Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75 OH

Version: 1.3 (US)

Date of print: 07/05/2013

Date of last alteration: 12/13/2012

1.	Product and company identification		
1.1	Identification of the substance or preparation:		
	Commercial product name:	ELASTOSIL® R 502/75 OH	
	Use of substance / preparation	Industrial. Raw material for: elastomer products .	
1.2	Company/undertaking identification:		
	Manufacturer/distributor:	Wacker Chemie AG Hanns-Seidel-Platz 4 81737 München Germany	
	Customer information:	Wacker Chemical Corporation 3301 Sutton Road Adrian, Michigan 49221-9397 USA 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): Transportation emergency:	(517) 264-8500 (800) 424-9300 (CHEMTREC, USA) (703) 527-3887 (CHEMTREC, international)	

This MSDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2. Composition/information on ingredients

2.1 Chemical characterization (preparation)

Chemical characteristics Polydimethylsiloxane with vinyl groups and auxiliary

2.2 Information on ingredients:

Туре	CAS No.	Substance	Content	[wt. %]	Note
			Lower	Upper	
INHA	556-67-2	Octamethyl cyclotetrasiloxane	0.1	<1.0	R

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.

Due to the physical nature of this material (paste), exposure to dusts/particulates is not expected.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in Section 2 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.

3. Hazards identification

3.1 Hazards classifications

HMIS® rating (product as packaged):				
Health: 1	Fire: 1	Reactivity: 0	PPE: B	
(HMIS codes are bas	sed on contact with the product	as packaged and any hydrolysis by-p	oducts, if present.) Hazardous M	aterials

(HMIS codes are based on contact with the product as packaged and any hydrolysis by-products, if present.) Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association.

Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75

Version: 1.3 (US)

Date of print: 07/05/2013

Date of last alteration: 12/13/2012

Canadian WHMIS Classification: D2A

3.2 Emergency overview and potential hazards

This material is not hazardous under OSHA criteria.

Physical Hazards: No known physical hazards.

Acute health effects

Route of entry or possible contact: eyes , skin , ingestion Eye contact: May cause slight eye irritation. Skin contact: No acute toxic effects are expected. Inhalation: See Sect. 3.3 "Chronic health effects". Inhalation caused reproductive effects in animals. Ingestion: Not expected in industrial use.

3.3 Further information:

Chronic health effects:

Prolonged or repeated inhalation of vapors may have adverse effects on the reproductive system, based on animal testing of a component of this material.

Medical conditions which may be aggravated by exposure: unknown

Target organs affected:

Liver and Female Reproductive System.

Carcinogens/Reproductive toxins:

Based on animal tests. This material contains between 0.1% and 1% of a known reproductive toxin. This material contains >= 0.1% of a substance which may cause cancer. However, the relevance to humans has not been determined.

See Section 11 for Toxicological Information, if any.

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 measures required.

4.3 After contact with the skin

For 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

After swallowing No special treatment is required.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:
Flash point	> 200 °C (> 392 °F)
Boiling point / boiling range	not applicable

Method: (DIN 51376)

Material Safety Data Sheet

Mate	rial: 60008264	ELASTOSIL® R 502/75 OH	
Versi	on: 1.3 (US)	Date of print: 07/05/2013	Date of last alteration: 12/13/2012
	Lower explosion limit (LEL) Upper explosion limit (UEL) Ignition temperature	: not applicable : not applicable : > 400 °C (> 752 °F)	(DIN 51794)
5.2	Fire and explosion hazards:		
	This material does not presen	t any unusual fire or explosion hazards.	
5.3	Recommended extinguishir	ng media:	
	water-spray , dry chemical , a	lcohol-resistant foam , carbon dioxide , sand .	
5.4	Unsuitable extinguishing m	edia:	
	water jet		
5.5	Special exposure hazards a	rising from the substance or preparation itself, co	mbustion products, resulting gases
	Hazardous decomposition pro hydrocarbons .	ducts: carbon dioxide, carbon monoxide, formaldeh	yde, silicon dioxide and incompletely burnt
5.6	Fire fighting procedures:		
	Fire fighters should wear full p water.	protective clothing including a self-contained breathing	g apparatus. Cool endangered containers with
6.	Accidental release mea	asures	
6.1	Precautions:		
	No special measures required	I.	
	HAZWOPER PPE Level: D		
6.2	Containment:		
	Prevent material from entering	g sewers or surface waters.	
	Spills of material which could	reach surface waters must be reported to the United t	States Coast Guard National Response

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 Handling

Precautions for safe handling:

No special protective measures required. Precautions against fire and explosion:

No special precautions against fire and explosion required.

