

Safety Data Sheet

Material: 60082729

ELASTOSIL® VARIO 40

Version: 1.8 (AU)

Date of print: 23.03.2022

Date of last alteration: 18.11.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Commercial product name:** ELASTOSIL® VARIO 40**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of substance / preparation:

Industrial.

Raw material for: elastomer products .

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Wacker Chemie AG

Street/POB-No.:

Hanns-Seidel-Platz 4

State/postal code/city:

D 81737 München

Telephone:

+49 89 6279-0

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+49 89 6279-1770

Distributor:

Wacker Chemie AG

Care of Wacker Chemicals Australia Pty Ltd

Street/POB-No.:

Unit 1 / 35 Dunlop Road

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Mulgrave, Victoria 3170

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+61 3 9541 8900

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Information about the Safety Data Sheet:

Telephone

+49 8677 83-4888

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eMail

WLCP-MSDS@wacker.com

1.4 Emergency telephone number**Emergency Information:****Regulatory Compliance Manager****+61 3 9541 8900****Emergency response service only (24h):****+61 2 8014 4558****SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Non-Hazardous Chemical according to Australian GHS criteria. Non-Dangerous Goods to the ADG Code.

Not a hazardous substance or mixture.

2.2 Label elements

No labeling according to GHS required.

2.3 Other hazards

The product contains substances which are relevant for the assessment in chapter 12.5.

Product can release hydrogen. Risk of hydrogen gas formation with water, alcohols, acids, metallic salts, amines and alkalis. In combination with oxygen, the released hydrogen can form oxyhydrogen.

SECTION 3: Composition/information on ingredients**3.1 Substances**

not applicable

3.2 Mixtures**3.2.1 Chemical characteristics**

Polydimethylsiloxane with functional groups and auxiliaries for addition cross-linking

3.2.2 Ingredients

| Type | CAS No. | Substance | Content % |
|------|----------|------------------------------|--------------|
| VERU | 556-67-2 | Octamethylcyclotetrasiloxane | >=0.3 – <0.5 |

Type: INHA: ingredient, VERU: impurity

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The product contains the following substances of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 57) in amounts $\geq 0.1\%$:

| Type | CAS No. | Substance | Content [%] |
|------|----------|-------------------------------|--------------------|
| VERU | 556-67-2 | Octamethylcyclotetrasiloxane | $\geq 0.3 - < 0.5$ |
| VERU | 541-02-6 | Decamethylcyclopentasiloxane | $\geq 0.3 - < 0.5$ |
| VERU | 540-97-6 | Dodecamethylcyclohexasiloxane | $\geq 0.1 - < 0.3$ |

Type: INHA: ingredient, VERU: impurity

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of accident or if you feel unwell seek medical advice (show label or SDS where possible).

After contact with the eyes:

Rinse immediately with plenty of water. Seek medical advice in case of continuous irritation.

After contact with the skin:

Wash with plenty of water or water and soap. In the event of a visible skin change or other complaints, seek medical advice (show label or SDS where possible).

After inhalation:

Provide fresh air.

After swallowing:

Give several small portions of water to drink. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Any relevant information can be found in other parts of this section.

4.3 Advice for the doctor:

Further toxicology information in section 11 must be observed.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Fires can be controlled with water spray, foam or carbon dioxide. Larger fires are best fought with alcohol-resistant aqueous film forming foam (AFFF-AR).

Extinguishing media which must not be used for safety reasons:

water jet , extinguishing powder , halones .

5.2 Special hazards arising from the substance or mixture

Risk of hazardous gasses or fumes in the event of fire. Exposure to combustion products may be a health hazard! Hazardous combustion products: toxic and very toxic fumes . With the use of water-based extinguishing agents care is required because hydrogen can be released, which accumulates after extinguishing the fire in poorly ventilated or confined areas and may re-fire or cause an explosion. Foam carpets may also include hydrogen or flammable vapors, which can lead to surface bursts. Remove sources of ignition during cleaning and absorbing.

5.3 Advice for firefighters

Special protective equipment for fire fighting:

Use respiratory protection independent of recirculated air. Keep unprotected persons away.

