

# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product identifier:** AEROSIL® R 202

**Chemical name:**

Silicones and siloxanes, dimethyl-, reaction products with silica

**Other means of identification**

**CAS Number:** 67762-90-7

**Recommended restrictions**

**Recommended use:** Coating agent Sealant Reinforcing agent. Cosmetics

**Restrictions on use:** None known.

**Manufacturer/Importer/Distributor Information**

Company Name : Evonik Corporation  
2 Turner Place  
Piscataway, NJ 08854  
USA

Telephone : +1 732 981 5000

E-mail : product-regulatory-services@evonik.com

**Emergency telephone number:**

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)

Emergency 800 681 9531 (CHEMTREC MEXICO)

+1 703 527 3887 (CHEMTREC WORLD)

## 2. Hazard(s) identification

**Hazard Classification**

**Environmental Hazards**

Chronic hazards to the aquatic environment Category 3

**Label Elements**

**Hazard Symbol:** No symbol

**Signal Word:** No signal word.

**Hazard Statement:** Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

**Prevention:** Avoid release to the environment.

**Disposal:** Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

**Hazard(s) not otherwise classified (HNOC):** None.

### 3. Composition/information on ingredients

**Chemical name:**

Silicones and siloxanes, dimethyl-, reaction products with silica  
**Substances**

**Composition information of impurities and stabilizers**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) <sup>*</sup>
octamethylcyclotetrasiloxane		556-67-2	0.01 - <0.1%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

### 4. First-aid measures

**Description of necessary first-aid measures**

**Inhalation:** In case product dust is released: Possible discomfort: cough, sneezing Move to fresh air.

**Skin Contact:** Wash off with plenty of water and soap.

**Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention. No information available.

**Ingestion:** Clean mouth with water and drink afterwards plenty of water. After absorbing large amounts of substance / In case of discomfort: Supply with medical care.

**Personal Protection for First-aid Responders:** No data available.

**Most important symptoms and effects, both acute and delayed**

**Symptoms:** None known.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** No hazards which require special first aid measures.

### 5. Fire-fighting measures

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Water spray, foam, CO<sub>2</sub>, dry powder. Adapt fire-extinguishing measures to surroundings

<b>Unsuitable extinguishing media:</b>	Do not use full-force water jet in order to avoid dispersal and spread of the fire.
<b>Special hazards arising from the substance or mixture:</b>	May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition.
<b>Special protective equipment and precautions for fire-fighters</b>	
<b>Special fire-fighting procedures:</b>	No data available.
<b>Special protective equipment for fire-fighters:</b>	As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment.
<b>Accidental release measures:</b>	Avoid dust formation.
<b>Methods and material for containment and cleaning up:</b>	Sweep up or vacuum up spillage and collect in suitable container for disposal.
<b>Environmental Precautions:</b>	Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

## 7. Handling and storage

### Handling

<b>Technical measures (e.g. Local and general ventilation):</b>	No data available.
<b>Safe handling advice:</b>	Handle in accordance with good industrial hygiene and safety practice. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. If the workplace threshold limit value is exceeded and/or the substance is released, use appropriate respiratory protection. Use with adequate ventilation.
<b>Contact avoidance measures:</b>	No data available.

### Storage

<b>Safe storage conditions:</b>	Protect from heat and exposure to direct sunlight Keep containers tightly closed in a dry, cool and well-ventilated place. Take precautionary measures against static discharges. When repairs of the production system are to be made (e.g. welding work), the section to be repaired must be essentially free of product.
<b>Safe packaging materials:</b>	No data available.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

None of the components have assigned exposure limits.

**Biological Limit Values**

Chemical name	Parameters / Sampling Time	Exposure Limit Values	Source
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**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:**

Wear safety glasses with side shields. In case dusts are formed, wear close fitting protective goggles.

**Skin Protection**

**Hand Protection:**

Additional Information: Use impermeable gloves.

**Skin and Body Protection:**

Safety showers and eye showers should be easily accessible. In order to determine further specifications applicable to the personal protection equipment, a hazard assessment according to the OSHA standards (29 CFR 1910.132) for personal protection equipment (PPE) is recommended before the product is used.

**Respiratory Protection:**

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

**Hygiene measures:**

When using, do not eat, drink or smoke. Wash face and/or hands before break and end of work. To ensure ideal skin protection: use super fatted soaps and skin cream for skin care. Wash contaminated clothing before reuse.

