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: Not known.

Manufacturer/Importer/Distributor Information

Company Name: Evonik Corporation
299 Jefferson Road
Parsippany, NJ 07054
USA

Telephone: +1 973 929 8000
Fax: +1 973 929 8042
E-mail: product-regulatory-services@evonik.com

Emergency telephone number:
24-Hour Health: +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency: +1 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification
Not classified

Label Elements

Hazard Symbol: No symbol
Signal Word: No signal word.
Hazard Statement: Not applicable
Precautionary Statements
Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Chemical name:
Silicones and siloxanes, dimethyl-, reaction products with silica

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicones and siloxanes, dimethyl-, reaction products with silica</td>
<td>67762-90-7</td>
<td>&lt;=100%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of necessary first-aid measures

Inhalation: In case product dust is released: Possible discomfort: cough, sneezing. Move victims into 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.

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: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

Most important symptoms/effects, 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, CO2, dry powder. Adapt fire-extinguishing measures to surroundings

Unsuitable extinguishing media: Do not use full-force water jet in order to avoid dispersal and spread of the fire.

Specific hazards arising from the chemical: May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition.
Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Accidental release measures: Avoid dust formation.

Methods and material for containment and cleaning up: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Environmental Precautions: 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

Technical measures (e.g. Local and general ventilation): No data available.

Safe handling advice: 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.

Contact avoidance measures: No data available.

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.

Storage

Safe storage conditions: Protect from heat and exposure to direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place. Take measures to prevent the build up of electrostatic charge. 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.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon dioxide, chemically prepared (CAS 112945-52-5)</td>
<td>REL</td>
<td>6 mg/m³</td>
<td>US. NIOSH: Pocket Guide to Chemical Hazards (2010)</td>
</tr>
<tr>
<td>resp. 7631-86-9</td>
<td>TWA</td>
<td>20 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>----------------</td>
<td>-----</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.8 mg/m³</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>exposure limit for dust - Respirable particles.</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2016)</td>
</tr>
<tr>
<td>exposure limit for dust - Inhalable particles.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. ACGIH Threshold Limit Values (03 2016)</td>
</tr>
<tr>
<td>exposure limit for dust - Total dust.</td>
<td>TWA</td>
<td>50 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>exposure limit for dust - Respirable fraction.</td>
<td>TWA</td>
<td>15 millions of particles per cubic foot of air</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>exposure limit for dust - Total dust.</td>
<td>TWA</td>
<td>15 mg/m³</td>
<td>US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)</td>
</tr>
<tr>
<td>exposure limit for dust - Respirable fraction.</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td>exposure limit for dust - Total dust.</td>
<td>TWA</td>
<td>15 mg/m³</td>
<td>US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td>exposure limit for dust - Respirable fraction.</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)</td>
</tr>
<tr>
<td>exposure limit for dust - Total dust.</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)</td>
</tr>
<tr>
<td>exposure limit for dust - Respirable fraction.</td>
<td>TWA PEL</td>
<td>5 mg/m³</td>
<td>US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (01 2015)</td>
</tr>
</tbody>
</table>

**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:** A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

**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

**Appearance**

**Physical state:** solid
Form: Powder
Color: White
Odor: odourless
Odor Threshold: Not applicable
pH: 4 - 6 (40 g/l, 20 °C) 1:1 in suspension
Melting Point: Not applicable Decomposition
Boiling Point: Not applicable Decomposition
Flash Point: Not applicable
Evaporation Rate: Not applicable
Flammability (solid, gas): not determined

Explosive limit - upper (%): not determined
Explosive limit - lower (%): not determined
Vapor pressure: Not applicable
Vapor density (air=1): No data available.
Density: approx. 2 g/cm3 (20 °C)
Relative density: No data available.

Solubility(ies)
Solubility in Water: > 1 mg/l
Solubility (other): No data available.
Partition coefficient (n-octanol/water): Not applicable
Self Ignition Temperature: not determined
Decomposition Temperature: > 300 °C
Kinematic viscosity: Not applicable solid
Dynamic viscosity: Not applicable solid

Other information
Molecular weight:
Explosive properties: Not to be expected in view of the structure
Oxidizing properties: not determined
Minimum ignition energy: > 10 kJ (VDI Guideline 2263 sheet 1)
Minimum ignition temperature: approx. 460 °C (VDI Guideline 2263 sheet 1)

10. Stability and reactivity
Reactivity: No dangerous reaction known under conditions of normal use.
Chemical Stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: No hazardous reactions are known if properly handled and stored.
Conditions to avoid: Hydrophobic properties disappear at temperatures > 300°C
Incompatible Materials: 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 likely routes of exposure
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics
Inhalation: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: LD 50 (Rat): > 5,000 mg/kg comparable product
LD0 (Rat): 1,000 mg/kg No deaths occurred.

Dermal
Product: LD 50 (Rat): > 2,000 mg/kg

Inhalation
Product: LC0 (Rat): 0.139 mg/l (maximum concentration attainable in experiments), No deaths occurred., Based on available data, the classification criteria are not met.

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

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:

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

Germ Cell Mutagenicity

In vitro
Product: Ames test (literature): Negative

In vivo
Product: No data available.

Reproductive toxicity
Product: no evidence of reproduction toxic 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

Other effects: 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), 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

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
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:** No remarkable mobility in soil is to be expected.

**Other adverse effects:** An Expert Judgment stated that no classification is necessary based on present knowledge.

13. Disposal considerations

**Disposal methods:** No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority. Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method.

**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)
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

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

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

SARA 311/312 Hazardous Chemical
Chemical Identity       Threshold Planning Quantity

SARA 313 (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.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.
US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

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: 03/20/2019
Version #: 1.0
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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