

Safety Data Sheet (1907/2006/EC)

Material: 60112120

ELASTOSIL® FX 20 B

Version: 1.1 (GB)

Date of print: 12.07.2021

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:** ELASTOSIL® FX 20 B**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:

Wacker Chemie AG

Street/POB-No.:

Hanns-Seidel-Platz 4

State/postal code/city:

D 81737 München

Telephone:

+49 89 6279-0

Telefax:

+49 89 6279-1770

Information about the Safety Data Sheet:

Telephone

+49 8677 83-4888

Telefax

+49 8677 886-9722

eMail

WLCP-MSDS@wacker.com

1.4 Emergency telephone number

Emergency Information:

+44 1273 289451**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

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 Hazardous ingredients

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

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

CAS No.	Substance	Content [%]	Reason for inclusion

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540-97-6	Dodecamethylcyclohexasiloxane	$\geq 0,1 - < 0,3$	Persistent, bioaccumulative and toxic (article 57d) Very persistent and very bioaccumulative (article 57e)
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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 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 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.

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.

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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.

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.

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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.

8.3 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 determined	
Initial boiling point and boiling range		
Boiling point / boiling range	not applicable	
Flash point		
Flash point.....	321 °C	(estimation)
Evaporation rate		
Evaporation rate	no data available	
Upper/lower flammability or explosive limits		
Lower explosion limit (LEL)	not determined	
Vapour pressure		
Vapour pressure.....	not applicable	
Solubility(ies)		
Water solubility / miscibility.....	virtually insoluble	

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Vapour density

Relative gas/vapour density: No data known.

Relative DensityRelative Density: 1,06 (23 °C; 1013 hPa) (Estimated Value)
(Water / 4 °C = 1,00)Density: 1,06 g/cm³ (23 °C; 1013 hPa) (Estimated Value)**Partition coefficient: n-octanol/water**

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

Auto-ignition temperature

Ignition temperature: 445 °C (not determined)

Decomposition temperature

Thermal decomposition: 200 °C (Lit.)

Viscosity

Viscosity (dynamic): 5000 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 . The reaction takes place with 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****Product details:**

Route of exposure	Result/Effect	Species/Test system	Source
Oral	LD50: > 2000 mg/kg No mortality observed at this dose.	Rat	test report
Oral	LD50: > 15000 mg/kg	Rat	Conclusion by analogy
dermal	LD50: > 2000 mg/kg No mortality observed at this dose.	Rabbit	test report

11.1.2 Skin corrosion/irritation

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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; Maximisation 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:**

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.

Product details:

Result/Effect	Species/Test system	Source
> 1000 mg/l (nominal) effect level > maximum achievable concentration	static (water-accommodated fraction) Fish (96 h)	literature (Polydimethylsiloxane)

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EC50: > 0,0001 mg/l (measured) effect level > maximum achievable concentration	static (water-accommodated fraction) Daphnia magna (48 h)	literature (Polydimethylsiloxane)
IC50 (growth rate): > 100000 mg/l (nominal) effect level > maximum achievable concentration	static (water-accommodated fraction) Marine alga (skeleonema costatum) (72 h)	literature (Polydimethylsiloxane)
NOEC: > 10000 mg/kg	feeding study rainbow trout (Oncorhynchus mykiss) (28 d)	literature (Polydimethylsiloxane)
NOEC (mortality, growth, reproduction): > 500 mg/kg The exposure to treated sediment did not result in effects.	exposure via sediment Daphnia magna (21 d)	literature (Polydimethylsiloxane)

12.2 Persistence and degradability**Assessment:**

Silicone content: biologically not degradable. Elimination by adsorption to activated sludge.

12.3 Bioaccumulative potential**Assessment:**

Polymer component: Bioaccumulation is not expected to occur.

Data on substances**Dodecamethylcyclohexasiloxane (D6):**

Under controlled laboratory conditions D6 dissolved in water bioconcentrates in fish. However, available monitoring data indicate that the substance does not biomagnify in aquatic and terrestrial food webs in the environment.

12.4 Mobility in soil**Assessment:**

Polymer component: insoluble in water. Adsorbs on soil.

Data on substances:**Dodecamethylcyclohexasiloxane (D6):**

D6 has a very low water solubility, easily evaporates to air, and partitions to organic matter. It is degraded in air by reaction with hydroxyl radicals. In soil D6 is removed by several simultaneously occurring processes including volatilisation, hydrolysis, and clay-catalysed degradation.

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.

Data on substances:**Dodecamethylcyclohexasiloxane (D6):**

D6 formally meets the criteria for vPvB substances according to regulation (EC) No. 1907/2006 (REACH), Annex XIII. However, D6 does not behave similarly to known vPvB substances. The weight of scientific evidence from field studies shows that D6 is not biomagnifying in aquatic and terrestrial food webs. D6 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D6 in air that does not degrade by this reaction is not expected to deposit from the air to water, to land, or to living organisms.

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 WACKER 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.

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.

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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 -