[7]** Short term.

**Derived No Effect Level (DNEL) - General Public**

| Chemical name | Oral | Dermal | Inhalation |
|---|---|---|---|
| Base Oil<br>72623-87-1 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | - | - | 50 mg/m³ [4] [7] |
| Base oil<br>64742-54-7 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>68411-46-1 | 0.04 mg/kg bw/day [4] [6] | - | 0.14 mg/m³ [4] [6] |
| Base oil<br>64742-65-0 | 0.74 mg/kg bw/day [4] [6] | - | 1.19 mg/m³ [5] [6] |
| Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)<br>2215-35-2 | 0.24 mg/kg bw/day [4] [6] | - | 2.13 mg/m³ [4] [6] |
| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)<br>4259-15-8 | 0.19 mg/kg bw/day [4] [6] | - | 1.67 mg/m³ [4] [6] |
| 1,2-Diaminoethane<br>107-15-3 | 0.275 mg/kg bw/day [4] [6] | - | 12.5 mg/m³ [4] [6] |

**Notes**
**[4]** Systemic health effects.
**[5]** Local health effects.
**[6]** Long term.
**[7]** Short term.

**Predicted No Effect Concentration (PNEC)**

| Chemical name | Freshwater | Freshwater (intermittent release) | Marine water | Marine water (intermittent release) | Air |
|---|---|---|---|---|---|
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>68411-46-1 | 0.0338 mg/L | 0.51 mg/L | 0.00338 mg/L | - | - |
| Zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)<br>2215-35-2 | 4 µg/L | 45 µg/L | 4.6 µg/L | - | - |
| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)<br>4259-15-8 | 4 µg/L | 44 µg/L | 4.6 µg/L | - | - |
| 1,2-Diaminoethane<br>107-15-3 | 0.016 mg/L | 0.167 mg/L | 0.002 mg/L | - | - |

| Chemical name | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---|---|---|---|---|---|
| Base Oil 72623-87-1 | - | - | - | - | 9.33 mg/kg food |
| 2-ethyl-2-[[(1-oxononyl)oxy ]methyl]propane-1,3-diyl dinonan-1-oate 126-57-8 | - | - | 7.9 mg/L | - | - |
| Base oil 64742-54-7 | - | - | - | - | 9.33 mg/kg food |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene 68411-46-1 | 0.446 mg/kg sediment dw | 0.0446 mg/kg sediment dw | 10 mg/L | 1.76 mg/kg soil dw | - |
| Base oil 64742-65-0 | - | - | - | - | 9.33 mg/kg food |
| Zinc O,O,O',O'-tetrakis(1,3-dim ethylbutyl) bis(phosphorodithioate) 2215-35-2 | 0.074 mg/kg sediment dw | 0.0074 mg/kg sediment dw | 100 mg/L | 0.01 mg/kg soil dw | 10.67 mg/kg food |
| Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) 4259-15-8 | 0.322 mg/kg sediment dw | 0.0322 mg/kg sediment dw | 3.8 mg/L | 0.0619 mg/kg soil dw | 8.33 mg/kg food |
| 1,2-Diaminoethane 107-15-3 | 7.68 mg/kg sediment dw | 0.768 mg/kg sediment dw | 0.5 mg/L | 4.36 mg/kg soil dw | 4.9 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: 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.

**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** | 220 °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** | 47.1 cSt at 40 ºC<br>8.8 cSt at 100 ºC | ASTM D445 |
| **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** | 0.8545 | No data available |
| **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** -53 ºC [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** 244 ºC (COC) [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** Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Thermal decomposition can lead to release of irritating gases and vapours.

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

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Base Oil<br>72623-87-1 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rabbit ) | > 5.53 mg/L ( Rat ) 4 h |
| Reaction products of 1-decene and 1-dodecene, hydrogenated<br>151006-60-9 | - | - | < 4800 mg/m³ ( Rat ) 4 h |
| Reaction products of 1-decene, hydrogenated<br>68649-12-7 | > 5000 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | - |
| Base oil<br>64742-54-7 | > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | > 5530 mg/m³ ( Rat ) 4 h |
| Benzenamine, N-phenyl-, reaction | > 5000 mg/kg ( Rat ) | > 2000 mg/kg (Rat) | - |

| | | | |
|---|---|---|---|
| products with 2,4,4-trimethylpentene 68411-46-1 | | | |
| Base oil 64742-65-0 | > 5000 mg/kg ( Rat ) | > 5000 mg/kg ( Rabbit ) | > 5530 mg/m³ ( Rat ) 4 h |
| 1,2-Diaminoethane 107-15-3 | = 866 mg/kg ( Rat ) | = 560 mg/kg ( Rabbit ) | = 14.7 mg/L ( 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 | |
|---|---|
| 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** Based on available data, the classification criteria are not met.

