

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 $\geq 20\text{l}$ 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: +49 621 3701-0 (ZENTRALE)

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.
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Aspiration Hazard	Category 1	H304: May be fatal if swallowed and enters airways.
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Product name: VAICO VA-002-SYNT

Environmental Hazards

Chronic hazards to the aquatic environment

Category 2

H411: Toxic to aquatic life with long lasting effects.

Hazard summary

Physical Hazards:

No data available.

Health Hazards

Ingestion:

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

2.2 Label Elements

Contains:

Hydrocarbons, low viscous
Base oil, naphthenic



Signal Words:

Danger

Hazard Statement(s):

H332: Harmful if inhaled.
H304: May be fatal if swallowed and enters airways.
H411: Toxic 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

Endocrine disrupting properties

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. The product may not be released into the environment without control.

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.

Results of PBT and vPvB assessment:

Contains:
Aryl thiophosphate (TPPT)

Fulfilling PBT (persistent/bioaccumulative/toxic) criteria

Product name: VAICO VA-002-SYNT

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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	
Hydrocarbons, low viscous	EINECS: 934-954-2	1,00% - <10,00%	01-2119826592-36	
base oil, low viscous	EINECS: 276-738-4	1,00% - <10,00%	01-2119474889-13	
Aryl thiophosphate (TPPT)	EINECS: 209-909-9	0,25% - <1,00%	01-2119979545-21	PBT **
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.

** Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List

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
Hydrocarbons, low viscous	EINECS: 934-954-2	CLP: Asp. Tox. 1;H304 EUH066
base oil, low viscous	EINECS: 276-738-4	CLP: Asp. Tox. 1;H304
Aryl thiophosphate (TPPT)	EINECS: 209-909-9	CLP: , Aquatic Chronic 1;H410; M-Factor (aquatic acute): 1; M-Factor (aquatic chronic): 10
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.

Please note that the mineral oils and petroleum distillates used in our products are severely refined and have a DMSO extract < 3% as measured by method IP 346 and are not classified as carcinogenic according to Nota L/ Nota N of Annex VI of Regulation EC 1272/2008."

SECTION 4: First aid measures

General: Instantly remove any clothing soiled by the product.

4.1 Description of first aid measures

Inhalation: Move to fresh air. Call a POISON CENTER or doctor/ physician if you feel unwell.

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

Product name: VAICO VA-002-SYNT

Skin Contact: Wash with soap and water.

Ingestion: Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do NOT induce vomiting.

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. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

4.3 Indication of any immediate medical attention and special treatment needed Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO₂, 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: Move container from fire area if it can be done without risk. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

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

6.1 Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. See Section 8 of the SDS for Personal Protective Equipment. Keep upwind. Keep unauthorized personnel away. In case of spills, beware of slippery floors and surfaces.

6.2 Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent from spreading (e.g. by binding or oil barriers). Environmental manager must be informed of all major spillages. Do not allow to enter drainage system, surface or ground water.

6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acidbinders, universal binders, sawdust). Dispose of the material collected according to regulations. Stop the flow of material, if this is without risk.

Product name: VAICO VA-002-SYNT

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.

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Minimize dust generation and accumulation. Do not eat, drink or smoke when working with the product. Take usual precautions when handling mineral oil products or chemical products. Prevent formation of aerosols. Observe good industrial hygiene practices. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities: Store locked up. Local regulations concerning handling and storage of waterpolluting products have to be followed. 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)
Hydrocarbons, low viscous	AGW	300 mg/m ³	Germany. TRGS 900, Occupational Exposure Limits (AGW), as amended (Sep. 2017)
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.

