

Material: 60096233

SEMICOSIL® 268 BLACK

Version: 2.6 (US)

Date of print: 09/30/2019

Date of last alteration: 09/24/2019

1. Product and company identification

1,1 Identification of the substance or preparation:

Commercial product name:

SEMICOSIL® 268 BLACK

Use of substance / preparation

Industrial.

Electronic industry adhesives

1.2 Company/undertaking identification:

Manufacturer/distributor:

Wacker Chemical Corporation

3301 Sutton Road Adrian, MI 49221-9397

USA

Customer information:

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):

(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

Polydimethylsiloxane with functional groups and auxiliaries for addition cross-linking

3.2 Information on ingredients:

Туре	CAS No.	Substance	Content [wt. %]		Note
			Lower	Upper	
INHA	2530-83-8	(3-(2,3-Epoxypropoxy)propyl) trimethoxysilane	>=1.0	5.0	

Type: HYD - by-product upon hydrolysis, !NHA - 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 7 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.

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



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Method: (DIN 51376)

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. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

4.3 After contact with the skin

For skin contact, immediately wipe away excess material. 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

For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids.

4.6 Advice for the physician

Treat symptomatically.

5. Fire-fighting measures

5.1 Flammable properties:

Property:	Value:
Flash point:	> 93 °C (> 199 °F)
Boiling point / boiling range:	not applicable
Lower explosion limit (LEL):	
Upper explosion limit (UEL):	not applicable
Ignition temperature:	

5.2 Fire and explosion hazards:

Under certain conditions this material may generate flammable hydrogen gas. Consider possible formation of explosive mixtures with air, for example in uncleaned containers by moisture. Never use welding or cutting torch on or near any container of this material, even if empty, because an explosion could occur. Spontaneous ignition is possible due to electrostatic discharge. The generation of hydrogen gas is increased under circumstances mentioned in Sect. 10 "Stability and reactivity". Explosion limits for hydrolysis product: 4-75.6% v/v (hydrogen).

5.3 Recommended extinguishing media:

carbon dioxide, dry sand, alcohol-resistant foam.

5.4 Unsuitable extinguishing media:

water, halones, dry chemical.

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 and incompletely burnt hydrocarbons .

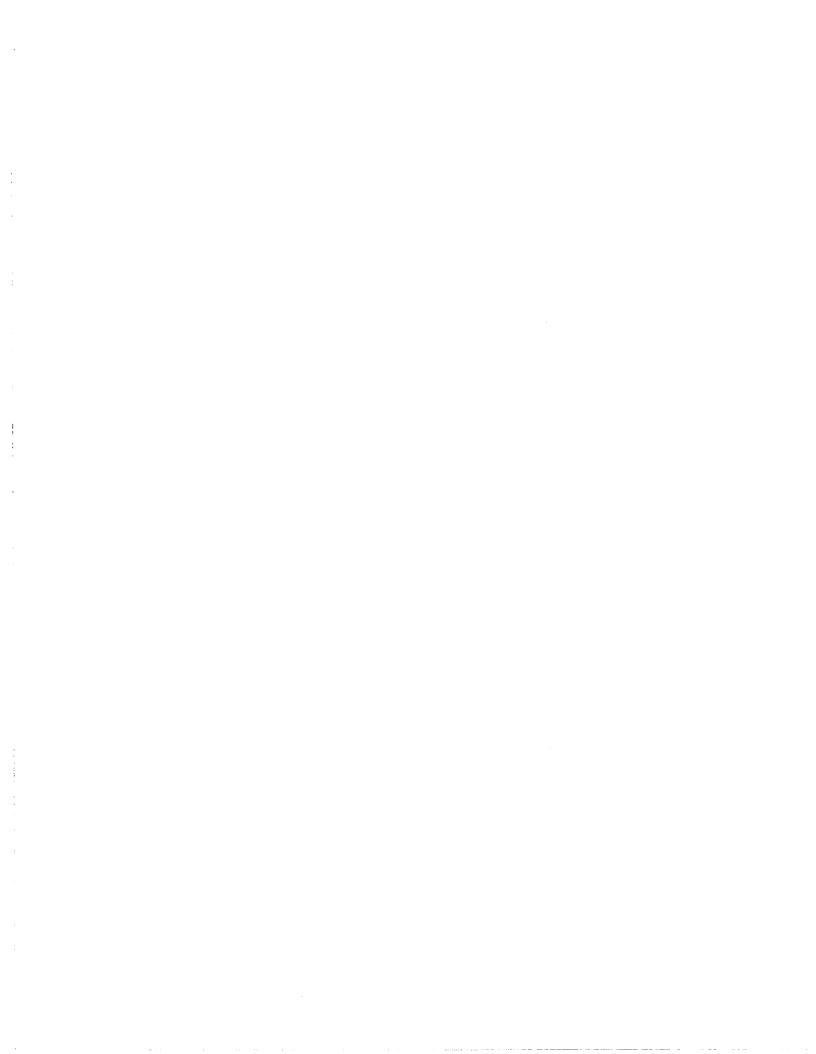
5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a self-contained breathing apparatus. Cool endangered containers with water. Hydrogen gas can become trapped under foam blankets, so sources of ignition must be eliminated during the clean-up and recovery process.

6. Accidental release measures

6.1 Precautions:

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





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HAZWOPER PPE Level: D

6.2 Containment:

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

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

Remove mechanically or with liquid-binding material. 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.

