

**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Commercial product name:** ELASTOSIL® M 4600 A

This substance/ mixture contains nanoforms

**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

Contact point:

Wacker Chemicals Ltd.

Street/POB-No.:

2 Arlington Square, Downshire Way

Postal code/city:

Bracknell RG12 1WA

Country:

United Kingdom

Telephone:

+44 1344 401 670

Information about the Safety Data Sheet:

Telephone

+49 8677 83-4888

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.

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.

**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

# Safety Data Sheet (1907/2006/EC)

Material: 60008685

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## 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).

**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.

# Safety Data Sheet (1907/2006/EC)

Material: 60008685

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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:

exempt

### 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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

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**Further information for system design and engineering measures**

Observe information in section 7. Observe national regulatory requirements.

**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, according to recognized standards such as EN374.

Recommended glove types: Protective gloves made of nitrile rubber

thickness of the material: &gt; 0,1 mm

Breakthrough time: &gt; 480 min

Recommended glove types: Protective gloves made of butyl rubber

thickness of the material: &gt; 0,3 mm

Breakthrough time: &gt; 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.

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

<b>Property:</b>	<b>Value:</b>	<b>Method:</b>
Physical state .....	liquid	
Colour .....	colourless dark	
Odour .....	faint	
Odour Threshold .....	no data available	
Melting point .....	exempt	
Boiling point/boiling range .....	exempt	
Lower explosion limit .....	exempt	
Upper explosion limit .....	no data available	
Flash point .....	321 °C	(DIN 51376)
Ignition temperature .....	445 °C	(DIN 51794)
Thermal decomposition .....	200 °C	
pH .....	Not applicable. Insoluble in water.	
Viscosity, kinematic .....	no data available	
Viscosity, dynamic .....	20000 mPa.s at 23 °C	(Brookfield)
Water solubility .....	practically insoluble	
Partition coefficient: n-octanol/water .....	not applicable	
Vapour pressure .....	exempt	
Density .....	1,1 g/cm <sup>3</sup> (25 °C; 1013 hPa)	(DIN 53217)
Relative vapour density .....	no data available	
Particle Size Distribution .....	Not applicable.	

**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

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Date of last alteration: 15.11.2022

**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).

Property:	Value:	Method:
Evaporation rate.....:	no data available	
Molecular weight.....:	not applicable	

**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 hazard classes as defined in Regulation (EC) No 1272/2008****11.1.1 Acute toxicity****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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

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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:**

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

**11.2 Information on other hazards****11.2.1 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.

**11.2.2 Further toxicological information**

None known.

**SECTION 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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

Print Date 05.01.2023

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**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

**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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

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**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 &amp; Safety at Work Regulations 1999

Health &amp; Safety at Work Act 1974

SI 1993/1643: Environmental Protection Act 1993 &amp; 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

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX I. RESTRICTED EXPLOSIVES PRECURSORS: Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX II. REPORTABLE EXPLOSIVES PRECURSORS: Not applicable

**Details of international registration status**

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

Japan .....	: <b>ENCS</b> (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
New Zealand .....	: <b>NZIoC</b> (New Zealand Inventory of Chemicals): This product is listed in, or complies with, the substance inventory. (For a correct interpretation of the New Zealand status, additional information like GHS classification or Group Standard is required.)
Australia .....	: <b>AiIC</b> (Australian Inventory of Industrial Chemicals): This product is listed in, or complies with, the substance inventory.
China.....	: <b>IECSC</b> (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Canada .....	: <b>DSL</b> (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
Philippines.....	: <b>PICCS</b> (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA).....	: <b>TSCA</b> (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 .....	: <b>TCSI</b> (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).....	: <b>REACH</b> (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) .....	: <b>AREC</b> (Act on Registration and Evaluation of Chemicals; "K-REACH"): Please approach your regular contact for more detailed information.

**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.



**Safety Data Sheet (1907/2006/EC)**

Material: 60008685

ELASTOSIL® M 4600 A

Version 4.0 (GB)

Print Date 05.01.2023

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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](http://www.wacker.com). WACKER may cancel any delivery obligation(s) if the Health Care Policy is not observed.

**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.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ABEK - Multi-Range Filter A, B, E, K; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; APF - Assigned Protection Factor; CAS No. - Chemical Abstracts Service Registry Number; DFG - German Research Foundation; DIN - German institute for standardization; DOC - Dissolved Organic Carbon; d/w - days per week; EC / CE / EG - European Community; EC50 / CE50 - Median effective concentration; ECHA - European Chemicals Agency; ED - endocrine disruptor; EG-RL - test method according to Regulation 440/2008; EN - European Standard; ERC - Environmental Release Category; g/cm<sup>3</sup> - gram per cubic centimeter; h - hour(s); H-Code - hazard statement code(s); hPa - Hectopascal; IATA Regs - International Air Transport Association (IATA) Dangerous Goods Regulations; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 / CI50 - half maximal inhibitory concentration; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IMDG Code - International Maritime Dangerous Goods Code; ISO - International Organization for Standardization; LC50 / CL50 - medium lethal concentration; LD50 / DL50 - medium lethal dose; LOAEC - Lowest Observed Adverse Effect Concentration; LOAEL - Lowest Observed Adverse Effect Level; MARPOL - International Convention for the Prevention of Marine Pollution from Ships; mg/g - milligrams per gram; mg/kg - milligrams per kilogram; mg/l - milligrams per liter; mg/m<sup>3</sup> - milligrams per cubic meter; min - minutes; mJ - millijoule; mm - millimeter; mm<sup>2</sup>/s - square millimeter per second; mPa.s - Millipascal second(s); MSDS / SDB / SDS - safety data sheet; NOAEC - No Observed Adverse Effect Concentration; NOAEL - No Observed adverse effect level; NOEC - No Observed Effect Concentration; NOEL - No Observed Effect Level; OECD - Organization for Economic Cooperation and Development; PBT - persistent, bioaccumulative, toxic; PC - product category; P-Code - precautionary statement code(s); ppm - parts per million; PROC - process category; RCP - reciprocal calculation-based procedure; RID - convention concerning international carriage by rail; SU - sector of use; SVHC - substance of very high concern; Vol% - volume percent; UN No. - United Nations Dangerous Goods Number; vPvB - very Persistent, very Bioaccumulative

**- End of Safety Data Sheet -**

**Safety Data Sheet (1907/2006/EC)**

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Commercial product name:** ELASTOSIL® M 4600 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

Contact point:

Wacker Chemicals Ltd.

Street/POB-No.:

2 Arlington Square, Downshire Way

Postal code/city:

Bracknell RG12 1WA

Country:

United Kingdom

Telephone:

+44 1344 401 670

Information about the Safety Data Sheet:

Telephone

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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**

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.

**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).

# Safety Data Sheet (1907/2006/EC)

Material: 60008687

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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).

**After contact with the eyes:**

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

**After contact with the skin:**

Wipe off excess material with cloth or paper. 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:**

Material cannot be inhaled under normal conditions.

**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:**

alcohol-resistant foam , carbon dioxide , water mist , sprinkler system , sand , extinguishing powder .

**Extinguishing media which must not be used for safety reasons:**

water jet .

### 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 .

### 5.3 Advice for firefighters

**Special protective equipment for fire fighting:**

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

## 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.

# Safety Data Sheet (1907/2006/EC)

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

## 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:**

Observe information in section 8.

**Precautions against fire and explosion:**

Observe the general rules for fire prevention.

### 7.2 Conditions for safe storage, including any incompatibilities

**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.

### 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:**

exempt

### 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.

**Further information for system design and engineering measures**

Observe information in section 7. Observe national regulatory requirements.

**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, according to recognized standards such as EN374.

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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

**8.2.2 Exposure to the environment limited and controlled**

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

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

Property:	Value:	Method:
Physical state .....	liquid	
Form .....	paste	
Colour .....	colourless	
Odour .....	faint	
Odour Threshold .....	no data available	
Melting point .....	exempt	
Boiling point/boiling range .....	exempt	
Lower explosion limit .....	exempt	
Upper explosion limit .....	no data available	
Flash point .....	301 °C	(DIN 51376)
Ignition temperature .....	425 °C	(DIN 51794)
Thermal decomposition .....	200 °C	
pH .....	Not applicable. Insoluble in water.	
Viscosity, kinematic .....	no data available	
Viscosity, dynamic .....	10000 mPa.s at 23 °C	(Brookfield)
Water solubility .....	practically insoluble	
Partition coefficient: n-octanol/water .....	not applicable	
Vapour pressure .....	exempt	
Density .....	1 g/cm <sup>3</sup> (25 °C; 1013 hPa)	(DIN 53217)
Relative vapour density .....	no data available	
Particle Size Distribution .....	Not applicable.	

**9.2 Other information**

No data available.

Property:	Value:	Method:
Evaporation rate .....	no data available	
Molecular weight .....	not applicable	

**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**

None known.

**10.5 Incompatible materials**

None known.

**10.6 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.

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****11.1.1 Acute toxicity**

**Safety Data Sheet (1907/2006/EC)**

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

**Product details:**

Exposure routes	Result/Effect
Oral	LD50 > 2000 mg/kg Neither mortality nor clinical signs of toxicity were observed with the given dose. Species: Rat, Method: OECD 423, Source: Conclusion by analogy
dermal	LD50 > 2000 mg/kg Species: Rabbit, Source: Expert judgement

**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:**

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

**11.2 Information on other hazards****11.2.1 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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

**11.2.2 Further toxicological information**

None known.