General information:

Fires involving SiH polysiloxane materials can be difficult to extinguish under certain circumstances.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. If material is released indicate risk of slipping. Do not walk through spilled material.

6.2 Environmental precautions

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

6.3 Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Do not flush away with water. For small amounts: Absorb with a neutral (non-acidic / non-basic) liquid binding material such as diatomaceous earth and dispose of according to government regulations. For large amounts: Liquids may be recovered using suction devices or pumps. Use only air driven or properly rated electrical equipment. Use vented recovery containers. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Silicone fluids are slippery; spills are a safety hazard. Apply sand or other inert granular material to improve traction.

Further information:

Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Material designated for disposal must be segregated from incompatible substances or materials specified in Sect. 10. Do not blend contaminated material with uncontaminated material. Do not seal collecting vessel gas-tight. Observe notes under section 7.

6.4 Reference to other sections

Relevant information in other sections has to be considered. This applies in particular for information given on personal protective equipment (section 8) and on disposal (section 13).

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling:

Ensure adequate ventilation. Open and handle container with care. Keep container closed when not in use. Keep away from incompatible substances in accordance with section 10. Where possible, inert process equipment and blanket vessels, tanks and containers with nitrogen to reduce the available oxygen level. Contact WACKER for additional publications on the safe Handling of SiH Products. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Spilled substance increases risk of slipping. Observe information in section 8.

Precautions against fire and explosion:

Product can release hydrogen. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and uncleaned containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

Do not store in virgin glass containers with basic surface. Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Do not store with: basic substances (e.g. alkalis, ammonia, amines), oxidizing agents, strong acids. Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place. Protect against moisture. Store container in a well ventilated place.

7.3 Specific end use(s)

No data available.

7.4 Regulations and standards (Australia):

Store and handle in accordance with Work Health & Safety Regulations or Occupational Health & Safety Regulations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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Maximum airborne concentrations at the workplace:

not applicable

8.2 Exposure controls**8.2.1 Exposure in the work place limited and controlled****General protection and hygiene measures:**

Observe standard industrial hygiene practices for the handling of chemical substances. Do not eat, drink or smoke when handling.

Personal protection equipment:**Respiratory protection**

No personal respiratory protective equipment normally required.

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Suitable respiratory equipment: Filtering half-face mask, according to acknowledged standards such as EN 149.

Recommended Filter type: FFP1 or equivalent filter, according to acknowledged standards such as EN 149

Observe the equipment manufacturer's information and wear time limits for respirators.

Eye protection

Recommendation: protective goggles .

Hand protection

Use of protective gloves is recommended when handling the material.

Recommended glove types: Protective gloves made of nitrile rubber

thickness of the material: > 0.1 mm

Breakthrough time: > 480 min

Recommended glove types: Protective gloves made of butyl rubber

thickness of the material: > 0.3 mm

Breakthrough time: > 480 min

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Note that, due to the numerous external influences (such as temperature), a chemically resistant protective glove in daily use may have a service life that is considerably shorter than the measured break through time.

8.2.2 Exposure to the environment limited and controlled

Prevent material from entering surface waters, drains or sewers and soil.

8.2.3 Specific notes (Australia):

If spraying or other operations which generate an aerosol mist are conducted, respiratory protection for exposed personnel is recommended. Select and use respirators in accordance with AS1715/1716.

8.3 Further information for system design and engineering measures

Observe information in section 7. Observe national regulatory requirements.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

| Property: | Value: | Method: |
|-------------------------------------|-------------------|---------|
| Appearance | | |
| Physical state | liquid | |
| Colour | colourless | |
| Odour | | |
| Odour | faint | |
| Odour limit | | |
| Odour limit | no data available | |
| pH-Value | | |
| pH-Value | not applicable | |
| Melting point/freezing point | | |
| Melting point / melting range | not applicable | |

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Initial boiling point and boiling range

Boiling point / boiling range: not applicable

Flash point

Flash point.....: 310 °C (DIN 51376)

Evaporation rate

Evaporation rate.....: no data available

Upper/lower flammability or explosive limits

Lower explosion limit (LEL): not applicable

Vapour pressure

Vapour pressure.....: not applicable

Solubility(ies)

Water solubility / miscibility.....: virtually insoluble

Vapour density

Relative gas/vapour density: No data known.

