

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: AEROSIL® R 812 S

Chemical name:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica

Other means of identification

CAS Number: 68909-20-6

Recommended restrictions

Recommended use: Paints and varnishes. Toner Flow-promoting agent. Cosmetics Silicone rubber Reinforcing agent.

Restrictions on use: Not determined.

Manufacturer/Importer/Distributor Information

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

Telephone : +1 973 929 8000

Fax : +1 973 929 8040

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

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:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica		68909-20-6	98 - 100%

^{*} 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, CO₂, dry powder. Adapt fire-extinguishing measures to surroundings

Product name: AEROSIL® R 812 S

Unsuitable extinguishing media:

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

Special hazards arising from the substance or mixture:

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:**

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

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.

Storage**Safe storage conditions:**

Take precautionary measures against static discharges. Keep containers tightly sealed and store in a dry, cool place

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters**Occupational Exposure Limits**

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls No data available.

Controls**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: No special protective equipment required. Preventive skin 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**

Physical state:	solid
Form:	Powder
Color:	White
Odor:	odorless
Odor Threshold:	Not applicable
Melting Point:	Not applicable Decomposition
Boiling Point:	Not applicable Decomposition
Flammability:	Not applicable
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	Not determined.
Explosive limit - lower:	Not determined.
Flash Point:	Not applicable

Self Ignition Temperature:	Not applicable
Decomposition Temperature:	> 572 °F/> 300 °C
pH:	5.5 - 7.5 (40 g/l, 68 °F/20 °C) 1: 1 in suspension
Viscosity	
Dynamic viscosity:	Not applicable solid
Kinematic viscosity:	Not applicable solid
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	> 1 mg/l
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable
Vapor pressure:	Not applicable
Relative density:	No data available.
Density:	Approximate 2 g/cm ³ (68 °F/20 °C)
Bulk density:	No data available.
Vapor density (air=1):	No data available.

Particle characteristics

Particle Size:	No data available
Particle Size Distribution:	No data available
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available
Crystallinity:	Crystallinity: amorphous;
Surface treatment:	Surface treatment /Coatings: Yes;

Other information

Explosive properties:	Not to be expected in view of the structure
Oxidizing properties:	Not to be expected in view of the structure
Minimum ignition temperature:	986 °F/530 °C (VDI 2263)
Dust explosion properties:	Not dust explosive
Evaporation Rate:	No data available.
Minimum ignition energy:	> 10 kJ

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:	Carbon Monoxide. Carbon Dioxide. organic products of decomposition 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): > 2,000 mg/kg (OECD 401) Not toxic after single exposure; Limit Test, No deaths observed., Based on available data, the classification criteria are not met., comparable product

Dermal

Product: No data available.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica No data available.

Inhalation

Product: No data available.

Components:

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica Not toxic after single exposure; No data available., Dusts, mists and fumes Not toxic after single exposure; No data available., Vapour

Repeated dose toxicity

Product: No data available.

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: Maximization Test, OECD 406 (Guinea Pig): Not sensitising Based on available data, the classification criteria are not met. comparable product

Carcinogenicity

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

Germ Cell Mutagenicity**In vitro****Product:** Ames test (Literature): negative;**In vivo****Product:** No data available.**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.; No toxicological tests are available on the product.;**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** LC 50 (Brachydanio rerio (zebrafish), 96 h): > 1,000 mg/l The reported toxic effects relate to the nominal concentration. tested substance: comparable product**Aquatic Invertebrates****Product:** EC 50 (Daphnia magna, 48 h): > 100 mg/l Limit Test The reported toxic effects relate to the nominal concentration. tested substance: comparable product**Toxicity to Aquatic Plants****Product:** No data available.**Toxicity to microorganisms****Product:** EC 50 (activated sludge): > 1,000 mg/l (OECD 209) The reported toxic effects relate to the nominal concentration. tested substance: comparable product**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants**

Product name: AEROSIL® R 812 S

Product: No data available.**Toxicity to microorganisms****Product:** EC 50 (activated sludge): > 1,000 mg/l (OECD 209) The reported toxic effects relate to the nominal concentration. tested substance: comparable product**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:** An Expert Judgment stated that no classification is necessary based on present knowledge.**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

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.

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

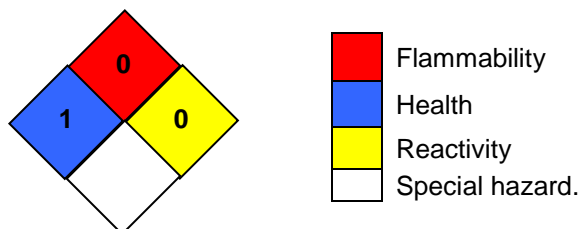
No ingredient regulated by MA Right-to-Know Law present.

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: 12/07/2021**Version #:** 1.2**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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