6.4 Further information:

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

7. Handling and storage

7.1 Handling

Precautions for safe handling:

Use caution when opening any bulging container. Wear all appropriate protective equipment. Work in an open area away from other materials, operations, and sources of ignition. Open slowly to allow a gradual release of pressure. 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. Product can separate methanol. In partly emptied containers formation of explosive mixtures is possible. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Keep away from heat, sparks and flame.

7.2 Storage

Conditions for storage rooms and vessels:

Store in a dry and cool place.

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. Store in a cool, temperature regulated location. Store in a dry location to prevent exposure to water or moist air.

Maximum temperature allowed during storage and transportation: 25 °C (77 °F)

Temperature limit to maintain product quality.

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

No special ventilation required.

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.

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Method:

(DIN 51376)

(Brookfield)

Hand protection:

Any liquid-tight rubber or vinyl gloves.

Eye protection:

Safety glasses with side shields or chemical safety goggles.

Other protective clothing or equipment:

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

8.4 General hygiene and protection measures:

Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when handling. Follow standard industrial hygiene practices when using this material. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state	liquid
Form:	paste
Colour:	black
Odour:	odourless

9.2 Safety parameters

Property: V Melting point / melting range n Boiling point / boiling range n Flash point > Ignition temperature n Lower explosion limit (LEL) n Upper explosion limit (UEL) n Vapour pressure n Density 1 Water solubility / miscibility ir pH-Value n Viscosity (dynamic) 1	not applicable 93 °C (> 199 °F) not applicable
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9.3 Further 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). pH Value: Product displays neutral reaction.

Odour limit no data available

10. Stability and reactivity

10.1 General information:

Stable under normal conditions of use.

10.2 Conditions to avoid

Although this product is not expected to react with commonly used materials of construction and process equipment, it is advised that any rubber or plastic items such as hoses and gaskets be tested prior to large scale processing to ensure there is no degradation of performance or durability. Keep away from incompatible substances. 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.

10.3 Materials to avoid

Reacts with: alkalis, amines, strong acids, oxidizing agents. Reaction causes the formation of: hydrogen and methanol.

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10.4 Hazardous decomposition products

hydrogen . Under the effect of humidity, water and protic agents: methanol . 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

Product details:

Route of expo	osure Result/Effect	Species/Test system	Source
Oral	LD50: > 2000 mg/kg	Rat	Conclusion by analogy
dermal	LD50; > 2000 mg/kg	Rabbit	Conclusion by analogy

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

Product details:

Result/Effect	Species/Test system	Source
not irritating	Rabbit	Conclusion by
		analogy
		OECD 405

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.

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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.

Other information: Hydrolysis product / impurity: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

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. The product of hydrolysis (methanol) is readily biodegradable.

12.3 Bioaccumulative potential

Assessment:

Polymer component: Bioaccumulation is not expected to occur.

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:

Risk of hydrogen gas formation with water, alcohols, acids, metallic salts, amines and alkalis. In combination with oxygen, the released hydrogen can form oxyhydrogen. Material designated for disposal must be segregated from incompatible substances or materials specified in Sect. 10. Provide measures such as vented bungs to ensure pressure relief in the waste containers. Wastes of this material should not be mixed with other wastes. 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.

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13.2 Packaging disposal

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.

14. Transport information

14.1 US DOT & CANADA TDG SURFACE

Refrigerated Transport Required.

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.

HAPS (Hazardous Air Pollutants):

TIAL O (Trazardous Arr Torratario).					
CAS No.	Chemical	Upper limit wt. %			
67-56-1	Methanol	<=0.0182			

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.

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Details of international registration status 15.3

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

Japan: ENCS (Handbook of Existing and New Chemical Substances):

This product is not listed or in compliance with the substance inventory.

This product is listed in, or complies with, the substance inventory.

This product is not listed or in compliance with the substance inventory.

This product is listed in, or complies with, the substance inventory.

All components of this product are listed as active or are in compliance with the

substance inventory.

Taiwan: 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.

South Korea (Republic of Korea).....: AREC (Act on Registration and Evaluation of Chemicals; "K-REACH"):

General note: in case of registration obligations for substances or polymers imported into Korea or manufactured within Korea these are fulfilled by the supplier mentioned in section 1. The registration obligations for substances or polymers imported into Korea 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.

Glossary of Terms: 16.2

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 n ame

ASTM D56...... Tagliabue (Tag) closed cup

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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)

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Wacker Chemical Corp. 3301 Sutton Road Adrian, MI 49221-9397 USA Tel. +1 888 922-5374 Fax +1 517 264-4068 www.wacker.com Wacker Chemical Corporation 3301 Sutton Road, Adrian, MI 49221-9397, USA Wacker Chemical Corp (Hisco) C/O Hisco Inc 10803 Vinecrest Ste 190 Houston, TX 77086 USA

Date 30.09.2019

Oustomer number 0025006810

Safety Data Sheets

Dear Sir or Madam:

Attached please find Safety Data Sheets (SDSs) for products you have received or will receive (refer to the list below). These SDSs also may have been sent in response to your request for the documents.

Unless a different dispatch address has been indicated, documents will be sent to the goods delivery address.

Please review these SDSs carefully and use them to update your SDS files as required by the OSHA Hazard Communication Standard (Worker's "Right-to-Know" Law) or applicable worker right to know laws in your country. These versions supersede all previous versions of the safety data sheets.

If you have not previously done so, please let us know if you would prefer to receive the safety data sheets via email. If email is preferred, please provide us with an email address that is not specific to just one person. Email notification helps to conserve paper.

Thank you for your interest in our products; we appreciate your business.

Yours sincerely

Wacker Chemical Corporation

Enclosure:

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