

Material: 60020254 ELASTOSIL® R plus 4305/50

Version: 2.1 (GB) Date of print: 16.10.2013 Date of last alteration: 13.09.2013

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Commercial product name: ELASTOSIL® R plus 4305/50

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of substance / preparation:

Industrial.

Raw material for: elastomer products .

1.3 Details of the supplier of the safety data sheet

Manufacturer/distributor: Wacker Chemie AG
Street/POB-No.: Hanns-Seidel-Platz 4
State/postal code/city: D 81737 München
Telephone: +49 89 6279-0
Telefax: +49 89 6279-1770

Information about the Safety Data Sheet: Telephone +49 8677 83-4888
Telefax +49 8677 886-9722

eMail WLCP-MSDS@wacker.com

1.4 Emergency telephone number

Emergency Information: 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 (GHS):

Class	Category	Route of
		exposure
-	-	

Classification (67/548/EEC, 1999/45/EC):

R-Phrase	Description
R-	-

This product is not a dangerous preparation within the meaning of Directive 1999/45/EC.

2.2 Label elements

Labelling (GHS):

H-Code	Hazard Statements
-	-
P-Code	Precautionary Statements
-	-

Labelling (67/548/EEC, 1999/45/EC):

R-Phrase	Description
R-	-
S-Phrase	Description
S-	-

2.3 Other hazards

Product can release hydrogen. Danger of oxyhydrogen gas formation with water, alcohols, acids, metallic salts, amines and alkalis.



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SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

3.2.1 Chemical characterization (preparation)

Polydimethylsiloxane with vinyl groups and auxiliary

SECTION 4: First aid measures

I.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 inhalation:

Material cannot be inhaled under normal conditions.

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 contact with the eyes:

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

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, sand. Hydrogen gas can become trapped under foam blankets, so sources of ignition must be eliminated during the clean-up and recovery process.

Extinguishing media which must not be used for safety reasons:

water, extinguishing powder, halones.

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Special protective equipment for fire fighting:

Use respiratory protection independent of recirculated air.

SECTION 6: Accidental release measures

5.1 Personal precautions, protective equipment and emergency procedures

Secure the area. Wear personal protection equipment (see section 8). If material is released indicate risk of slipping.

6.2 Environmental precautions

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



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6.3 Methods and material for containment and cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. Use vented recovery containers. 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.

Further information:

Eliminate all sources of ignition. Material designated for disposal must be segregated from incompatible substances or materials specified in Sect. 10. Do not blend contaminated material with uncontaminated material. Observe notes under section 7.

6.4 Reference to other sections

Relevant information in other sections have 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:

Open and handle container with care. Ensure adequate ventilation. 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.

Precautions against fire and explosion:

Product can release hydrogen. In partly emptied containers formation of explosive mixtures is possible. Keep away from sources of ignition and do not smoke. Keep away from open flames, heat and sparks. Take precautionary measures against electrostatic charging.

7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:

none known

Advice for storage of incompatible materials:

Do not store with: basic substances (e.g. alkalis, ammonia, amines), oxidizing agents, strong acids.

Further information for storage:

Store in the original container. Protect against moisture. Store in a dry and cool place. Store container in a well ventilated place.

7.3 Specific end use(s)

No data are 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:

Do not eat, drink or smoke when handling. Wash hands at the end of work and before eating.

Personal protection equipment:

Respiratory protection

not required.

Hand protection

Recommendation: Protective gloves made of butyl rubber, protective gloves coated with neoprene, PVC gloves. Gloves suitable for up to 60 minutes' use. The selection of appropriate gloves not only depends on the material, but also on other quality characteristics, and may vary depending on the manufacturer. Please observe information from your glove supplier in terms of permeability and breakthrough time.



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Eye protection

protective goggles .

8.2.2 Exposure to the environment limited and controlled

Prevent material from entering surface waters and soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General information:

Important information about the protection of health, safety and the environment:

Method: Property: Value: Melting point / melting range not applicable Boiling point / boiling range not applicable Flash point..... > 200 °C (DIN 51376) Ignition temperature > 400 °C (DIN 51794) Lower explosion limit (LEL) not applicable Upper explosion limit (UEL)..... not applicable Vapour pressure..... not applicable (ISO 1183-1 A) pH-Value not applicable Viscosity (dynamic) not applicable

9.2 Other information

According to previous experience autoignition of SiH containing products on a catalytically active surface may occur at a much lower temperature than expected. 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.

Thermal decomposition > 250 °C

SECTION 10: Stability and reactivity

10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions

Stable under normal conditions of use.

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 with: acids , basic substances (e.g. alkalis, ammonia, amines) , 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 $^{\circ}$ C (302 $^{\circ}$ F) through oxidation.

SECTION 11: Toxicological information

11.1 Information on toxicological effects



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11.1.1 Acute toxicity

Assessment:

Based on the available data acute toxic effects are not expected after single oral exposure. Based on the available data acute toxic effects are not expected after single dermal exposure.

Product details:

Route of exposure	Result/Effect	Species/Test system	Source
oral	LD ₅₀ : > 2000 mg/kg	rat	Conclusion by analogy
dermal	LD ₅₀ : > 2000 mg/kg	rat	Conclusion by analogy

Acute toxicity estimate (ATE):

ATE_{mix} (oral): > 2000 mg/kg

11.1.2 Skin corrosion/irritation

Assessment:

Based on the available data a clinically relevant skin irritation hazard is not expected.

Product details:

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

11.1.3 Serious eye damage / eye irritation

Assessment:

Based on the available data a clinically relevant eye irritation hazard is not expected.

Product details:

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

11.1.4 Respiratory or skin sensitization

Assessment:

Based on the available data a sensitization reaction is not expected from this product.

Product details:

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

11.1.5 Germ cell mutagenicity

Assessment:

Based on known data a significant mutagenic potential may be excluded.

Product details:

Result/Effect	Species/Test system	Source
negative	mutation assay (in vitro)	Conclusion by
	bacterial cells	analogy
		OFCD 471

11.1.6 Carcinogenicity

Assessment:

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



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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.

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. Separation by sedimentation.

12.3 Bioaccumulative potential

Assessment:

Polymer component: No adverse effects expected.

12.4 Mobility in soil

Assessment:

Insoluble in water. No adverse effects expected.

12.5 Results of PBT and vPvB assessment

No data are available.

12.6 Other adverse effects

none known

12.7 Additional information

Easily separable from water by filtration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Material

Recommendation:

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable governmental regulations. 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.



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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. Uncleaned packaging should be treated with the same precautions as the material. Containers should be completely emptied before recycling as specified in government regulations.

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 have to be considered.

14.7 Transport in bulk according to Annex II of MARPOL73/78 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 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 Other international regulations

Details of international registration status:

Listed on or in accordance with the following inventories:

EINECS - Europe ECL - Korea ENCS - Japan

AICS - Australia



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IECSC - China
DSL - Canada
PICCS - Philippines
TSCA - USA

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.

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 -