**9. Physical and chemical properties**

**Information on basic physical and chemical properties**

**Appearance**

<b>Physical state:</b>	solid
<b>Form:</b>	Powder
<b>Color:</b>	White
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	Not applicable
<b>Melting Point:</b>	Not applicable Decomposition

<b>Boiling Point:</b>	Not applicable Decomposition
<b>Flammability:</b>	No data available.
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Explosive limit - upper:</b>	No data available.
<b>Explosive limit - lower:</b>	No data available.
<b>Flash Point:</b>	Not applicable (solid)
<b>Self Ignition Temperature:</b>	Not determined.
<b>Decomposition Temperature:</b>	> 572 °F/> 300 °C
<b>pH:</b>	4 - 6 (40 g/l, 20 °C) 1: 1 in suspension
<b>Viscosity</b>	
<b>Dynamic viscosity:</b>	Not applicable solid
<b>Kinematic viscosity:</b>	Not applicable solid
<b>Flow Time:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	> 1 mg/l
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	Not applicable
<b>Vapor pressure:</b>	Not applicable
<b>Relative density:</b>	No data available.
<b>Density:</b>	Approximate 2 g/cm <sup>3</sup> (68 °F/20 °C)
<b>Bulk density:</b>	No data available.
<b>Vapor density (air=1):</b>	Not applicable
<b>Particle characteristics</b>	
<b>Particle Size:</b>	No data available
<b>Particle Size Distribution:</b>	No data available
<b>Specific surface area:</b>	No data available.
<b>Surface charge/Zeta potential:</b>	No data available.
<b>Shape:</b>	No data available
<b>Crystallinity:</b>	Crystallinity: amorphous;
<b>Surface treatment:</b>	Surface treatment /Coatings: Yes;

**Other information**

<b>Explosive properties:</b>	Not to be expected in view of the structure
<b>Oxidizing properties:</b>	Not determined.
<b>Minimum ignition temperature:</b>	Approximate 860 °F/460 °C (VDI 2263)
<b>Evaporation Rate:</b>	Not applicable

**10. Stability and reactivity**

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	No hazardous reactions are known if properly handled and stored.
<b>Conditions to avoid:</b>	Hydrophobic properties disappear at temperatures > 300°C
<b>Incompatible Materials:</b>	None known.

**Hazardous Decomposition Products:**

None known.

## 11. Toxicological information

**General information:** Silicosis or other product specific illnesses of the respiratory tract have not been reported.

### Information on toxicological effects

#### Information on likely routes of exposure

**Inhalation:** Information on effects are given below.

**Skin Contact:** Information on effects are given below.

**Eye contact:** Information on effects are given below.

**Ingestion:** Information on effects are given below.

#### Acute toxicity (list all possible routes of exposure)

##### Oral

**Product:** LD 50 (Rat): > 5,000 mg/kg (OECD 401) comparable product  
LD 0 (Rat): 1,000 mg/kg (OECD 401) No deaths observed., Based on available data, the classification criteria are not met.

##### Dermal

**Product:** LD 50 (Rat): > 2,000 mg/kg (OECD 402) Not toxic after single exposure, Based on available data, the classification criteria are not met.;

##### Inhalation

**Product:** LC 0 (Rat, 4 h): 0.139 mg/l (maximum concentration attainable in experiments), No deaths observed.  
Not classified for acute toxicity based on available data.

#### Repeated dose toxicity

**Product:** No data available.

##### Components:

octamethylcyclotetrasiloxane  
NOAEC (Rat(Female, Male), Inhalation(Vapour) , 5 days/weeks, 6 hours/day): 1.8 mg/l Subchronic toxicity  
LOAEC (Rat(Female, Male), Inhalation(Vapour) , 5 days/weeks, 6 hours/day): 8.5 mg/l chronic  
NOAEC (Rat(Female, Male), Inhalation(Vapour) , 5 days/weeks, 6 hours/day): 0.36 mg/l Subacute toxicity

#### Skin Corrosion/Irritation

**Product:** Not irritating OECD 404 (Rabbit): Not irritating;

#### Serious Eye Damage/Eye Irritation

**Product:** Not irritating Rabbit: Not irritating

#### Respiratory or Skin Sensitization

**Product:** Not known.

#### Carcinogenicity

**Product:** Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA. No evidence that cancer may be caused.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogens present or none present in regulated quantities

**ACGIH: US.ACGIH Threshold Limit Values:**

No carcinogens present or none present in regulated quantities

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogens present or none present in regulated quantities

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:**

No carcinogens present or none present in regulated quantities

**Germ Cell Mutagenicity**

no evidence of mutagenic effects

**In vitro**

**Product:** Ames test (Literature): negative;

**In vivo**

**Product:** No data available.

**Components:**

octamethylcyclotetrasiloxane  
Micronucleus test (OECD 474) Inhalation - vapor (Rat): negative  
Chromosomal aberration (OECD 478) Oral (Rat): negative  
Chromosomal aberration (OECD 475) Inhalation - vapor (Rat, Female, Male): negative

**Reproductive toxicity**

**Product:** no evidence of reproductiontoxic properties

**Specific Target Organ Toxicity - Single Exposure**

**Product:** no evidence for hazardous properties

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** no evidence for hazardous properties

**Aspiration Hazard**

**Product:** Not classified

**Information on health hazards**

**Other hazards**

**Product:** An Expert Judgment stated that no classification is necessary based on present knowledge.;

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** LC 50 (Brachydanio rerio (zebrafish), 96 h): > 10,000 mg/l The reported toxic effects relate to the nominal concentration. tested substance: Silicon dioxide, derived from chemical synthesis

**Aquatic Invertebrates**

**Product:** EC 50 (Daphnia magna, 24 h): > 1,000 mg/l The reported toxic effects relate

to the nominal concentration. tested substance: Silicon dioxide, derived from chemical synthesis

#### Toxicity to Aquatic Plants

**Product:** No data available.

**Components:**

octamethylcyclotetrasiloxane  
EC 50 (Algae (*Pseudokirchneriella subcapitata*), 96 h): > 22 µg/l (US-EPA-method)  
EC 50 (Algae (*Pseudokirchneriella subcapitata*), 96 h): > 22 µg/l (US-EPA-method)

#### Toxicity to microorganisms

**Product:** No data available.

#### Chronic hazards to the aquatic environment:

##### Fish

**Product:** No data available.

**Components:**

octamethylcyclotetrasiloxane  
NOEC (*Oncorhynchus mykiss*, 93 d): 4.4 µg/l (US-EPA-method)

##### Aquatic Invertebrates

**Product:** No data available.

**Components:**

octamethylcyclotetrasiloxane  
NOEC (*Daphnia magna*, 21 d): 15 µg/l (EPA OTS 797.1330)  
Lowest Observed Effect Concentration (*Daphnia magna*, 21 d): 15 µg/l (EPA OTS 797.1330)  
EC 50 (*Daphnia magna*, 21 d): > 15 µg/l (EPA OTS 797.1330)

#### Toxicity to Aquatic Plants

**Product:** No data available.

**Components:**

octamethylcyclotetrasiloxane  
NOEC (Algae (*Pseudokirchneriella subcapitata*), 96 h): < 22 µg/l (US-EPA-method)

#### Toxicity to microorganisms

**Product:** No data available.

#### Persistence and Degradability

##### Biodegradation

**Product:** The methods designed to assess persistence and biodegradability are not applicable to this product, in analogy to inorganic substances.

##### BOD/COD Ratio

**Product:** No data available.

#### Bioaccumulative potential

##### Bioconcentration Factor (BCF)

**Product:** Not to be expected.

##### Partition Coefficient n-octanol / water (log Kow)

**Product:** Log Kow: Not applicable

#### Mobility in soil:

**Product** No remarkable mobility in soil is to be expected.

#### Results of PBT and vPvB assessment:



**Product** Not a PBT, vPvB substance as per the criteria of the REACH Regulation.

**Other adverse effects:**

**Other hazards**

**Product:**

The properties of this product which are characteristics posing a threat to the environment have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".  
Harmful to aquatic life with long lasting effects.

**Additional Information:**

No ecotoxicological data is available for this product.

**13. Disposal considerations**

**Disposal methods:**

Waste must be disposed of in accordance with federal, state, provincial and local regulations.

**Contaminated Packaging:**

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

**14. Transport information**

**Domestic regulation**

**49 CFR**

Not regulated as a dangerous good

Remarks : Not dangerous according to transport regulations.

**International Regulations**

**UNRTDG**

Not regulated as a dangerous good

**IATA-DGR**

Not regulated as a dangerous good

**IMDG-Code**

Not regulated as a dangerous good

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Not classified

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances**

None present or none present in regulated quantities.

**US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

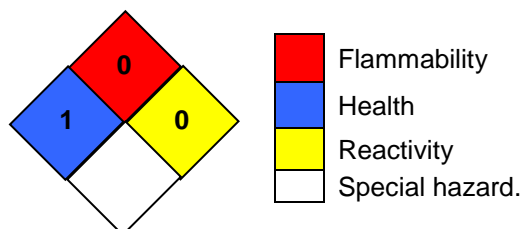
**US State Regulations**

**US. California Proposition 65**

No ingredient requiring a warning under CA Prop 65.

**16. Other information, including date of preparation or last revision**

**NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 03/19/2019

**Version #:** 2.0

**Further Information:** No data available.

**Revision Information** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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