Safety Data Sheet

Material: 60004616

Version: 1.10 (US)

WACKER® RTV-S 691 A

Date of print: 08/02/2021

Date of last alteration: 11/16/2019

1. Product and company identification 1.1 Identification of the substance or preparation: **Commercial product name:** WACKER® RTV-S 691 A Use of substance / preparation Industrial. Raw material for: elastomer products . 1.2 Company/undertaking identification: Wacker Chemie AG Manufacturer/distributor: Hanns-Seidel-Platz 4 81737 München Germanv Customer information: Wacker Chemical Corporation 3301 Sutton Road Adrian, Michigan 49221-9397 USA InfoLine: Tel (517) 264-8240 Hours of operation: Monday - Friday, 8 am to 5 pm (eastern standard time) Corporate website: www.wacker.com Emergency telephone no. (24h): (517) 264-8500 Transportation emergency: (800) 424-9300 (CHEMTREC, USA) (703) 527-3887 (CHEMTREC, international) This SDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (GHS):

No labeling according to GHS required.

2.3 Other hazards

No data available.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation) Chemical characteristics

Polysiloxane with functional groups+auxiliary

3.2 Information on ingredients:

Туре	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	14464-46-1	Cristobalite	>50.0	<60.0	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.

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

Safety Data Sheet

Material: 60004616

Version: 1.10 (US)

WACKER® RTV-S 691 A

Date of last alteration: 11/16/2019

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.

Date of print: 08/02/2021

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

4. First-aid measures

4.1 General information:

Get medical attention if irritation 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

After skin contact wipe off excess material with cloth or paper. 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):		
Upper explosion limit (UEL):	not applicable	
Ignition temperature:	> 400 °C (> 752 °F)	(DIN 51794)

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 decomposition products: carbon dioxide , carbon monoxide , formaldehyde , silicon dioxide , benzene and incompletely burnt hydrocarbons .

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.

Safety Data Sheet

Material: 60004616

WACKER® RTV-S 691 A

Date of last alteration: 11/16/2019

Version: 1.10 (US)

Date of print: 08/02/2021

HAZWOPER PPE Level: D

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and soil. Close leak if possible without risk. Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Inform authorities if substance leaks into surface waters, sewerage or ground.

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

6.3 Methods for cleaning up

Scoop up large quantities after dusting surfaces with sand or Fuller's earth to prevent sticking. Sweep or scrape up the spilled material and place in an appropriate chemical waste container. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Apply sand or other inert granular material to improve traction.

7. Handling and storage

7.1 General information:

Stir thoroughly before use or catalysing.

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.

Diserve local/state/lederal regulations

Further information for storage: Store in a dry and cool place.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

not necessary

8.2 Associate substances with specific control parameters such as limit values

none known

8.3 Personal protection equipment (PPE)

Respiratory protection:

Respiratory protection is not normally required.

Hand protection:

Recommendation: Any liquid-tight rubber or vinyl gloves.

Eye protection:

Recommendation: Safety glasses with side shields.

Other protective clothing or equipment:

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

Safety Data Sheet

Material: 60004616

WACKER

WACKER® RTV-S 691 A

Version: 1.10 (US)

Date of print: 08/02/2021

Date of last alteration: 11/16/2019

8.4 General hygiene and protection measures:

When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

3.1	Appearance		
	Physical state	paste red	
9.2	Safety parameters		
1	Property: Melting point / melting range Boiling point / boiling range Flash point Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density	not applicable > 250 °C (> 482 °F) > 400 °C (> 752 °F) not applicable not applicable not applicable ca. 1.52 g/cm ³ at 20 °C (68 °F)	Method: (DIN 51376) (DIN 51794) (EN/ISO 1183)
-	Water solubility / miscibility pH-Value Viscosity (dynamic)	virtually insoluble at 20 °C (68 °F) not applicable	
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. Measurements have shown the formation of small amounts of benzene at temperatures above about 180 °C (356 °F).

10.5 Further information:

Hazardous polymerization cannot occur.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 Acute toxicity

Assessment:

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

Acute toxicity estimate (ATE):

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

Safety Data Sheet

Material: 60004616

WACKER® RTV-S 691 A

Date of last alteration: 11/16/2019

Version: 1.10 (US)

Date of print: 08/02/2021

11.1.2 Skin corrosion/irritation

Assessment:

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

11.1.3 Serious eye damage / eye irritation

Assessment:

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

11.1.4 Respiratory or skin sensitization

Assessment:

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

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

Cristobalite 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:

For the product as a whole, no test data is available. 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.

Safety Data Sheet

Material: 60004616

Version: 1.10 (US)

WACKER® RTV-S 691 A

Date of print: 08/02/2021

Date of last alteration: 11/16/2019

12.3 Bioaccumulative potential

Assessment:

No adverse effects expected.

12.4 Mobility in soil

Assessment:

Silicone content: Insoluble in water.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

none known

13. Disposal considerations

13.1 Product disposal

Recommendation:

Material that cannot be used, reprocessed or recycled should be disposed of in accordance with Federal, State, and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

13.2 Packaging disposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation Not regulated for transport

14.2 Transport by sea IMDG-Code

Valuation Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation Not regulated for transport

15. Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

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

TSCA 12(b) Export Notification:

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

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

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.

Safety Data Sheet

Material: 60004616

WACKER® RTV-S 691 A

Version: 1.10 (US)

Date of print: 08/02/2021

Date of last alteration: 11/16/2019

HAPS (Hazardous Air Pollutants):

This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

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

California Proposition 65 Carcinogens:

14464-46-1 Cristobalite

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

Massachusetts	Substance	List:
---------------	-----------	-------

1309-37-1 Iron oxide 14464-46-1 Cristobalite

New Jersey Right-to-Know Hazardous Substance List:

 1309-37-1
 Iron oxide

 14464-46-1
 Cristobalite

Pennsylvania Right-to-Know Hazardous Substance List:

 1309-37-1
 Iron oxide

 14464-46-1
 Cristobalite

15.3 Details of international registration status

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

Japan:	ENCS (Handbook of Existing and New Chemical Substances): This product is listed in, or complies with, the substance inventory.
Australia:	AICS (Australian Inventory of Chemical Substances): This product is listed in, or complies with, the substance inventory.
China:	IECSC (Inventory of Existing Chemical Substances in China): This product is listed in, or complies with, the substance inventory.
Canada:	
Philippines:	PICCS (Philippine Inventory of Chemicals and Chemical Substances):
United States of America (USA):	This product is listed in, or complies with, the substance inventory. TSCA (Toxic Substance Control Act Chemical Substance Inventory): All components of this product are listed as active or are in compliance with the
Taiwan:	
	This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.
European Economic Area (EEA) :	REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.
South Korea (Republic of Korea): :	

16. Other information

16.1 Additional information:

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR

Safety Data Sheet

Material: 60004616

WACKER® RTV-S 691 A

Date of last alteration: 11/16/2019

Version: 1.10 (US)

Date of print: 08/02/2021

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

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

WACKER restricts the use of its products inside the human body or in contact with bodily fluids and mucosa. For further details please review our Health Care Policy on www.wacker.com. WACKER may cancel any delivery obligation(s) if the Health Care Policy is not observed.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists 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 methodsCommon nameASTM D56.....Tagliabue (Tag) closed cupASTM D92, DIN 51376, ISO 2592Cleveland open cupASTM D93, DIN 51758, ISO 2719Pensky-Martens closed cupASTM D3278, DIN 55680, ISO 3679Setaflash or Rapid closed cupDIN 51755Abel-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)