

Safety Data Sheet (1907/2006/EC)

Material: F24.06/10

FLEXONAL® VR 6200 SIL B (ALL TYPES)

Version: 2.7 (GB)

Date of print: 26.05.2021

Date of last alteration: 24.08.2020

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

1.1 Product identifier

Commercial product name: FLEXONAL® VR 6200 SIL B (ALL TYPES)

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/distributor:

Bachmann Kunststoff Technologien GmbH

Street/POB-No.:

Rudolf-Diesel-Str. 2

State/postal code/city:

D 63322 Rödermark

Telephone:

+49 6074 94394

Telefax:

+49 6074 98544

Information about the Safety Data Sheet:

Telephone

+49 6074 94394

Telefax

+49 6074 98544

eMail

service@bktgermany.com

1.4 Emergency telephone number

Emergency Information:

+49 6131 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Not a hazardous substance or mixture.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008:

No labeling according to GHS required.

2.3 Other hazards

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 Hazardous ingredients

This material does not contain any ingredients above the permitted limit(s).

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) in amounts above $\geq 0.1\%$.

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).

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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 Indication of any immediate medical attention and special treatment needed

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 refire 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.

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. 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

Scoop up large quantities after dusting surfaces with sand or Fuller's earth to prevent sticking. Sweep or scrape up the spilled material and place in an appropriate chemical waste container. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. 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.

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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 BKT for additional publications on the safe Handling of SiH Products. 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.

Maximum temperature allowed during storage and transportation: 30 °C

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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.

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

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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.

Skin protection

not required .

8.2.2 Exposure to the environment limited and controlled

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

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 dark	
Odour		
Odour	odourless	
Odour limit		
Odour limit.....	no data available	
pH-Value		
pH-Value	not applicable	
Melting point/freezing point		
Melting point / melting range	not applicable	
Initial boiling point and boiling range		
Boiling point / boiling range	not applicable	
Flash point		
Flash point.....	> 304 °C	(ISO 2592)
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 Density		
Relative Density	1,1 (Water / 4 °C = 1,00)	
Density	1,1 g/cm ³	
Partition coefficient: n-octanol/water		
Partition coefficient: n-octanol/water.....	No data known.	
Auto-ignition temperature		
Ignition temperature	> 450 °C	(not specified)
Decomposition temperature		
Thermal decomposition	> 250 °C	
Viscosity		
Viscosity (dynamic)	20000 mPa.s	
Molecular mass		
Molecular mass	not applicable	

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9.2 Other information

According to previous experience autoignition of SiH containing products on a catalytically active surface may occur at a much lower temperature than expected. 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 with acids, basic substances (e.g. alkalis, ammonia, amines), alcohols, water, moisture, oxidizing agents, catalysts. The reaction takes place with the formation of hydrogen.

10.6 Hazardous decomposition products

Upon contact with the substances mentioned in 10: hydrogen. 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

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
No skin irritation	Rabbit	Conclusion by analogy

11.1.3 Serious eye damage / eye irritation

Product details:

Result/Effect	Species/Test system	Source
No eye irritation	Rabbit	Conclusion by analogy

11.1.4 Respiratory or skin sensitization

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
dermal	Does not cause skin sensitisation.	Guinea pig; Buehler Test	Conclusion by analogy OECD 406

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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:

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

SECTION 12: Ecological information

12.1 Toxicity

Assessment:

Based on available data no effects on aquatic organisms that are relevant for classification must be expected for the product up to its limits of water solubility. 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: Bioaccumulation is not expected to occur.

12.4 Mobility in soil

Assessment:

Silicone content: Insoluble in water.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

none known

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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.

13.1.3 Waste Disposal Legislation Ref.No.(EC)

It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

SECTION 14: Transport information

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

Road ADR:

Valuation: Not regulated for transport

Railway RID:

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

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.

Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances (Seveso III):

Not applicable

Relevant regulations:

SI 2002/1689: CHIP Regulations 2002

SI 2002/2677: COSHH Regulations 2002

SI 1999/3242: Management of Health & Safety at Work Regulations 1999

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Health & Safety at Work Act 1974

SI 1993/1643: Environmental Protection Act 1993 & Subsidiary Regulations.

Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.

Other specifications, restrictions and prohibitions:

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

15.2 Chemical safety assessment

Due to the results of the chemical safety assessment, exposure scenarios and identified uses are not of relevance for this safety data sheet.

15.3 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"): Please approach your regular BKT contact for more detailed information.

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.

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16.2 Further information:

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

- End of Safety Data Sheet -