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

**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 |
|---|---|
| Base Oil | Carc. 1B |
| Base oil | Not classified |
| Base oil | Carc. 1B |

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

**11.2.2. Other information**

**Other adverse effects** No information available.

## SECTION 12: Ecological information

**12.1. Toxicity**

**Ecotoxicity** Based on available data, the classification criteria are not met. Large or frequent spills may have hazardous effects on the environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|---|---|
| Base Oil<br>72623-87-1 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| Base oil<br>64742-54-7 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>68411-46-1 | EC50: 51mg/L (48h, Daphnia magna) | LC50: >100mg/L (96h, Danio rerio) | - | - |
| Base oil<br>64742-65-0 | - | LC50: >5000mg/L (96h, Oncorhynchus mykiss) | - | EC50: >1000mg/L (48h, Daphnia magna) |
| 1,2-Diaminoethane<br>107-15-3 | EC50: =645mg/L (72h, Pseudokirchneriella subcapitata)<br>EC50: =151mg/L (96h, Pseudokirchneriella subcapitata) | LC50: 98.6 - 131.6mg/L (96h, Pimephales promelas)<br>LC50: 191 - 254mg/L (96h, Pimephales promelas)<br>LC50: =115.7mg/L (96h, Pimephales promelas)<br>LC50: 180 - 560mg/L (96h, Poecilia reticulata) | - | EC50: =17mg/L (48h, Daphnia magna) |

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation**

**Component Information**

| Chemical name | Partition coefficient |
|---|---|
| Reaction products of 1-decene, hydrogenated | 5 |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene | 6.66 |
| 1,2-Diaminoethane | -1.221 |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

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

**PBT and vPvB assessment** Based on available data, the classification criteria are not met.

| Chemical name | PBT and vPvB assessment |
|---|---|
| Base Oil<br>72623-87-1 | The substance is not PBT / vPvB |
| Reaction products of 1-decene and 1-dodecene, hydrogenated<br>151006-60-9 | The substance is not PBT / vPvB |
| Reaction products of 1-decene, 1-dodecene and 1-octene, hydrogenated<br>163149-28-8 | The substance is not PBT / vPvB |
| Base oil<br>64742-54-7 | The substance is not PBT / vPvB |
| Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene<br>68411-46-1 | The substance is not PBT / vPvB |
| Base oil<br>64742-65-0 | The substance is not PBT / vPvB |
| 1,2-Diaminoethane<br>107-15-3 | The substance is not PBT / vPvB |

### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** Based on available data, the classification criteria are not met.

### 12.7. Other adverse effects

**Other adverse effects** No information available.

**PMT or vPvM properties** Based on available data, the classification criteria are not met.

## 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

**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

**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 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

**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

**ADN** Not regulated
**14.1 UN/ID no** Not regulated
**14.2 EPNN** Not regulated
**14.3 Transport hazard class(es)** Not regulated
**14.4 Packing group** Not applicable
**14.5 Environmental hazard** Not applicable
**14.6 Special Precautions for Users**
**Special Provisions** None

## SECTION 15: Regulatory information

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

**National regulations**

**France**
**Occupational Illnesses (R-463-3, France)**

| Chemical name | French RG number |
|---|---|
| 1,2-Diaminoethane<br>107-15-3 | RG 49,RG 49bis |

**Germany**
**Water hazard class (WGK)** strongly hazardous to water (WGK 3)
**TA Luft (German Air Pollution Control Regulation)**

| Chemical name | Number | Class |
|---|---|---|
| 1,2-Diaminoethane | 5.2.5 | Class I |

**Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018** Not applicable
**WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20** Not applicable

**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)

| Chemical name | Restricted substance per REACH Annex XVII | Substance subject to authorisation per REACH Annex XIV |
|---|---|---|
| Base Oil - 72623-87-1 | 28<br>75 | - |
| Base oil - 64742-54-7 | 28<br>75 | - |
| Base oil - 64742-65-0 | 28<br>75 | - |
| 1,2-Diaminoethane - 107-15-3 | 75 | - |

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**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**

H350 - May cause cancer
H361f - Suspected of damaging fertility
H412 - Harmful to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

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

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | Sk* | 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 | On basis of test data |
| 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**

Agency for Toxic Substances and Disease Registry (ATSDR)
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)
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 Library of Medicine’s PubMed database (NLM PUBMED)
U.S. 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 safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006**

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**End of Safety Data Sheet**