

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: VAICO VA-002-SYNT

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

Identified uses: Lubricant
Containers ≥ 20 l for commercial use only

Uses advised against: No uses advised against identified.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier VIEROL AG
Karlstraße 19
26123 Oldenburg

Telephone: +49 441 210 20 - 0
Fax: +49 441 210 20 - 111

Contact for request of safety data sheets

E-mail: Automotive lubricants info@vierol.de
Industrial lubricants
Telephone: +49 441 210 20 - 0

Informing department for safety data sheets

E-mail: info@vierol.de

1.4 Emergency telephone number: Giftinformationszentrum Nord (Göttingen) +49 (0)551/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

Classification according to Regulation (EC) No 1272/2008 as amended.

Health Hazards

Acute toxicity (Inhalation - dust and mist) Category 4 H332: Harmful if inhaled.

Aspiration Hazard Category 1 H304: May be fatal if swallowed and enters airways.

Product name: VAICO VA-002-SYNT

Environmental Hazards

Chronic hazards to the aquatic environment

Category 3

H412: Harmful to aquatic life with long lasting effects.

Hazard summary

Physical Hazards:

By handling of mineral oil products and chemical products no particular hazard is known when normal precautions (item 7) and personal protective equipment (item 8) are kept.

Environmental hazards: This product is water polluting.

2.2 Label Elements

Contains:

Hydrocarbons, low viscous



Signal Words:

Danger

Hazard Statement(s):

H332: Harmful if inhaled.
H304: May be fatal if swallowed and enters airways.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

P273: Avoid release to the environment.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331: Do NOT induce vomiting.
P312: Call a POISON CENTER or doctor/ physician if you feel unwell.

Disposal:

P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Supplemental label information

EUH208: Contains: Alkyl methacrylate. May produce an allergic reaction.

2.3 Information on other hazards

No data available.

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product name: VAICO VA-002-SYNT

General information: Mixture of synthetic base oils with additives.

| Chemical name | Identifier | Concentration * | REACH Registration No. | Notes |
|---------------------------|-------------------|-------------------|------------------------|-------|
| Hydrocarbons, low viscous | EC: 500-228-5 | 50,00% - <100,00% | 01-2119493069-28 | |
| Base oil, naphthenic | EINECS: 265-156-6 | 10,00% - <20,00% | 01-2119480375-34 | |
| Base oil, low viscous | EC: 934-956-3 | 1,00% - <10,00% | 01-2119827000-58 | |
| base oil, low viscous | EINECS: 276-738-4 | 1,00% - <10,00% | 01-2119474889-13 | |
| base oil, paraffinic | EINECS: 265-169-7 | 1,00% - <10,00% | 01-2119471299-27 | |
| phenolic antioxidant | EINECS: 204-881-4 | 0,25% - <1,00% | 01-2119565113-46 | |
| Alkyl methacrylate | EINECS: 201-297-1 | 0,10% - <1,00% | 01-2119452498-28 | |

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

| Chemical name | Identifier | Classification |
|---------------------------|-------------------|---|
| Hydrocarbons, low viscous | EC: 500-228-5 | CLP: Asp. Tox. 1;H304, Acute Tox. 4;H332 |
| Base oil, naphthenic | EINECS: 265-156-6 | CLP: Asp. Tox. 1;H304 |
| Base oil, low viscous | EC: 934-956-3 | CLP: Asp. Tox. 1;H304 |
| base oil, low viscous | EINECS: 276-738-4 | CLP: Asp. Tox. 1;H304 |
| base oil, paraffinic | EINECS: 265-169-7 | CLP: Asp. Tox. 1;H304 |
| phenolic antioxidant | EINECS: 204-881-4 | CLP: Aquatic Acute 1;H400, Aquatic Chronic 1;H410; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 1 |
| Alkyl methacrylate | EINECS: 201-297-1 | CLP: Flam. Liq. 2;H225, Skin Irrit. 2;H315, Skin Sens. 1B;H317, STOT SE 3;H335 |

CLP: Regulation No. 1272/2008.

specific concentration limit

| Chemical name | Identifier | specific concentration limit | Hazard class | Hazard Category | Hazard statements |
|--------------------|-------------------|------------------------------|--|-----------------|-------------------|
| Alkyl methacrylate | EINECS: 201-297-1 | >= 10 % | Specific target organ toxicity - single exposure | 3 | H335 |

For the wording of the listed hazard statements refer to section 16.

