

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: AEROSIL® E 812

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: For industrial use

Restrictions on use: Not 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

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 | <=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
- 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.

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: | hardly soluble |
| 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: | No data available. |
| Surface treatment: | No data available. |

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: | > 752 °F/> 400 °C |
| 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: No data available.
Skin Contact: No data available.
Eye contact: No data available.
Ingestion: No data available.

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.

Inhalation

Product: No data available.

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.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

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

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: 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

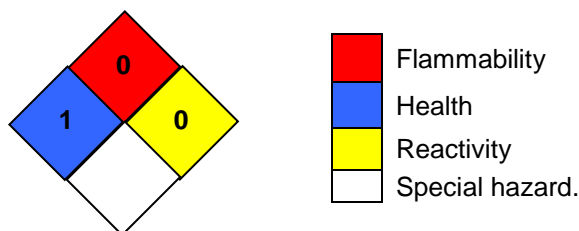
No ingredient regulated by PA Right-to-Know Law present.

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: 11/12/2021

Version #: 2.1

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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