Relative DensityRelative Density: ca. 1.15 (23 °C; 1013 hPa) (-)
(Water / 4 °C = 1,00)Density: ca. 1.15 g/cm³ (23 °C; 1013 hPa) (-)**Partition coefficient: n-octanol/water**

Partition coefficient: n-octanol/water.....: No data known.

Auto-ignition temperature

Ignition temperature: 455 °C (DIN 51794)

Decomposition temperature

Thermal decomposition: Decomposition begins at approx. 200 °C

Viscosity

Viscosity (dynamic): ca. 20000 mPa.s at 23 °C (Brookfield)

Molecular mass

Molecular mass: not applicable

9.2 Other information

According to previous experience spontaneous combustion temperature for polymer siloxane with SiH compounds is above 240 °C (464 °F). On a catalytically active surface ignition may occur at much lower temperature. This applies to porous or fibrous substances including those with alkaline surfaces, such as thermal insulation and cementaceous insulating materials. Explosion limits for released hydrogen: 4 - 75.6%(V). pH Value: Product displays neutral reaction.

SECTION 10: Stability and reactivity**10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions**

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Relevant information can possibly be found in other parts of this section.

10.4 Conditions to avoid

moisture , Heat, open flames, and other sources of ignition. Contact with contaminated piping or vessels or with corroded and rusty containers can increase the rate of hydrogen formation. Observe information in section 7.

10.5 Incompatible materials

proton-active substances . Reacts violently with: acids , basic substances (e.g. alkalis, ammonia, amines) . Reacts with: alcohols , water , moisture , oxidizing agents , catalyst . Reaction causes the formation of: hydrogen .

10.6 Hazardous decomposition products

In contact with incompatible substances this material may quickly generate a large volume of flammable hydrogen gas. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****11.1.1 Acute toxicity**

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Product details:

| Route of exposure | Result/Effect | Species/Test system | Source |
|-------------------|--------------------|---------------------|-----------------------|
| Oral | LD50: > 2000 mg/kg | Rat | Conclusion by analogy |
| dermal | LD50: > 2000 mg/kg | Rat | Conclusion by analogy |

11.1.2 Skin corrosion/irritation**Product details:**

| Result/Effect | Species/Test system | Source |
|----------------|---------------------|-----------------------|
| not irritating | Rabbit | Conclusion by analogy |

11.1.3 Serious eye damage / eye irritation**Product details:**

| Result/Effect | Species/Test system | Source |
|----------------|---------------------|-----------------------|
| not irritating | Rabbit | Conclusion by analogy |

11.1.4 Respiratory or skin sensitization**Product details:**

| Route of exposure | Result/Effect | Species/Test system | Source |
|-------------------|-----------------|--------------------------|-----------------------------------|
| dermal | not sensitizing | Guinea pig; Buehler Test | Conclusion by analogy OECD 406 |

11.1.5 Germ cell mutagenicity**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.6 Carcinogenicity**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Reproductive toxicity**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Specific target organ toxicity (single exposure)**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (repeated exposure)**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Aspiration hazard**Assessment:**

Based on the physical-chemical properties of the product no aspiration hazard must be expected.

SECTION 12: Ecological information**12.1 Toxicity****Assessment:**

Assessment based on ecotoxicological tests with similar products under consideration of the physical-chemical properties: For

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this product no effects on aquatic organisms, relevant for classification, are expected. According to current knowledge adverse effects on water purification plants are not expected.

12.2 Persistence and degradability

Assessment:

Silicone content: biologically not degradable. Separation by sedimentation.

12.3 Bioaccumulative potential

Assessment:

Polymer component: No adverse effects expected.

12.4 Mobility in soil

Assessment:

Silicone content: Insoluble in water.