SECTION 4: First aid measures

General: Change clothes and shoes contaminated or soaked by the product. Never put rags contaminated by the product into clothing pockets.

4.1 Description of first aid measures

Inhalation: Supply fresh air and call for doctor for safety reasons.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids.

Skin Contact: Wash with soap and water. The product is not skin irritating.

Product name: VAICO VA-002-SYNT

| | |
|---|---|
| Ingestion: | Rinse mouth thoroughly. |
| 4.2 Most important symptoms and effects, both acute and delayed: | Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. |
| 4.3 Indication of any immediate medical attention and special treatment needed | Get medical attention if symptoms occur. |

SECTION 5: Firefighting measures

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|---|---|
| 5.1 Extinguishing media | |
| Suitable extinguishing media: | CO ₂ , fire extinguishing powder or fog like water spraying. Extinguish larger fires with alcohol resistant foam or spray water with suitable surfactant added |
| Unsuitable extinguishing media: | Water with a full water jet. |
| 5.2 Special hazards arising from the substance or mixture: | During fire, gases hazardous to health may be formed. |
| 5.3 Advice for firefighters | |
| Special fire-fighting procedures: | No data available. |
| Special protective equipment for fire-fighters: | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |

SECTION 6: Accidental release measures

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|---|--|
| 6.1 Personal precautions, protective equipment and emergency procedures: | In case of spills, beware of slippery floors and surfaces. |
| 6.2 Environmental Precautions: | Prevent from spreading (e.g. by binding or oil barriers). |
| 6.3 Methods and material for containment and cleaning up: | Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). |
| 6.4 Reference to other sections: | See Section 8 of the SDS for Personal Protective Equipment. See Section 7 for information on safe handling See Section 13 for information on disposal. |

SECTION 7: Handling and storage:

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| 7.1 Precautions for safe handling: | Use only in well-ventilated areas. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. |
|---|--|

Product name: VAICO VA-002-SYNT

7.2 Conditions for safe storage, including any incompatibilities: Local regulations concerning handling and storage of waterpolluting products have to be followed. Prevent formation of aerosols. Do not heat up to temperatures close to the flash point.

7.3 Specific end use(s): Not applicable

Storage Class: 10, Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

| Chemical name | Type | Exposure Limit Values | Source |
|--|------|------------------------------|---|
| Hydrocarbons, low viscous - Respirable fraction. | MAK | 5 mg/m ³ | Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG), as amended (2011) |
| phenolic antioxidant - Inhalable fraction. | AGW | 10 mg/m ³ | Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (09 2012) |
| Alkyl methacrylate | AGW | 50 ppm 210 mg/m ³ | Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (01 2012) |

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information: Wash hands before breaks and after work. Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. The usual precautionary measures should be adhered to in handling the chemicals or the mineral oil products.

Eye/face protection: Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.

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Skin protection

Hand Protection:

Material: Nitrile butyl rubber (NBR).
Min. Breakthrough time: >= 480 min
Recommended thickness of the material: >= 0,38 mm

Avoid long-term and repeated skin contact. Suitable gloves can be recommended by the glove supplier. Use skin protection cream for preventive skin protection. Protective gloves, where permitted in acc. to safety directions. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Other:

Do not carry cleaning cloths impregnated with the product in trouser pockets. Wear suitable protective clothing.

Respiratory Protection:

Respirator type: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Thermal hazards:

Not known.