Product name: VAICO VA-002-SYNT

Eye/face protection:	Avoid contact with skin and eyes. Goggles/face shield are recommended. If risk of splashing, wear safety goggles or face shield.
Skin protection	
Hand Protection:	Material: Nitrile butyl rubber (NBR). Min. Breakthrough time: ≥ 480 min Recommended thickness of the material: $\geq 0,38$ 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
Flammability (solid, gas):	not determined
Explosion Limit - Upper (%):	Not applicable for mixtures
Explosion 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)

Product name: VAICO VA-002-SYNT

Solubility(ies)

Solubility in Water: Insoluble in water

Solubility (other): No data available.

Partition coefficient (n-octanol/water): Not applicable for mixtures

Auto-ignition temperature: not determined

Decomposition Temperature: not determined

Kinematic viscosity: 18,5 mm²/s (40 °C)

Particle characteristics: Not applicable

9.2 Other information No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity: Stable under normal use conditions.

10.2 Chemical Stability: Stable under normal use conditions.

10.3 Possibility of hazardous reactions: Stable under normal use conditions.

10.4 Conditions to avoid: Stable under normal use conditions.

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

Information on likely routes of exposure

Inhalation: Harmful if inhaled.

Ingestion: No data available.

Skin Contact: No data available.

Eye contact: No data available.

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.

Product name: VAICO VA-002-SYNT

Specified substance(s)

Hydrocarbons, low viscous	LD 50 (Rat): > 5.001 mg/kg
Hydrocarbons, low viscous	LD 50 (Rat): > 5.001 mg/kg (OECD 401)
base oil, low viscous	LD 50 (Rat): > 5.000 mg/kg (OECD 401)
Aryl thiophosphate (TPPT)	LD 50 (Rat): > 10.000 mg/kg
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)
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Inhalation

Product: ATEmix: 1,72 mg/l Dust and mist

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
Hydrocarbons, low viscous	LC 50 (Rat, 4 h): > 5,2 mg/l (OECD 403) Dust and mist

Skin Corrosion/Irritation:

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

Specified substance(s)

Hydrocarbons, low viscous	OECD 404 (Rabbit): Not irritant.
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Serious Eye Damage/Eye Irritation:

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

Specified substance(s)

Hydrocarbons, low viscous	OECD 405 (Rabbit): Not irritant.
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Product name: VAICO VA-002-SYNT

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)

Hydrocarbons, low vis-
cous

No sensitizing effect (guinea pig); OECD 406

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: May be fatal if swallowed and enters airways.

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.

SECTION 12: Ecological information

Acute toxicity

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

Fish

Specified substance(s)

Hydrocarbons, low vis-
cous

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

Base oil, naphthenic

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

Hydrocarbons, low vis-
cous

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

Product name: VAICO VA-002-SYNT

Aryl thiophosphate (TPPT)	LC 50 (Fish, 96 h): > 100 mg/l (OECD 203)
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Aquatic Invertebrates

Specified substance(s)

Hydrocarbons, low vis- cous	EC 50 (Water Flea, 48 h): > 1.000 mg/l
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Hydrocarbons, low vis- cous	EC 50 (Water Flea, 48 h): > 3.193 mg/l
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base oil, low viscous	EL50 (Water Flea, 48 h): > 10.000 mg/l (OECD 202)
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Aryl thiophosphate (TPPT)	EC 50 (Water Flea, 48 h): > 100 mg/l
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phenolic antioxidant	EC 50 (Water Flea, 48 h): 0,61 mg/l (OECD 202)
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Chronic ToxicityProduct: Based on available data, the classification criteria are met.

