

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: SPHERILEX® DP-0111

Other means of identification

CAS Number: 112926-00-8, 7631-86-9

Recommended restrictions

Recommended use: 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

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9)		112926-00-8	80 - 100%

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

Composition Comments: The components are not hazardous or are below required disclosure limits.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of 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, CO ₂ , 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.

Special hazards arising from the substance or mixture: None known.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: 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. Avoid dust formation.

Accidental release measures: No data available.

Methods and material for containment and cleaning up: Vacuum up immediately. A vacuum cleaner with a high-efficiency filtration system is recommended. To avoid raising dust do not use brooms or compressed air. Collect and place in correctly labelled containers. For disposal see Section 13.

Environmental Precautions: Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, rivers, groundwater or soil. Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

7. Handling and storage

Handling

Technical measures: No data available.

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

Chemical Identity	Type	Exposure Limit Values	Source
Silicon dioxide, chemically prepared (CAS 112926-00-8 resp. 7631-86-9)	PEL		6 mg/m ³
	PEL		20 millions of particles per cubic foot of air

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 No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses with side shields In case of dusts: Wear tight-fitting eye protection (e.g. safety 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: Approximate
3,092 °F/ 1,700 °C
Boiling Point: No data available.
Flammability: Not applicable

Upper/lower limit on flammability or explosive limits

Explosive limit - upper: Not applicable
Explosive limit - lower: Not applicable
Flash Point: Not applicable (solid)
Auto-ignition temperature: Not applicable
Decomposition Temperature: > 3,632 °F/> 2,000 °C
pH: 6.0 - 8.0 at 68 °F/20 °C
Method: DIN / ISO 787 / 9
Concentration: 50 g/l
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/cm³ at 68 °F/20 °C

Bulk density: No data available.

Vapor density (air=1): 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
Self-ignition:	Not applicable
Peroxides:	Not applicable
Dust explosion properties:	Not dust explosive
Evaporation Rate:	Not applicable
Minimum ignition energy:	Not applicable

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:	No specific hazards are known.
Incompatible Materials:	None known.
Hazardous Decomposition Products:	None known.

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 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, Female, Male, > 5,000 mg/kg, OECD 401, Based on available data, the classification criteria are not met.

Dermal

Product: LD 50, Rabbit, > 5,000 mg/kg, Based on available data, the classification criteria are not met.

Inhalation

Product: LC 50, Rat, Female, Male, 4 h, > 5.01 mg/l, OECD 436, Dust and mist, Based on available data, the classification criteria are not met.

Repeated dose toxicity

Product: NOAEL Rat, Male, Oral, 28 day, 7 days a week, >= 1,000 mg/kg, No negative effects.

Skin Corrosion/Irritation

Product: OECD 404, (Rabbit), Not irritating, Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation

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

Respiratory or Skin Sensitization

Product: Local Lymph Node Assay (LLNA), OECD 429, Mouse, Not a skin sensitizer.
Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer.

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

ACGIH: US.ACGIH Threshold Limit Values:

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 1910.1001-1053), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

no evidence of mutagenic effects

In vitro

Product: gene mutation test, OECD 471: , negative
gene mutation test, OECD 490: , negative
Chromosomal aberration, OECD 473: , negative

In vivo

Product: Chromosomal aberration, OECD 475, Oral, Rat, Male, negative

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 applicable

Information on health hazards**Other hazards**

Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50, (Brachydanio rerio), 96 h, > 10,000 mg/IOECD 203, The reported toxic effects relate to the nominal concentration.

Aquatic Invertebrates

Product: EC 50, Daphnia magna, 24 h, > 1,000 mg/IOECD 202, The reported toxic effects relate to the nominal concentration.

Toxicity to Aquatic Plants

Product: EC 50, Desmodesmus subspicatus (green algae), 72 h, > 173 mg/l, OECD 201

Toxicity to microorganisms

Product: EC 50, local activated sludge, 3 h, > 2,500 mg/l, OECD 209

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to microorganisms

Product: EC 50, local activated sludge, 3 h, > 2,500 mg/l, OECD 209

Persistence and Degradability

Biodegradation

Product: The methods for determining biodegradability are not applicable 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: , Not applicable

Mobility in soil:

Product: No remarkable mobility in soil is to be expected.

Results of PBT and vPvB assessment:

Product: No data available.

Other adverse effects:

Other hazards

Product: The data we have at our disposal do not necessitate identification concerning environmental hazard.

13. Disposal considerations

Disposal methods: Waste must be disposed of in accordance with federal, provincial and local regulations. 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 1910.1001-1053), 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

None present or none present in regulated quantities.

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.

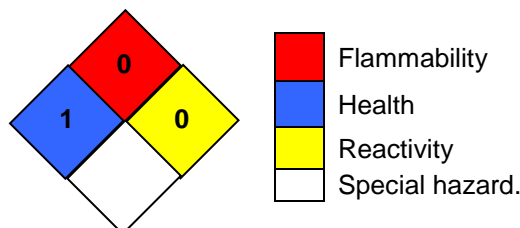
US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

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

Version #: 1.4

Generation date: 11/06/2023

Date of first report version: 05/14/2019

Abbreviations and acronyms:

: Source: 54 FR 2701
/ PEL: Permissible exposure limit:

AllC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); EC_x - Concentration associated with x% response; EHS - Extremely Hazardous Substance; EL_x - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErC_x - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC₅₀ - Half maximal inhibitory concentration; ICAO -

International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further Information: No data available.

Revision Information Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Disclaimer: This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and/or recommendations at any time, without prior or subsequent notice.