12.5 Results of PBT and vPvB assessment

The product contains substances $\geq 0.1\%$ that have been subjected to the SVHC process according to REACH regulation (EC) No 1907/2006 Art. 57 as fulfilling the PBT and/or vPvB criteria according to REACH regulation (EC) No 1907/2006 Annex XIII.

12.6 Other adverse effects

none known

12.7 Additional information

Easily separable from water by filtration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Material

Recommendation:

Risk of oxyhydrogen formation upon contact with the substances mentioned in 10. Material designated for disposal must be segregated from incompatible substances or materials specified in Sect. 10. Wastes of this material should not be mixed with other wastes. Provide measures such as vented bungs to ensure pressure relief in the waste containers. Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.1.2 Uncleaned packaging

Recommendation:

Containers may contain hazardous quantities of hydrogen gas. Uncleaned containers should not be reused to hold another material due to the potential for reaction between residual product and incompatible materials. Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

SECTION 14: Transport information

14.1 – 14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group

Land transport ADG Code (road and rail):

Valuation: Not regulated for transport

Transport by sea IMDG-Code:

Valuation: Not regulated for transport

Air transport ICAO-TI/IATA-DGR:

Valuation: Not regulated for transport

14.5 Environmental hazards

Hazardous to the environment: no

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14.6 Special precautions for user

Relevant information in other sections has to be considered.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Bulk transport in tankers is not intended.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

National and local regulations must be observed.

For information on labelling please refer to section 2 of this document.

15.1.1 Poisons Standard (Standard for the Uniform Scheduling of Medicines and Poisons; SUSMP)**Poisons Schedule number:**

Not a Scheduled Poison.

Label elements:**15.2 Details of international registration status**

Relevant information about individual substance inventories, where available, is given below.

| | |
|---------------------------------------|---|
| Japan | : ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory. |
| Australia | : AICS (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory. |
| China..... | : IECSC (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory. |
| Canada | : DSL (Domestic Substance List): This product is listed in, or complies with, the substance inventory. |
| Philippines..... | : PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory. |
| United States of America (USA)..... | : TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the substance inventory. |
| Taiwan | : TCSI (Taiwan Chemical Substance Inventory): This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation. |
| European Economic Area (EEA)..... | : REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter. |
| South Korea (Republic of Korea) | : AREC (Act on Registration and Evaluation of Chemicals; "K-REACH"): General note: in case of registration obligations for substances or polymers imported into Korea or manufactured within Korea these are fulfilled by the supplier mentioned in section 1. The registration obligations for substances or polymers imported into Korea by customers or other downstream users must be fulfilled by the latter. |

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SECTION 16: Other information

16.1 Material

The details in this document are based on the state of our knowledge at the time of revision. They do not constitute an assurance of the described product properties in terms of statutory warranty requirements.

The providing of this document to a recipient does not relieve the recipient of his or her responsibility toward compliance with all laws and stipulations applicable to the product. This applies in particular to the further sale or distribution of the product or substances or items containing the product, in other jurisdictions and with regard to the protection of third-party intellectual property rights. If the described product is processed or mixed with other substances or materials, the details stated in this document cannot be conferred to the resultant new product unless this has been expressly mentioned. If the product is repackaged, the recipient is obligated to additionally provide the required safety-related information.

WACKER restricts the use of its products inside the human body or in contact with bodily fluids and mucosa. For further details please review our Health Care Policy on www.wacker.com. WACKER may cancel any delivery obligation(s) if the Health Care Policy is not observed.

16.2 Further information:

Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

16.3 Glossary of Terms:

CAS No. - Chemical Abstracts Service Registry Number

UN No. - United Nations Dangerous Goods Number

ADG Code - Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road & Rail

IMDG Code - International Maritime Dangerous Goods Code

IATA Regs - International Air Transport Association (IATA) Dangerous Goods Regulations

NOHSC - Australian National Occupational Health and Safety Commission (Note: NOHSC documents are now published by Safe Work Australia)

OEL - Occupational exposure limit in Great Britain

AGW - Occupational exposure limit in Germany

ES_AU - Occupational exposure standard in Australia

- End of Safety Data Sheet -