WACKER

Safety Data Sheet

Material: 60028606 **ELASTOSIL® N2199**

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1. Product and company identification

1.1 Identification of the substance or preparation:

Commercial product name: **ELASTOSIL® N2199**

Use of substance / preparation: Industrial.
Adhesive / sealant .

1.2 Company/undertaking identification:

Manufacturer/distributor:
Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München
Germany

Customer information:
Wacker Chemical Corporation
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USA
InfoLine:
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Hours of operation:
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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):

Hazard class	Hazard category	Route of exposure
Reproductive toxicity	Category 1B (developmental toxicity)	
Reproductive toxicity	Category 1B (impair fertility)	

2.2 Label elements

Labelling (GHS):

Pictogram(s):

Signal Word: Danger

H-Code	Hazard Statements
H360FD	May damage fertility. May damage the unborn child.

P-Code	Precautionary Statements
P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection.
P405	Store locked up.
P501	Dispose of contents/container to waste disposal.

2.3 Other hazards

Inhalation of aerosol spray may damage health.
The product hydrolyses under formation of methanol (CAS-Nr. 67-56-1). Methanol is classified concerning both physical and

health hazards. The hydrolysis rate and consequently the relevance for the hazard profile of the product is strongly dependent on the specific conditions.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characteristics
Polydimethylsiloxane with functional groups and auxiliary

3.2 Information on ingredients:

Type	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	2768-02-7	Trimethoxy vinylsilane		<5.0	
INHA	5089-72-5	Aminoalkyl functional alkoxy silane		<2.0	
INHA	93925-42-9	Proprietary Tin Catalyst	>0.1	<0.3	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.

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 occurs or if breathing becomes difficult.

4.2 After inhalation

If inhaled, remove to fresh air.

4.3 After contact with the skin

Remove material with a waterless skin cleaner from skin and clothing. Wash then with plenty of water or water and soap.

4.4 After contact with the eyes

If contact with eyes, immediately flush eyes with plenty of water.

4.5 After swallowing

Drink plenty of water. Get medical attention immediately. Show label.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:	Method:
Flash point	not applicable	
Boiling point / boiling range	not applicable	
Lower explosion limit (LEL)	not applicable	
Upper explosion limit (UEL)	not applicable	
Ignition temperature	approx. 400 °C (752 °F)	

5.2 Fire and explosion hazards:

Consider possible formation of explosive mixtures with air, for example in uncleaned containers.

5.3 Recommended extinguishing media:

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

5.4 Unsuitable extinguishing media:

sharp 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 , nitrogen oxides and incompletely burnt hydrocarbons .

5.6 Fire fighting procedures:

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

6. Accidental release measures

6.1 Precautions:

Secure the area. Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols. If material is released indicate risk of slipping. Do not walk through spilled material.

HAZWOPER PPE Level: D

6.2 Containment:

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.

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

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. If flammable, only air driven or properly rated electrical equipment should be used. 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.

6.4 Further information:

Exhaust vapours. Eliminate all sources of ignition. Consider explosion protection. Observe notes under section 7.

7. Handling and storage

7.1 Handling

Precautions for safe handling:
Ensure adequate ventilation. Must be syphoned off in situ. Spilled substance increases risk of slipping. Avoid formation of aerosols. In case of aerosol formation special protective measures are required (exhausting by suction, respiratory protection). Observe information in section 8. Keep away from incompatible substances in accordance with section 10.

Precautions against fire and explosion:
Product can separate methanol. 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 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. Protect against moisture. Store container in a well ventilated place.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:
Use only with adequate ventilation.

Local exhaust:
recommended

8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

CAS No.	Material	Type	mg/m³	ppm	Dust fract.
67-56-1	Methanol	OSHA PEL	260.0	200.0	
67-56-1	Methanol	ACGIH TWA		200.0	

Re Methanol (CAS-no. 67-56-1): STEL is 250 ppm, skin notation (ACGIH); STEL is 250 ppm, skin notation (NIOSH).

8.3 Personal protection equipment (PPE)

Respiratory protection:
In case of long or strong exposure use a NIOSH approved respirator for: organic vapors .

Hand protection:
butyl rubber protective gloves

Eye protection:
chemical safety goggles

Other protective clothing or equipment:
protective clothing

8.4 General hygiene and protection measures:

Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state / form ..... : paste
Colour ..... : colourless
Odour ..... : pleasant

9.2 Safety parameters

Property:	Value:	Method:
Melting point / melting range	not determined	
Boiling point / boiling range	not applicable	
Flash point	not applicable	
Ignition temperature	approx. 400 °C (752 °F)	
Lower explosion limit (LEL)	not applicable	
Upper explosion limit (UEL)	not applicable	
Vapour pressure	not applicable	
Density	1.03 g/cm³ at 25 °C (77 °F)	(ISO 2811)
Water solubility / miscibility	virtually insoluble	
pH-Value	not applicable	
Viscosity (dynamic)	not applicable	

9.3 Further information

Solubility in water: Hydrolytic decomposition occurs. Explosion limits for released methanol: 5.5 - 44%(V).

Odour limit ..... : no data available

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

moisture , Heat, open flames, and other sources of ignition.

10.3 Materials to avoid

Reacts with: water , basic substances and acids . Reaction causes the formation of: methanol .

10.4 Hazardous decomposition products

By hydrolysis: methanol . 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_{50}: > 2000 mg/kg	rat	Conclusion by analogy
dermal	LD_{50}: > 2000 mg/kg	rat	Conclusion by analogy

11.1.2 Skin corrosion/irritation

Assessment:

Based on the available data a clinically relevant skin irritation hazard is not expected. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact.

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. Temporary symptoms of an irritation cannot be excluded if the adhesive product is removed mechanically after contact.

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

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. 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 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:

No data known.

12.4 Mobility in soil

Assessment:

Silicone content: Insoluble in water.

12.5 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. This is a PMN Material that needs an NOC.

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.

HAPS (Hazardous Air Pollutants):

CAS No.	Chemical	Upper limit wt. %
67-56-1	Methanol	<=0.0265

15.2 U.S. State regulations

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

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

California Proposition 65 Reproductive Toxins:

67-56-1 Methanol

Massachusetts Substance List:
This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:
This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:
This material contains no listed components.

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 not listed or in compliance with the substance inventory.
Australia :	**AICS** (Australian Inventory of Chemical Substances): This product is not listed or in compliance with the substance inventory.
People's Republic of China :	**IECSC** (Inventory of Existing Chemical Substances in China): This product is not listed or in compliance with the substance inventory.
Canada :	**DSL** (Domestic Substance List): This product is not listed or in compliance with the substance inventory.
Philippines :	**PICCS** (Philippine Inventory of Chemicals and Chemical Substances): This product is not listed or in compliance 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: 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.

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 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.

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	**Common name**
ASTM D56	Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592	Cleveland open cup
ASTM D93, DIN 51758, ISO 2719	Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679	Setaflash or Rapid closed cup
DIN 51755	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)