

**Safety Data Sheet**

Material: 60007383

ELASTOSIL® M 4470

Version: 2.1 (US)

Date of print: 07/23/2018

Date of last alteration: 06/16/2018

**1. Product and company identification****1.1 Identification of the substance or preparation:**

**Commercial product name:** ELASTOSIL® M 4470  
 Use of substance / preparation: Industrial.  
 Raw material for: elastomer products .

**1.2 Company/undertaking identification:**

**Manufacturer/distributor:** Wacker Chemical Corporation  
 3301 Sutton Road  
 Adrian, MI 49221-9397  
 USA

**Customer information:** InfoLine:  
 Tel (517) 264-8240, Fax (517) 264-8740  
 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.

**3. Composition/information on ingredients****3.1 Chemical characterization (preparation)**

Chemical characteristics  
 Polysiloxane with functional groups + auxiliary

**3.2 Information on ingredients:**

Type	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	14808-60-7	Quartz	>40.0	<50.0	C1, C2

**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.

Quartz: This component does not impact the product's hazard classification. Due to the product's physical properties, particulate inhalation exposure is not possible.

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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.

## 4. First-aid measures

### 4.1 General information:

Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

### 4.2 After inhalation

Material cannot be inhaled under normal conditions. No special treatment required.

### 4.3 After contact with the skin

For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

### 4.4 After contact with the eyes

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

### 4.5 After swallowing

No special measures are required after swallowing.

## 5. Fire-fighting measures

### 5.1 Flammable properties:

Property:	Value:	Method:
Flash point.....	> 250 °C (> 482 °F)	(DIN 51376)
Boiling point / boiling range .....	not applicable	
Lower explosion limit (LEL) .....	not applicable	
Upper explosion limit (UEL).....	not applicable	
Ignition temperature .....	> 450 °C (> 842 °F)	(DIN 51794)
NFPA Hazard Class (comb./flam.liquid) .....	IIIB	

### 5.2 Fire and explosion hazards:

This material does not present any unusual fire or explosion hazards.

### 5.3 Recommended extinguishing media:

water-spray , dry chemical , alcohol-resistant foam , carbon dioxide , sand .

### 5.4 Unsuitable extinguishing media:

water jet

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

Hazardous combustion products: carbon monoxide , carbon dioxide , silicon dioxide , formaldehyde , Various hydrocarbon fragments .

### 5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a self-contained breathing apparatus. Cool endangered containers with water.

## 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

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## 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 General information:

Always stir well before use.

### 7.2 Handling

#### Precautions for safe handling:

Observe information in section 8.

#### Precautions against fire and explosion:

Observe the general rules for fire prevention.

### 7.3 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.

**Minimum temperature allowed during storage and transportation:** 0 °C (32 °F)

## 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

not applicable

### 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 or chemical safety goggles.

#### Other protective clothing or equipment:

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

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**8.4 General hygiene and protection measures:**

Avoid contact with eyes, skin and clothing. When handling do not eat, drink, smoke or apply cosmetics. Follow standard industrial hygiene practices when using this material. Wash thoroughly after handling.

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

Physical state / form .....: paste  
 Colour .....: red  
 Odour .....: odourless

**9.2 Safety parameters**

<b>Property:</b>	<b>Value:</b>	<b>Method:</b>
Melting point / melting range .....	not applicable	
Boiling point / boiling range .....	not applicable	
Flash point.....	> 250 °C (> 482 °F)	(DIN 51376)
Ignition temperature .....	> 450 °C (> 842 °F)	(DIN 51794)
Lower explosion limit (LEL) .....	not applicable	
Upper explosion limit (UEL).....	not applicable	
Vapour pressure.....	not applicable	
Density .....	approx. 1.44 g/cm <sup>3</sup> at 20 °C (68 °F), at 1013 hPa	(DIN 53217)
Water solubility / miscibility.....	virtually insoluble	
pH-Value .....	not applicable	
Viscosity (dynamic) .....	15000 mPa.s at 23 °C (73 °F)	(DIN EN ISO 3219)

**9.3 Further information**

Odour limit .....

Thermal decomposition .....

**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.

**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	LD <sub>50</sub> : > 2000 mg/kg	rat	Conclusion by analogy
dermal	LD <sub>50</sub> : > 2000 mg/kg	rat	Conclusion by analogy

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

Result/Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by analogy

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

Result/Effect	Species/Test system	Source
not irritating	rabbit	Conclusion by analogy

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

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

**11.1.5 Germ cell mutagenicity****Assessment:**

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

**11.1.6 Carcinogenicity****Assessment:**

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

**11.1.7 Reproductive toxicity****Assessment:**

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

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

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

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

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

**11.1.10 Aspiration hazard****Assessment:**

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

**11.1.11 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 carcinogen. 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.

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

Assessment based on ecotoxicological tests with similar products under consideration of the physical-chemical properties: For this product no effects on aquatic organisms, relevant for classification, are expected. According to current knowledge adverse

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effects on water purification plants are not expected.

**12.2 Persistence and degradability****Assessment:**

Silicone content: biologically not degradable. Separation by sedimentation.

**12.3 Bioaccumulative potential****Assessment:**

Polymer component: No adverse effects expected.

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

Silicone content: Insoluble in water.

**12.5 Other adverse effects**

none known

**12.6 Additional information**

Easily separable from water by filtration.

**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

**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.

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**SARA 311/312 Hazard Class:**

This product does not present any SARA 311/312 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****Massachusetts Substance List:**1309-37-1 Iron oxide  
14808-60-7 Quartz**New Jersey Right-to-Know Hazardous Substance List:**1309-37-1 Iron oxide  
14808-60-7 Quartz**Pennsylvania Right-to-Know Hazardous Substance List:**1309-37-1 Iron oxide  
14808-60-7 Quartz**15.3 Details of international registration status**

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

South Korea (Republic of Korea) .....	<b>ECL</b> (Existing Chemicals List): This product is listed in, or complies with, the substance inventory.
Japan .....	<b>ENCS</b> (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
Australia .....	<b>AICS</b> (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory.
People's Republic of 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 (Republic of China).....	<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.

**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

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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.

All deliveries are subject to the WACKER SILICONES Health Care Policy, which is available at [www.wacker.com](http://www.wacker.com).

**16.2 Glossary of Terms:**

ACGIH - American Conference of Governmental Industrial Hygienists

DOT - Department of Transportation

hPa - Hectopascals

mPa\*s - Milli Pascal-Seconds

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

ppm - Parts per Million

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

WHMIS - Canadian Workplace Hazardous Materials Identification System

**Flash point determination methods**

ASTM D56.....

ASTM D92, DIN 51376, ISO 2592 .....

ASTM D93, DIN 51758, ISO 2719 .....

ASTM D3278, DIN 55680, ISO 3679 .....

DIN 51755.....

**Common name**

Tagliabue (Tag) closed cup

Cleveland open cup

Pensky-Martens closed cup

Setaflash or Rapid closed cup

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)