

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: AEROSIL® R 805

Chemical name:

Silane, trimethoxyoctyl-, hydrolysis products with silica

Other means of identification

CAS Number: 92797-60-9

Recommended restrictions

Recommended use: Paints and varnishes. Sealant Adhesive Cosmetics Flow-promoting agent. Reinforcing agent.

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 8040

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

Physical Hazards

Combustible dust

Category 1

Label Elements

Hazard Symbol: No symbol

Signal Word: Warning

Hazard Statement: May form combustible dust concentrations in air.

Precautionary Statements

- Prevention:** Take precautionary measures against static discharge. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use with adequate ventilation. Avoid generation or accumulation of dust. Avoid breathing dust.
- Response:** IF ON SKIN: Wash with plenty of water. In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops. If inhaled, remove to fresh air. If symptoms persist, consult a physician for treatment. In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
- Disposal:** Collect in a chemical waste container. Use only vacuum cleaners approved for combustible dust collection.

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

3. Composition/information on ingredients

Chemical name:

Silane, trimethoxyoctyl-, hydrolysis products with silica

Substances

Chemical Identity	CAS number	Content in percent (%) [*]
Silane, trimethoxyoctyl-, hydrolysis products with silica	92797-60-9	<=100%

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

A specific chemical identity and/or percentage of composition 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 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:** No data available.

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 a solid water stream as it may scatter and spread 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: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

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

Accidental release measures: Avoid dust formation. If dust is present, control smoking, open flames, sparks, static electricity and friction heat.

Methods and material for containment and cleaning up: Sweep up or vacuum up spillage and collect in suitable container for disposal. Use cleaning techniques that do not generate dust clouds if ignition sources are present.

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. Minimize the escape of dust from process equipment and ventilation systems. Utilize surfaces that minimize dust accumulation and facilitate cleaning. Dust accumulations should be avoided to prevent secondary dust explosions.

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: 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. Keep containers tightly closed in a dry, cool place. Additional guidance on fire and explosion protection may be found in the consensus standard NFPA 654 for chemical dusts.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Silicon dioxide, chemically prepared (CAS 112945-52-5 resp. 7631-86-9)	PEL	6 mg/m ³	Source: 54 FR 2701
	PEL	20 millions of particles per cubic foot of air	Source: 54 FR 2701

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: Wear protective gloves made of the following materials: material, rubber, leather. 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:	Odorless
Odor Threshold:	Not applicable
pH:	3.5 - 5.5 (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):	May form combustible dust concentrations in air.

Explosive limit - upper (%):	not determined
Explosive limit - lower (%):	1 m3 standard container
Vapor pressure:	Not applicable
Vapor density (air=1):	No data available.
Density:	approx. 2.2 g/cm ³ (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:	Self-heating may occur
Decomposition Temperature:	> 150 °C
Kinematic viscosity:	No data available.
Dynamic viscosity:	Not applicable

Other information

Explosive properties:	Dust, which can be formed through abrasion, can combine with air to form a mixture which can be explosive. not determined
Oxidizing properties:	not determined
Dust Explosion Description Number Kst:	< 3 m.b./s
Minimum ignition energy:	> 1 kJ <= 10 kJ (VDI Guideline 2263 sheet 1) 1 m3 standard container
Minimum ignition temperature:	460 °C (VDI Guideline 2263 sheet 1)
Dust explosion properties:	St1

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:	Self-heating may occur
Conditions to avoid:	Hydrophobic properties disappear at temperatures > 200°C
Incompatible Materials:	No further information available
Hazardous Decomposition Products:	Carbon Monoxide. Carbon Dioxide. organic products of decomposition

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 Based on available data, the classification criteria are not met.

Dermal

Product:

Inhalation

Product:

Components:

Silane, trimethoxyoctyl-, hydrolysis products with silica
 The substance or mixture has no acute inhalation toxicity, Dusts, mists and fumes The substance or mixture has no acute inhalation toxicity, Vapour

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Not irritating. OECD Test Guideline 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.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

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

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Germ Cell Mutagenicity

In vitro
Product: Ames test: Negative literature

In vivo
Product: No data available.

Reproductive toxicity

Product: No data available.

Components:
Silane, trimethoxyoctyl-,
hydrolysis products with
silica

Not classified

Specific Target Organ Toxicity - Single Exposure

Product: no evidence for hazardous properties

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

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, 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 subject to Division 4.2 in packagings equal or less than 3 cbm. If in packagings (bags, big bags or silos) exceeding a volume of 3 cbm, the material has to be classified in Division 4.2, UN 3190, III., Air shipments must not exceed a quantity of

3 cbm (in big bags or in paper bags on pallets as well) in the same aircraft., To be stowed away from any source of heat (such as heatable fuel tanks, steam piping, etc.)

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**

Combustible dust

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

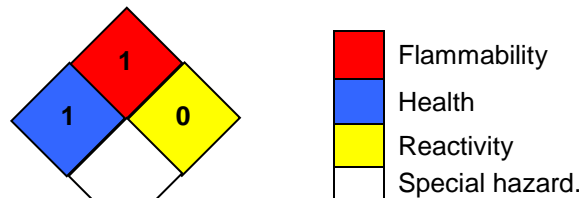
No ingredient regulated by PA Right-to-Know Law present.

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: 07/09/2019

Version #: 1.1

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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