**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
LL50: > 1000 mg/l (nominal) The effect level is greater than the maximum achievable concentration. The value refers to the water-accommodated fraction (WAF).	static test Fish (96 h)	literature (Polydimethylsiloxane)
EC50: > 0,0001 mg/l (measured) The effect level is greater than the maximum achievable concentration. The value refers to the water-accommodated fraction (WAF).	static test Daphnia magna (Water flea) (48 h)	literature (Polydimethylsiloxane)
IC50 (Growth rate): > 100000 mg/l (nominal) The effect level is greater than the maximum achievable concentration. The value refers to the water-accommodated fraction (WAF).	static test Skeletonema costatum (marine diatom) (72 h)	literature (Polydimethylsiloxane)
NOEC: > 10000 mg/kg	feeding study Oncorhynchus mykiss (rainbow trout) (28 d)	literature (Polydimethylsiloxane)
NOEC (mortality): > 500 mg/kg The exposure to treated sediment did not result in effects.	exposure via sediment Daphnia magna (Water flea) (21 d)	literature (Polydimethylsiloxane)
NOEC (Growth): > 500 mg/kg The exposure to treated sediment did not result in effects.	exposure via sediment Daphnia magna (Water flea) (21 d)	literature (Polydimethylsiloxane)
NOEC (reproduction rate): > 500 mg/kg The exposure to treated sediment did not result in effects.	exposure via sediment Daphnia magna (Water flea) (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.

**12.4 Mobility in soil****Assessment:**

Polymer component: insoluble in water. Adsorbs on soil.

**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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

**12.7 Other adverse effects**

none known

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****13.1.1 Material**

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.

**13.1.2 Uncleaned packaging**

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.

**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 &amp; Safety at Work Regulations 1999



# Safety Data Sheet (1907/2006/EC)

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

Health &amp; Safety at Work Act 1974

SI 1993/1643: Environmental Protection Act 1993 &amp; 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

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX I. RESTRICTED EXPLOSIVES PRECURSORS: Not applicable

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - ANNEX II. REPORTABLE EXPLOSIVES PRECURSORS: Not applicable

**Details of international registration status**

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

Japan .....	: <b>ENCS</b> (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
New Zealand .....	: <b>NZIoC</b> (New Zealand Inventory of Chemicals): This product is listed in, or complies with, the substance inventory. (For a correct interpretation of the New Zealand status, additional information like GHS classification or Group Standard is required.)
Australia .....	: <b>AIIC</b> (Australian Inventory of Industrial Chemicals): This product is listed in, or complies with, the substance inventory.
China.....	: <b>IECSC</b> (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Canada .....	: <b>DSL</b> (Domestic Substance List): This product is listed in, or complies with, the substance inventory.
Philippines.....	: <b>PICCS</b> (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substance inventory.
United States of America (USA).....	: <b>TSCA</b> (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 .....	: <b>TCSI</b> (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).....	: <b>REACH</b> (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) .....	: <b>AREC</b> (Act on Registration and Evaluation of Chemicals; "K-REACH"): Please approach your regular contact for more detailed information.

**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.

**Safety Data Sheet (1907/2006/EC)**

Material: 60008687

ELASTOSIL® M 4600 B

Version 3.0 (GB)

Print Date 05.01.2023

Date of last alteration: 15.11.2022

**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.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ABEK - Multi-Range Filter A, B, E, K; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; APF - Assigned Protection Factor; CAS No. - Chemical Abstracts Service Registry Number; DFG - German Research Foundation; DIN - German institute for standardization; DOC - Dissolved Organic Carbon; d/w - days per week; EC / CE / EG - European Community; EC50 / CE50 - Median effective concentration; ECHA - European Chemicals Agency; ED - endocrine disruptor; EG-RL - test method according to Regulation 440/2008; EN - European Standard; ERC - Environmental Release Category; g/cm<sup>3</sup> - gram per cubic centimeter; h - hour(s); H-Code - hazard statement code(s); hPa - Hectopascal; IATA Regs - International Air Transport Association (IATA) Dangerous Goods Regulations; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 / CI50 - half maximal inhibitory concentration; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IMDG Code - International Maritime Dangerous Goods Code; ISO - International Organization for Standardization; LC50 / CL50 - medium lethal concentration; LD50 / DL50 - medium lethal dose; LOAEC - Lowest Observed Adverse Effect Concentration; LOAEL - Lowest Observed Adverse Effect Level; MARPOL - International Convention for the Prevention of Marine Pollution from Ships; mg/g - milligrams per gram; mg/kg - milligrams per kilogram; mg/l - milligrams per liter; mg/m<sup>3</sup> - milligrams per cubic meter; min - minutes; mJ - millijoule; mm - millimeter; mm<sup>2</sup>/s - square millimeter per second; mPa.s - Millipascal second(s); MSDS / SDB / SDS - safety data sheet; NOAEC - No Observed Adverse Effect Concentration; NOAEL - No Observed adverse effect level; NOEC - No Observed Effect Concentration; NOEL - No Observed Effect Level; OECD - Organization for Economic Cooperation and Development; PBT - persistent, bioaccumulative, toxic; PC - product category; P-Code - precautionary statement code(s); ppm - parts per million; PROC - process category; RCP - reciprocal calculation-based procedure; RID - convention concerning international carriage by rail; SU - sector of use; SVHC - substance of very high concern; Vol% - volume percent; UN No. - United Nations Dangerous Goods Number; vPvB - very Persistent, very Bioaccumulative

**- End of Safety Data Sheet -**