Hygiene measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Environmental Controls:

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|---|---|
| Physical state: | liquid |
| Form: | liquid |
| Color: | Green |
| Odor: | Characteristic |
| pH: | substance/mixture is non-soluble (in water) |
| Freezing point: | not determined |
| Boiling Point: | not determined |
| Flash Point: | 160 °C |
| Evaporation Rate: | Not applicable for mixtures |
| Flammability (solid, gas): | not determined |
| Flammability Limit - Upper (%)—: | Not applicable for mixtures |
| Flammability Limit - Lower (%)—: | Not applicable for mixtures |
| Vapor pressure: | Not applicable for mixtures |
| Relative vapor density: | Not applicable for mixtures |
| Density: | 0,83 g/ml (15,00 °C) |
| Solubility(ies) | |

Product name: VAICO VA-002-SYNT

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|---|---------------------------------------|
| Solubility in Water: | Insoluble in water |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | Not applicable for mixtures |
| Autoignition Temperature: | not determined |
| Decomposition Temperature: | not determined |
| Kinematic viscosity: | 18,5 mm ² /s (40 °C) |
| Explosive properties: | Value not relevant for classification |
| Oxidizing properties: | Value not relevant for classification |
| Particle characteristics: | Not applicable |
| 9.2 Other information | No data available. |

SECTION 10: Stability and reactivity

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|---|---|
| 10.1 Reactivity: | Stable under normal temperature conditions and recommended use. |
| 10.2 Chemical Stability: | No data available. |
| 10.3 Possibility of hazardous reactions: | None under normal conditions. |
| 10.4 Conditions to avoid: | Avoid heat or contamination. |
| 10.5 Incompatible Materials: | Strong oxidizing substances. Strong acids. Strong bases. |
| 10.6 Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

SECTION 11: Toxicological information

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

Acute toxicity

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

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|---------------------------|---------------------------------------|
| Hydrocarbons, low viscous | LD 50 (Rat): > 5.001 mg/kg |
| Base oil, low viscous | LD 50 (Rat): > 5.000 mg/kg (OECD 401) |
| base oil, low viscous | LD 50 (Rat): > 5.000 mg/kg (OECD 401) |
| phenolic antioxidant | LD 50 (Rat): > 2.930 mg/kg (OECD 401) |

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

| | |
|----------------------|---------------------------------------|
| phenolic antioxidant | LD 50 (Rat): > 5.000 mg/kg (OECD 402) |
|----------------------|---------------------------------------|

Product name: VAICO VA-002-SYNT

Inhalation

Product: ATEmix: 1,72 mg/l

Specified substance(s)

Hydrocarbons, low viscous LC 50 (Rat, 4 h): 1,17 mg/l
Dust and mist

Base oil, naphthenic LC 50 (Rat, 4 h): > 5,53 mg/l
Dust and mist

Base oil, low viscous LC 50 (Rat, 4 h): > 5,266 mg/l (OECD 403)

Skin Corrosion/Irritation:

Product: Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation:

Product: Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitization:

Product: Skin sensitizer: Based on available data, the classification criteria are not met.
Respiratory sensitizer: Based on available data, the classification criteria are not met.

Specified substance(s)
phenolic antioxidant

No sensitizing effect (guinea pig); OECD 406

Germ Cell Mutagenicity

Product: Based on available data, the classification criteria are not met.

Carcinogenicity

Product: Based on available data, the classification criteria are not met.

Reproductive toxicity

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Single Exposure

Product: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity - Repeated Exposure

Product: Based on available data, the classification criteria are not met.

Aspiration Hazard

Product: Based on available data, the classification criteria are met.

11.2 Information on other hazards

Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Product name: VAICO VA-002-SYNT

SECTION 12: Ecological information

General information: Not applicable

12.1 Toxicity

Acute toxicity

Product: Based on available data, the classification criteria are not met.