7.2 Storage

Conditions for storage rooms and vessels: none known

Advice for storage of incompatible materials: not applicable

Further information for storage:

Keep container tightly closed. Store in a dry and cool place.

8. Exposure controls and personal protection

8.1 Engineering controls

Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75 OH

	on: 1.3 (US)	Date of print: 07/05/2013	Date of last alteration: 12/13/2012
	Ventilation: Use with adequate ventilation.		
	Local exhaust: not necessary		
8.2	Associate substances with specifi	c control parameters such as limit values	
	Further information: Maximum concentration at workplace (123 mg/m3).	e recommended by producer: octamethylcyclotetrasilc	oxane (D4, CAS no. 556-67-2) = 10 ppm
8.3	Personal protection equipment (PF	PE)	
	Respiratory protection: Respiratory protection is not normally	/ required.	
	Hand protection: Recommendation: Any liquid-tight rul	ober or vinyl gloves.	
	Eye protection: Recommendation: Safety glasses wit	h side shields.	
	Other protective clothing or equip Additional protective clothing or equip	ment: oment is not normally required. Provide eye bath and	safety shower.
8.4	General hygiene and protection me	easures:	
	When handling do not eat, drink, smo	oke or apply cosmetics. Wash thoroughly after handli	ng.
Э.	Physical and chemical prope	erties	
9.1	Appearance		
	Physical state / form Colour Odour	paste opaque slight	
	Safety parameters		
9.2			
9.2	Property: Melting point / melting range Boiling point / boiling range Flash point Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density Water solubility / miscibility pH-Value Viscosity (dynamic)	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)
9.2	Property: Melting point / melting range Boiling point / boiling range Flash point Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density Water solubility / miscibility PH-Value Viscosity (dynamic) Further information	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable not applicable	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)
9.2	Property: Melting point / melting range Boiling point / boiling range Flash point Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density Water solubility / miscibility PH-Value Viscosity (dynamic) Further information Thermal decomposition	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable not applicable	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)
9.2	Property: Melting point / melting range Boiling point / boiling range Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density Water solubility / miscibility pH-Value Viscosity (dynamic) Further information Thermal decomposition Stability and reactivity	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)
9.2 9.3 10.	Property: Melting point / melting range	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable not applicable > 250 °C (> 482 °F)	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)
9.2 9.3 10.	Property: Melting point / melting range Boiling point / boiling range Flash point Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density Water solubility / miscibility pH-Value Viscosity (dynamic) Further information Thermal decomposition Stability and reactivity General information: If stored and handled in accordance of the stored an	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable not applicable 20 °C (> 482 °F)	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)
9.2 9.3 <u>10.</u> 10.1	Property: Melting point / melting range Boiling point / boiling range Flash point Ignition temperature Lower explosion limit (LEL) Upper explosion limit (UEL) Vapour pressure Density Water solubility / miscibility pH-Value Viscosity (dynamic) Further information Thermal decomposition Stability and reactivity General information: If stored and handled in accordance of Conditions to avoid	Value: not applicable not applicable > 200 °C (> 392 °F) > 400 °C (> 752 °F) not applicable not applicable 1.29 g/cm³ virtually insoluble at 20 °C (68 °F) not applicable not applicable 20 °C (> 482 °F) > 250 °C (> 482 °F)	Method: (DIN 51376) (DIN 51794) (ISO 1183-1 A)

Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75 OH

Version: 1.3 (US)

Date of print: 07/05/2013

Date of last alteration: 12/13/2012

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

Toxicological testing has not been conducted with this material. The toxicology information listed below is based on the components of the material.

11.1.1 Acute toxicity

Assessment:

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

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.

Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75 OH

Version: 1.3 (US)

Date of print: 07/05/2013

Date of last alteration: 12/13/2012

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

Toxicity to reproduction/fertility: In a two generation reproductive study via inhalation with OMCTS/D4 rats, decreased mean live litter size and prolonged labor (dystocia) were observed at the 500 ppm and 700 ppm exposure levels. The relevance of these effects in humans cannot be determined at this time. Because these effects are only seen at very high exposure levels, it is unlikely that industrial, commercial and/or consumer uses of products containing OMCTS/D4 would result in a significant risk to humans. Based on animal experiments there is no indication of developmental effects. Birth defects were only observed at maternally toxic doses.

Chronic toxicity / carcinogenicity: In a two year combined chronic toxicity and carcinogenicity inhalation study with octamethylcyclotetrasiloxane (OMCTS/D4) in rats, an increased incidence of (uterine) endometrial cell hyperplasia and endometrial adenomas were observed at the highest exposure level of 700 ppm in female rats. These same effects were not seen at the other dose levels of 10, 30, and 150 ppm. Since these effects only occurred at 700 ppm, a level that greatly exceeds typical workplace or consumer exposure, it is unlikely that industrial, commercial or consumer uses of products containing OMCTS/D4 would result in a significant risk to humans.

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:

Biologically not degradable. Insoluble in water. Separation by sedimentation.

12.3 Bioaccumulative potential

Assessment:

No adverse effects expected.

12.4 Mobility in soil

Assessment:

Insoluble in water. No adverse effects expected.

12.5 Other adverse effects

none known

13. Disposal considerations

13.1 Product disposal

Recommendation:

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

13.2 Packaging disposal

Recommendation:

Containers should be completely emptied before recycling as specified in government regulations. Empty containers should be sent to an approved recycling facility.

Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75 OH

Version: 1.3 (US)

Date of print: 07/05/2013

Date of last alteration: 12/13/2012

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 any TSCA 12(b) regulated 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. HAPS (Hazardous Air Pollutants): This material does not contain any hazardous air pollutants. 15.2 U.S. State regulations California Proposition 65 Carcinogens: This material does not contain any chemicals known to the state of California to cause cancer. California Proposition 65 Reproductive Toxins: This material does not contain any chemicals known to the state of California to cause reproductive effects. Massachusetts Substance List: 112945-52-5 Silica, amorphous, fumed New Jersey Right-to-Know Hazardous Substance List: 112945-52-5 Silica, amorphous, fumed Pennsylvania Right-to-Know Hazardous Substance List: 112945-52-5 Silica, amorphous, fumed 15.3 Canadian regulations This product has been classified in accordance with the Hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Hazard Classes: D2A **DSL Status:** This material or its components are listed on the Canadian Domestic Substances List.

Non-DSL Chemicals: This material does not contain any non-DSL chemicals.



Material Safety Data Sheet

Material: 60008264

ELASTOSIL® R 502/75

ОН

Version: 1.3 (US)

Date of print: 07/05/2013

Date of last alteration: 12/13/2012

Canadian Ingredient Disclosure List:

112945-52-5 Silica, amorphous, fumed

15.4 Other international regulations

EU Risk Phrases:

R-Phrase	Description		
R-	-		
EU Safety Ph	irases:		
S-Phrase	Description		
S-	-		

Details of international registration status

Listed on or in accordance with the following inventories:
EINECS - Europe
IECSC - China
TSCA - USA
PICCS - Philippines
ENCS - Japan
ECL - Korea
DSL - Canada
AICS - Australia

16. Other information

16.1 Additional information:

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. 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 MSDS 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.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial	ppm - Parts per Million
Hygienists	SARA - Superfund Amendments and Reauthorization Act
DOT - Department of Transportation	STEL - Short Term Exposure Limit
hPa - Hectopascals	TSCA - Toxic Substances Control Act
mPa*s - Milli Pascal-Seconds	TWA - Time Weighted Average
OSHA - Occupational Safety and Health Administration	WHMIS - Canadian Workplace Hazardous Materials
PEL - Permissible Exposure Limit	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: