

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: AEROSIL® E 972

Chemical name:

Silane, dichlorodimethyl-, reaction products with silica

Other means of identification

CAS Number: 68611-44-9

Recommended restrictions

Recommended use: Silicone rubber Sealant Paints and varnishes. Coloured printing inks Toner Adhesive Coating 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 : +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:

Silane, dichlorodimethyl-, reaction products with silica

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Silane, dichlorodimethyl-, reaction products with silica		68611-44-9	

* 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.
- 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.

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): Ensure suitable suction/aeration at the work place and with operational machinery. Local ventilation if necessary. 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 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: Keep in a dry place. 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

Chemical Identity	Type	Exposure Limit Values	Source
exposure limit for dust - Respirable particles.	TWA	3 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)
exposure limit for dust - Inhalable particles.	TWA	10 mg/m ³	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/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
exposure limit for dust - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
exposure limit for dust - Total dust.	TWA	15 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
exposure limit for dust - Respirable fraction.	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
exposure limit for dust - Total dust.	TWA	15 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
exposure limit for dust - Respirable fraction.	TWA	5 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
exposure limit for dust - Total dust.	TWA PEL	10 mg/m ³	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/m ³	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/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (06 2018)
	ST ESL	18 µg/m ³	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

Ensure suitable suction/aeration at the work place and with operational machinery. Local ventilation if necessary. 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. Additional Information: Use impermeable gloves.

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 determined.

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 determined.
Decomposition Temperature:	> 572 °F/> 300 °C
pH:	3.6 - 5.5 (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 2.2 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 determined.

Oxidizing properties: Not determined.

Minimum ignition temperature: Data from a comparable product: > 1112 °F/> 600 °C (VDI 2263)

Evaporation Rate: Not applicable

Minimum ignition energy: Not determined.

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
Stable under normal conditions. Product will not undergo hazardous polymerization.

11. Toxicological information

General information: Silicosis or other product specific illnesses of the respiratory tract were not observed in association with the product.

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

Dermal

Product: No data available.

Inhalation

Product: No data available.

Components:

Silane, dichlorodimethyl-, reaction products with silica
LC 0 (Rat, 4 h): 0.477 mg/l Not toxic after single exposure; (maximum concentration attainable in experiments), tested substance; Structurally similar substance, Dusts, mists and fumes Not toxic after single exposure; Not applicable, Vapour

Repeated dose toxicity

Product: No negative effects.
No irreversible changes and no indication of silicosis.

Skin Corrosion/Irritation

Product: Not irritating analogous OECD method (Rabbit): Not irritating; comparable product, Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation

Product: Not irritating Rabbit: Not irritating comparable product Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitization

Product: Not known.

Carcinogenicity

Product: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, 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

no evidence of mutagenic effects

In vitro

Product: No data available.

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): > 10,000 mg/l The reported toxic effects relate to the nominal concentration.

Aquatic Invertebrates

Product: EC 50 (Daphnia magna, 24 h): > 10,000 mg/l The reported toxic effects relate to the nominal concentration.

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: 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

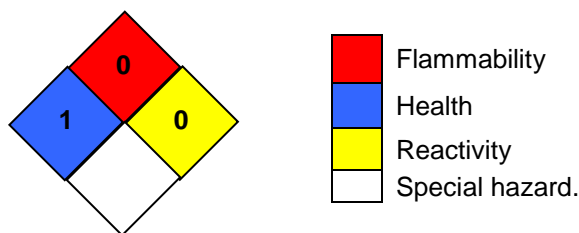
No ingredient regulated by PA Right-to-Know Law present.

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 #: 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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