SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: AEROSIL® E 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 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 Emergency	:	+1 800 424 9300 (CHEMTREC - US & CANADA) 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 action to prevent static discharges. 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. Get medical attention if any discomfort continues. 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	Common name and synonyms	CAS number	Content in percent (%)*
Silane, trimethoxyoctyl-, hydrolysis products with silica		92797-60-9	

* 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:	Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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. In the event of fire, wear self-contained breathing apparatus.

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):	Provide suitable extraction/ventilation at processing machines.If necessary: Local ventilation.see also section 7.

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 workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.If necessary: Local ventilation.

Contact avoidance measures: No data available.

Storage

Safe storage conditions: 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.

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/m3	Source: 54 FR 2701
	PEL	20 millions of particles per cubic foot of air	Source: 54 FR 2701
exposure limit for dust - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2016)
exposure limit for dust - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2016)
exposure limit for dust - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
exposure limit for dust - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
exposure limit for dust - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
exposure limit for dust - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
exposure limit for dust - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
exposure limit for dust - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
exposure limit for dust - Total dust.	TWA	15 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
exposure limit for dust - Respirable fraction.	TWA	5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
exposure limit for dust - Total dust.	TWA PEL	10 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
exposure limit for dust - Respirable fraction.	TWA PEL	5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
exposure limit for dust - Particulate.	AN ESL	1.8 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as

			amended (06 2018)
	ST ESL	18 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

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

Appropriate Engineering Controls Provide suitable extraction/ventilation at processing machines. If necessary: Local ventilation. see also section 7.

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: The data about break through time/strength of material is not valid for undissolved solids/dust.

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

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:	Data from a comparable product: (VDI 2263) 1 m3 standard container
Flash Point:	Not applicable
Self Ignition Temperature:	Not determined.
Decomposition Temperature:	> 302 °F/> 150 °C
pH:	3.5 - 5.5 (40 g/l, 68 °F/20 °C) 1: 1 in suspension
Viscosity	
Dynamic viscosity:	Not applicable
Kinematic viscosity:	No data available.
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 2.1 g/cm3 (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 determined.
Oxidizing properties:	Not determined.
Minimum ignition temperature:	Data from a comparable product: 860 °F/460 °C (VDI 2263)
Dust explosion properties:	ST-1
Dust Explosion Description Number Kst:	< 3 m.b_/s
Evaporation Rate:	No data available.
Minimum ignition energy:	> 1 kJ <= 10 kJ (VDI 2263) 1 m3 standard container comparable product

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 > 150°C
Incompatible Materials:	None known.
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 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): > 5,000 mg/kg (analogous OECD method) comparable product

Dermal

Product:	No data available.
Components:	
Silane, trimethoxyoctyl-, hydrolysis products with silica	No data available.

Inhalation

Product:	No data available.
Components:	
Silane, trimethoxyoctyl-, hydrolysis products with silica	Not toxic after single exposure; Vapour, No data available. Not toxic after single exposure; Dusts, mists and fumes, No data available.

Repeated dose toxicity

Product:	No data available.

Skin Corrosion/Irritation

Product:	Not irritating (Rabbit): Not irritating;

Serious Eye Damage/Eye Irritation

Product:	Not irritating Rabbit: Not irritating

Respiratory or Skin Sensitization

Product:	Not known. Based on available data, the classification criteria are not met.

Carcinogenicity
Product: Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.

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

no evidence of mutagenic effects

In vitro
Product: Ames test (Literature): negative;

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

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

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.

Toxicity to microorganisms
Product: No data available.

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: 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: 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: 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. Since empty containers retain product residue, follow MSDS and label warnings even after container is emptied.

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), 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.

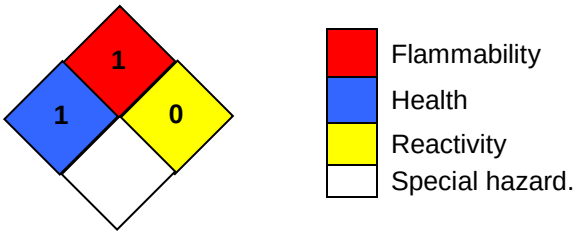
US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

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 #:	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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