

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

Material: 60003811

ELASTOSIL® RT 604 B

Version: 2.3 (GB)

Date of print: 26.09.2017

Date of last alteration: 22.06.2016

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Commercial product name:** ELASTOSIL® RT 604 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 .

This product is a polymer, which is exempted from registration according to (EC) regulation 1907/2006, article 2.

**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

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Information about the Safety Data Sheet:

Telephone

+49 8677 83-4888

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WLCP-MSDS@wacker.com

**1.4 Emergency telephone number****Emergency Information (German):****Plant fire brigade****+49 8677 83-2222****Emergency Information (internat.):****National Response Center****+49 621 60-43333****SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

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

Not a hazardous substance or mixture.

**2.2 Label elements**

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

No labeling according to GHS required.

**2.3 Other hazards**

Product can release hydrogen. Risk of hydrogen gas formation with water, alcohols, acids, metallic salts, amines and alkalis. In combination with oxygen, the released hydrogen can form oxyhydrogen.

**SECTION 3: Composition/information on ingredients****3.1 Substances****3.1.1 Chemical characteristics**

Polydimethylsiloxane with hydrogen groups

**3.2 Mixtures**

not applicable

**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.

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**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: carbon oxides , silicon oxides , incompletely burnt hydrocarbons , toxic and very toxic fumes . With the use of water-based extinguishing agents care is required because hydrogen can be released, which accumulates after extinguishing the fire in poorly ventilated or confined areas and may refire or cause an explosion. Foam carpets may also include hydrogen or flammable vapors, which can lead to surface bursts. Remove sources of ignition during cleaning and absorbing.

**5.3 Advice for firefighters****Special protective equipment for fire fighting:**

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

**General information:**

Fires involving SiH polysiloxane materials can be difficult to extinguish under certain circumstances.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. If material is released indicate risk of slipping. Do not walk through spilled material.

**6.2 Environmental precautions**

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. 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.

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**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****General information:**

Stir thoroughly before use or catalysing.

**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.

**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.

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

Material: 60003811

ELASTOSIL® RT 604 B

Version: 2.3 (GB)

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**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**

not applicable

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

<b>Property:</b>	<b>Value:</b>	<b>Method:</b>
<b>Appearance</b>		
Physical state / form .....	liquid	
Colour.....	colourless	
<b>Odour</b>		
Odour .....	odourless	
<b>pH-Value</b>		
pH-Value .....	not applicable	
<b>Melting point/freezing point</b>		
Melting point / melting range .....	not applicable	
<b>Initial boiling point and boiling range</b>		
Boiling point / boiling range .....	not applicable	
<b>Flash point</b>		
Flash point.....	> 250 °C	(DIN 51376)
<b>Upper/lower flammability or explosive limits</b>		
Lower explosion limit (LEL) .....	not applicable	
Upper explosion limit (UEL).....	not applicable	
<b>Vapour pressure</b>		
Vapour pressure.....	not applicable	
<b>Solubility(ies)</b>		
Water solubility / miscibility.....	virtually insoluble at 20 °C	
<b>Vapour density</b>		
Relative gas/vapour density .....	No data known.	
<b>Relative Density</b>		
Relative Density .....	0,97 (20 °C) (Water / 4 °C = 1,00)	(DIN 51757)
Density .....	0,97 g/cm <sup>3</sup> (20 °C)	(DIN 51757)
<b>Partition coefficient: n-octanol/water</b>		
Partition coefficient: n-octanol/water.....	No data known.	
<b>Auto-ignition temperature</b>		
Ignition temperature .....	> 400 °C	(DIN 51794)
<b>Decomposition temperature</b>		
Thermal decomposition .....	> 200 °C	

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

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ELASTOSIL® RT 604 B

Version: 2.3 (GB)

Date of print: 26.09.2017

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**Viscosity**

Viscosity (dynamic) .....: 150 - 250 mPa.s at 20 °C

**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). Re 9.2 pH Value: Product displays neutral reaction.

**SECTION 10: Stability and reactivity****10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions**

Stable under normal conditions of use. In contact with incompatible substances this material may quickly generate a large volume of flammable hydrogen gas.

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**

Reacts violently with: acids , basic substances (e.g. alkalis, ammonia, amines) . Reacts with: alcohols , water , moisture , oxidizing agents , catalyst . Reaction causes the formation of: hydrogen .

**10.6 Hazardous decomposition products**

hydrogen . Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****11.1.1 Acute toxicity****Product details:**

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD <sub>50</sub> : > 2000 mg/kg No mortality with the given dose.	rat	test report
oral	LD <sub>50</sub> : > 15000 mg/kg	rat	Conclusion by analogy
dermal	LD <sub>50</sub> : > 2000 mg/kg No mortality with the given dose.	rabbit	test report

**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**

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

Material: 60003811

ELASTOSIL® RT 604 B

Version: 2.3 (GB)

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**Product details:**

Route of exposure	Result/Effect	Species/Test system	Source
dermal	not sensitizing	guinea-pig; Magnusson-Kligman	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:**

Evaluation in analogy to similar product. No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.

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

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

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

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**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

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ELASTOSIL® RT 604 B

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**12.6 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**

Air transport: Due to safety reasons no air transport of inner packagings &gt; 1kg!

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.

**Relevant regulations:**

SI 2002/1689: CHIP Regulations 2002

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SI 2002/2677: COSHH Regulations 2002  
SI 1999/3242: Management of Health & Safety at Work Regulations 1999  
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.

**15.2 Chemical safety assessment**

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

**15.3 Details of international registration status**

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

South Korea (Republic of Korea) ..... : **ECL** (Existing Chemicals List):  
This product is listed in, or complies with, the substance inventory.

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.

People's Republic of 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):  
This product is listed in, or complies with, the substance inventory.

Taiwan (Republic of China)..... : **TCSI** (Taiwan Chemical Substance Inventory):  
This product is listed in, or complies with, the substance inventory. General note:  
Taiwan REACH 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.

**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.

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

**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 -