Fish

Specified substance(s)

Hydrocarbons, low viscous LC 50 (Fish, 96 h): > 1.000 mg/l

Base oil, naphthenic LC 50 (Fish, 96 h): > 101 mg/l

Base oil, low viscous LC 50 (Fish, 96 h): > 1.028 mg/l (OECD 203)

Aquatic Invertebrates

Specified substance(s)

Hydrocarbons, low viscous EC 50 (Water Flea, 48 h): > 1.000 mg/l

Base oil, low viscous LC 50 (Water Flea, 48 h): > 3.193 mg/l

base oil, low viscous EL50 (Water Flea, 48 h): > 10.000 mg/l (OECD 202)

phenolic antioxidant EC 50 (Water Flea, 48 h): 0,61 mg/l (OECD 202)

Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish

Specified substance(s)

base oil, low viscous NOEC (Fish, 14 d): > 1.000 mg/l

Aquatic Invertebrates

Specified substance(s)

Hydrocarbons, low viscous NOEC (Water Flea, 21 d): 125 mg/l

base oil, low viscous NOEC (Water Flea, 21 d): 10 mg/l (OECD 211)

phenolic antioxidant NOEC (Water Flea, 21 d): > 0,39 mg/l

Toxicity to Aquatic Plants

Specified substance(s)

Hydrocarbons, low viscous EC 50 (Alga, 72 h): > 1.000 mg/l

Base oil, low viscous ErC50 (Alga, 72 h): > 10.000 mg/l

base oil, low viscous NOEC (Alga, 72 h): > 100 mg/l (OECD 201)

12.2 Persistence and Degradability

Product name: VAICO VA-002-SYNT

Biodegradation

Product: Not applicable for mixtures
Specified substance(s)
 Base oil, low viscous 74 % (28 d, OECD 306) Readily biodegradable
 phenolic antioxidant 30 % (OECD 302C) Not readily degradable.

12.3 Bioaccumulative potential

Product: Not applicable for mixtures
Specified substance(s)
 phenolic antioxidant May be accumulated in organism

12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

The product does not contain any substances fulfilling the PBT/vPvB criteria.

12.6 Endocrine disrupting properties

Product: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects:

No data available.

Water Hazard Class (WGK):

WGK 1: slightly water-endangering.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Do not empty into drains; dispose of this material and its container in a safe way. When storing used products, ensure that the waste categories and mixing instructions are observed.

European Waste Codes

13 01 11*: synthetic hydraulic oils

Product name: VAICO VA-002-SYNT

SECTION 14: Transport information

ADR/RID

- 14.1 UN number or ID number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
 - Class: Non-dangerous goods
 - Label(s): —
 - Hazard No. (ADR): —
 - Tunnel restriction code: —
- 14.4 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

IMDG

- 14.1 UN number or ID number: —
- 14.2 UN Proper Shipping Name: —
- 14.3 Transport Hazard Class(es)
 - Class: Non-dangerous goods
 - Label(s): —
 - EmS No.: —
- 14.3 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

IATA

- 14.1 UN number or ID number: —
- 14.2 Proper Shipping Name: —
- 14.3 Transport Hazard Class(es):
 - Class: Non-dangerous goods
 - Label(s): —
- 14.4 Packing Group: —
- 14.5 Environmental hazards: —
- 14.6 Special precautions for user: —

14.7 Maritime transport in bulk according to IMO instruments: Not applicable.

SECTION 15: Regulatory information

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

EU Regulations

EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: none

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: none

Regulation (EC) No. 649/2012 Import and export of dangerous chemicals: none

National Regulations

Water Hazard Class WGK 1: slightly water-endangering.

Product name: VAICO VA-002-SYNT

(WGK):

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

DIRECTIVE 2012/18/EU (SEVESO III) on the control of major-accident hazards involving dangerous substances

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| SECTION 16: Other information |
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Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

| | |
|------|---|
| H225 | Highly flammable liquid and vapor. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Training information: Follow training instructions when handling this material.

Revision Date: 17.04.2023

Disclaimer: The data contained in this safety data sheet are based on our current knowledge and experience and are given to the best of our knowledge and belief. It characterizes the product only with regard to safety requirements for handling, transport and disposal. The data do not describe the product's properties (tech. product specification). Neither should any agreed property nor the suitability of the product for any specific technical application be deduced from the data contained in this safety data sheet. Modifications on this document are not allowed. The data are not transferable to other products. In the case of mixing the product with other products or in the case of processing, the data in this safety data sheet are not necessarily valid for the new-made material. It is the responsibility of the recipient of the product to observe federal, state and local law. Please contact us to obtain up-to-date safety data sheets. This document was issued electronically and has no signature.