Fish

Specified substance(s)

Hydrocarbons, low vis- cous	NOEC (Fish, 28 d): > 1.000 mg/l
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base oil, low viscous	NOEC (Fish, 14 d): > 1.000 mg/l
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Aryl thiophosphate (TPPT)	NOEC (Fish, 97 d): 0,0017 mg/l (OECD 210)
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Aquatic Invertebrates

Specified substance(s)

Hydrocarbons, low vis- cous	NOEC (Water Flea, 21 d): 125 mg/l
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Hydrocarbons, low vis- cous	NOEC (Water Flea, 28 d): > 1.000 mg/l
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base oil, low viscous	NOEC (Water Flea, 21 d): 10 mg/l (OECD 211)
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Aryl thiophosphate (TPPT)	NOEC (Water Flea, 21 d): 0,00724 mg/l (OECD 211)
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phenolic antioxidant	NOEC (Water Flea, 21 d): > 0,39 mg/l
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Toxicity to Aquatic Plants

Specified substance(s)

Hydrocarbons, low vis- cous	EC 50 (Alga, 72 h): > 1.000 mg/l
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Hydrocarbons, low vis- cous	EC 50 (Alga, 72 h): > 10.000 mg/l
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base oil, low viscous	NOEC (Alga, 72 h): > 100 mg/l (OECD 201)
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Product name: VAICO VA-002-SYNT

Aryl thiophosphate (TPPT)	EC 10 (Alga, 72 h): > 100 mg/l (OECD 201) EC 50 (Alga, 72 h): > 100 mg/l (OECD 201)
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12.2 Persistence and Degradability

Biodegradation

Product: Not applicable for mixtures

Specified substance(s)

Aryl thiophosphate (TPPT)	Not easily biodegradable
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phenolic antioxidant	30 % (OECD 302C) Not readily degradable.
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12.3 Bioaccumulative potential

Product: Not applicable for mixtures

Specified substance(s)

phenolic antioxidant	May be accumulated in organism
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12.4 Mobility in soil:

Product: Not applicable for mixtures

12.5 Results of PBT and vPvB assessment:

Aryl thiophosphate (TPPT)	Fulfilling PBT (persistent/bioaccumulative/toxic) criteria
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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: Toxic to aquatic life with long lasting effects.

Water Hazard Class (WGK): WGK 2: significantly water-endangering.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information: Dispose in accordance with all applicable regulations.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

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:	UN 3082
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Aryl thiophosphate (TPPT))
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
Hazard No. (ADR):	90
Tunnel restriction code:	(-)
14.4 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	—

IMDG

14.1 UN number or ID number:	UN 3082
14.2 UN Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Aryl thiophosphate (TPPT))
14.3 Transport Hazard Class(es)	
Class:	9
Label(s):	9
EmS No.:	F-A, S-F
14.3 Packing Group:	III
14.5 Environmental hazards:	Marine pollutant
14.6 Special precautions for user:	—

IATA

14.1 UN number or ID number:	UN 3082
14.2 Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s.(Aryl thiophosphate (TPPT))
14.3 Transport Hazard Class(es):	
Class:	9
Label(s):	9MI
14.4 Packing Group:	III
14.5 Environmental hazards:	Dangerous for the environment
14.6 Special precautions for user:	—

Amounts up to 5kg or 5 L are not regulated, (ADR/RID SP 375, IMDG 2.10.2.7, IATA SP A197)

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 2024/590/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

Product name: VAICO VA-002-SYNT

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

National Regulations

Water Hazard Class (WGK): WGK 2: significantly water-endangering.

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

Hazard category in accordance with Regulation (EC) No 1272/2008	Qualifying quantity for the application of Lower-tier requirements:	Qualifying quantity for the application of Upper-tier requirements:
E2: E2. Hazardous to the aquatic environment	200 t	500 t

SECTION 16: Other information

Revision Information: Vertical lines in the margin indicate an amendment.

Wording of the H-statements in section 2 and 3

EUH066	Repeated exposure may cause skin dryness or cracking.
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.
H411	Toxic to aquatic life with long lasting effects.

Other information: The classification complies with the current EU lists; however, it has been supplemented with expert literature information and information provided by/about our company. The following evaluation methods were used: - On the basis of test data - Calculation Method - Bridging Principle "Substantially similar mixtures" - Expert Judgement

Revision Date: 19.03.2025

Product name: VAICO VA-002-SYNT

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.

Abbreviations and acronyms:

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative