

Safety Data Sheet

Material: 60011027

ELASTOSIL® M 4541

Version 2.5 (US)

Print Date 06/02/2023

Date of last alteration: 11/09/2022

1. Product and company identification

1.1 Identification of the substance or preparation:

Trade name

ELASTOSIL® M 4541

Use of the Substance/Mixture

Industrial.

Raw material for: elastomer products .

1.2 Company/undertaking identification:

Manufacturer/distributor:

Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München
Germany

Customer information:

Wacker Chemical Corporation
4950 S State Road
Ann Arbor, MI 48108
InfoLine:
Tel (517) 264-8240
Hours of operation:
Monday - Friday, 8 am to 5 pm (eastern standard time)
Corporate website: www.wacker.com

Emergency telephone no. (24h):

(517) 264-8500

Transportation emergency:

(800) 424-9300 (CHEMTREC, USA)
(703) 527-3887 (CHEMTREC, international)

This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (GHS):

No labeling according to GHS required.

2.3 Other hazards

No data available.

Endocrine disrupting properties - human health: 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.

Endocrine disrupting properties - environment: 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.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characterization

Polysiloxane with functional groups+auxiliary

3.2 Information on ingredients:

Type	CAS-No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	14808-60-7	Quartz	>10.0	<20.0	C1, C2

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Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** **Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

The product is not classified as harmful since the crystalline silica is incorporated into the product. Titanium dioxide: This component does not impact the product's hazard classification. Due to the product's physical properties, particulate inhalation exposure is not possible.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

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

4. First-aid measures

4.1 General information:

Get medical attention if irritation occurs or if breathing becomes difficult. Remove contaminated clothing and shoes.

4.2 If inhaled

No special treatment required.

4.3 In case of skin contact

For skin contact, immediately wipe away excess material. Wash with soap and water.

4.4 In case of eye contact

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

4.5 If swallowed

For Ingestion, if conscious, give no more than two glasses of water and induce vomiting. Vomiting can be induced by giving Syrup of Ipecac. Give fluids until the vomitus is clear.

4.6 Advice for the physician

Treat symptomatically.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:	Method:
Flash point.....	288 °C (550 °F)	(ISO 2592)
Boiling point/boiling range	exempt	
Lower explosion limit.....	exempt	
Upper explosion limit.....	no data available	
Ignition temperature	386 °C (727 °F)	(DIN 51794)

5.2 Fire and explosion hazards:

This material will burn with a lazy smoldering flame. This material does not present any unusual fire or explosion hazards.

5.3 Recommended extinguishing media:

AFFF alcohol compatible foam. Dry chemical. Carbon dioxide. Water - Use Fine Spray or Fog.

5.4 Unsuitable extinguishing media:

None known.

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

not applicable

5.6 Fire fighting procedures:

Full turn-out gear and Self Contained Breathing Apparatus (SCBA) should be worn when fighting large fires.

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6. Accidental release measures

6.1 Precautions:

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.

HAZWOPER PPE Level: D

6.2 Containment:

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.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for 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.

7. Handling and storage

7.1 Handling

Precautions for safe handling:

Observe information in section 8.

Precautions against fire and explosion:

Observe the general rules for fire prevention.

7.2 Storage

Conditions for storage rooms and vessels:

Observe local/state/federal regulations.

Advice for storage of incompatible materials:

Observe local/state/federal regulations.

Further information for storage:

Store in a dry and cool place.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

No special ventilation required.

8.2 Associate substances with specific control parameters such as limit values

none known

8.3 Personal protection equipment (PPE)

Respiratory protection:

Respiratory protection is not normally required.

Hand protection:

Any liquid-tight rubber or vinyl gloves.

Eye protection:

Safety glasses with side shields.

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Other protective clothing or equipment:

Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

Wash thoroughly after handling.

9. Physical and chemical properties**9.1 Appearance**

Physical state liquid
Form paste
Colour white
Odour faint

9.2 Safety data

Property:	Value:	Method:
Melting point.....	exempt	
Boiling point/boiling range	exempt	
Flash point.....	288 °C (550 °F)	(ISO 2592)
Ignition temperature	386 °C (727 °F)	(DIN 51794)
Lower explosion limit.....	exempt	
Upper explosion limit.....	no data available	
Vapour pressure.....	exempt	
Density	1.18 g/cm ³ at 23 °C (73 °F), at 1013 hPa	
Water solubility.....	practically insoluble	
pH	Not applicable. Insoluble in water.	
Partition coefficient: n-octanol/water	not applicable	
Viscosity, dynamic.....	40000 mPa.s at 23 °C (73 °F)	(DIN EN ISO 3219)
Viscosity, kinematic.....	no data available	

9.3 Further information

No data available.

Odour Threshold : no data available
Thermal decomposition..... : > 200 °C (> 392 °F)

10. Stability and reactivity**10.1 General information:**

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

10.2 Conditions to avoid

None known.

10.3 Materials to avoid

None known.

10.4 Hazardous decomposition products

If stored and handled properly: none known. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

10.5 Further information:

Hazardous polymerization cannot occur.
Conditions to avoid hazardous polymerization: None known.

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

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Product details:

Exposure routes	Result/Effect
Oral	LD50 > 2000 mg/kg Species: Rat, Source: Conclusion by analogy
dermal	LD50 > 2000 mg/kg Species: Rat, Source: Conclusion by analogy

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

No skin irritation
(Species: Rabbit, Source: Conclusion by analogy)

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

No eye irritation
(Species: Rabbit, Source: Conclusion by analogy)

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

Exposure routes	Result
Skin contact	Does not cause skin sensitisation. (Species: Guinea pig, Test system: Buehler Test, Method: OECD 406, Source: Conclusion by analogy)
Inhalation	No data available.

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.

11.1.11 Endocrine disrupting properties

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

11.1.12 Further toxicological information

Quartz has been classified by IARC as carcinogen group 1 ("carcinogenic to humans") and by NTP as known to be a human

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carcinogen. Titanium dioxide has been classified by IARC as carcinogen group 2B ("possibly carcinogenic to humans"). No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other information: None known.

12. Ecological information

12.1 Toxicity

Assessment:

Evaluation on basis of physical-chemical properties: No expected damaging effects to aquatic organisms.

12.2 Persistence and degradability

Assessment:

Polymer component: biologically not degradable. Elimination by adsorption to activated sludge.

12.3 Bioaccumulative potential

Assessment:

Polymer component: No adverse effects expected.

12.4 Mobility in soil

Assessment:

Polymer component: insoluble in water.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

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

12.7 Other adverse effects

none known

13. Disposal considerations

13.1 Product disposal

Recommendation:

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.

13.2 Packaging disposal

Recommendation:

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.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation: Not regulated for transport

14.2 Transport by sea IMDG-Code

Valuation: Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation: Not regulated for transport

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15. Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

No SARA Hazards

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants):

This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

California Proposition 65 Carcinogens:

14808-60-7	Quartz
13463-67-7	Titanium dioxide

This material does not contain any chemicals known to the State of California to cause reproductive effects.

Massachusetts Substance List:

13463-67-7	Titanium dioxide
14808-60-7	Quartz

Pennsylvania Right-to-Know Hazardous Substance List:

13463-67-7	Titanium dioxide
14808-60-7	Quartz

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	AIIC (Australian Inventory of Industrial Chemicals): 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.

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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 contact for more detailed information.

16. Other information

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

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 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists	ppm - Parts per Million
DOT - Department of Transportation	SARA - Superfund Amendments and Reauthorization Act
hPa - Hectopascals	STEL - Short Term Exposure Limit
mPa*s - Milli Pascal-Seconds	TSCA - Toxic Substances Control Act
OSHA - Occupational Safety and Health Administration	TWA - Time Weighted Average
PEL - Permissible Exposure Limit	

Flash point determination methods	Common name
ASTM D56	Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592	Cleveland open cup
ASTM D93, DIN 51758, ISO 2719	Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679	Setaflash or Rapid closed cup
DIN 51755	Abel-Pensky closed cup

16.3 Conversion table:

Pressure:.....: 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa
Viscosity:.....: 1 mPa*s = 1 centipoise (cP)