1. Identification

1.1. Product identifier

Trade name	AEROSIL® 200
Chemical Name	Silicon dioxide, chemically prepared
CAS-No.	112945-52-5, 7631-86-9

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified	Sealants Coloured printing inks Paints and varnishes. Adhesive Silicone rubber Cosmetic ingredient Cosmetics Agrochemicals
Function	Anticaking agent Antiblocking agents Coating agent Dispersing agent Flow-promoting agent. Reinforcing agent. Carrier

1.3. Details of the supplier of the safety data sheet

Company	Evonik Corporation USA 299 Jefferson Road Parsippany,NJ 07054-0677 USA
Telephone	973-929-8000
Telefax	973-929-8040
Email address	Product-Regulatory-Services@Evonik.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US & CANADA:		800-424-9300
CHEMTREC MEXICO:		01-800-681-9531
CHEMTREC INTERNATIONAL:		+1 703-527-3887 **(collect calls accepted)**
Product Regulatory Services	:	973-929-8060

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200

Remarks Not a hazardous substance or mixture.

2.2. Label elements

Statutory basis Classification according to Regulation 29CFR 1910.1200
Remarks Not a hazardous substance or mixture.

2.3. Other hazards

Silicon dioxide, chemically prepared Not a PBT, vPvB substance as per the criteria of the REACH Regulation.

3. Composition/information on ingredients

3.1. Substances

• **Silicon dioxide, chemically prepared**	100%
CAS-No. 112945-52-5	
Remarks Not a hazardous substance or mixture.	

Other information
A new CAS , 112945-52-5, has been assigned to amorphous, fumed silica to distinguish it from crystalline silica. According to the EPA, this product meets TSCA requirements and is listed on the TSCA inventory as silica with CAS 7631-86-9.

3.2. Mixtures

not applicable

4. First aid measures

4.1. Description of first aid measures

Inhalation
In case product dust is released: Possible discomfort: cough, sneezing
Move victims into fresh air.

Skin contact
Wash off with soap and plenty of water.

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
If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms
None known

4.3. Indication of any immediate medical attention and special treatment needed

No hazards which require special first aid measures.

5. Fire-fighting measures

5.1. 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.

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for firefighters

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal.

7. Handling and storage

7.1. Precautions for safe handling

Use with adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

Storage

Keep containers tightly closed in a dry, cool place.

8. Exposure controls/personal protection

8.1. Control parameters

• **Silicon dioxide, chemically prepared**		
CAS-No.	112945-52-5 7631-86-9	
Control parameters	20millions of particles per cubic foot of air	Time Weighted Average (TWA):(Z3)
Control parameters	0.8 mg/m3	Time Weighted Average (TWA):(Z3)
	The exposure limit is calculated from the equation, 80/(%SiO2), using a value of 100% SiO2. Lower values of % SiO2 will give higher exposure limits.	

8.2. Exposure controls

Personal protective equipment

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.

Hand protection

Use impermeable gloves.

Eye protection

Wear safety glasses with side shields. In case dusts are formed, wear close fitting protective goggles.

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.

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 re-use.

Protective measures

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.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

physical state	solid
Colour	white
Form	powder
Odour	odorless
Odour Threshold	not applicable
pH	3.7 - 4.5 (40 g / l) (20 °C) (suspension)
Melting point/range	ca. 1700 °C
Boiling point/range	not determined
Flash point	not applicable
Evaporation rate	not applicable
Flammability (solid, gas)	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	not applicable

Vapour density	not applicable	
Density	ca. 2.2 g/cm3	(20 °C)
Water solubility	> 1 mg/l	
Partition coefficient: n-octanol/water	not applicable	
Autoignition temperature	not applicable	
Thermal decomposition	> 2000 °C	
Viscosity, dynamic	not applicable	

9.2. Other information

Explosiveness	Not to be expected in view of the structure
Minimum ignition energy	not applicable
Tapped density	ca. 50 g / l Method: DIN / ISO 787/11

10. Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions: See Sect. 10.1 Reactivity.

10.4. Conditions to avoid
No dangerous reaction known under conditions of normal use.
Operations that create dust.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
None known.

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

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity	LD50 Rat: > 3300 mg/kg No deaths occurred.
	LD50 Rat: > 5000 mg/kg

	Method: OECD Test Guideline 401 comparable product
Acute inhalation toxicity	LC0 Rat: 0.139 mg/l / 4 h Method: analogous OECD method (maximum concentration attainable in experiments) No deaths occurred.
Acute dermal toxicity	LD50 Rabbit: > 5000 mg/kg comparable product
Skin irritation	Rabbit not irritating Method: analogous OECD method
Eye irritation	Rabbit not irritating Method: analogous OECD method
Sensitization	not known
Repeated dose toxicity	Oral No negative effects. Inhalation No irreversible changes and no indication of silicosis.
Assessment of STOT single exposure	no evidence for hazardous properties
Assessment of STOT repeat exposure	no evidence for hazardous properties
Risk of aspiration toxicity	No aspiration toxicity classification
Mutagenicity assessment	no evidence of mutagenic effects No evidence of mutagenic effects reported in literature.
Carcinogenicity	No negative effects.
carcinogenicity assessment	Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.
Toxicity to reproduction	No negative effects.
Human experience	Silicosis or other product specific illnesses of the respiratory tract have not been reported.

12. Ecological information

12.1. Toxicity

Toxicity to fish	LC50 (Brachydanio rerio): > 10000 mg/l / 96 h Method: OECD 203 The reported toxic effects relate to the nominal concentration.

Toxicity in aquatic invertebrates	EC50 Daphnia magna: > 1000 mg/l / 24 h Method: OECD 202 The reported toxic effects relate to the nominal concentration.

12.2. Persistence and degradability

Biodegradability	The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

Bioaccumulation	Not to be expected.

12.4. Mobility in soil

Mobility	No remarkable mobility in soil is to be expected.

12.5. Other adverse effects

Further Information	The classification criteria are not met based on the available data.

13. Disposal considerations

13.1. Waste treatment methods

Product

Waste must be disposed of in accordance with federal, state, provincial and local regulations.

Uncleaned packaging
Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. Transport information

Not dangerous according to transport regulations.

14.1.	UN number:	--
14.2.	UN proper shipping name:	--
14.3.	Transport hazard class(es):	--
14.4.	Packing group:	--
14.5.	Environmental hazards (Marine pollutant):	--
14.6.	Special precautions for user:	Yes

Not dangerous according to transport regulations.

15. Regulatory information

US Federal Regulations

OSHA

If listed below, chemical specific standards apply to the product or components:

- None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- None listed

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- No SARA Hazards

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

State Regulations

The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this MSDS.

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

- None listed

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health : 1

Flammability :	0
Physical Hazard :	0

NFPA Ratings

Health :	1
Flammability :	0
Reactivity :	0

16. Other information

Further information

Revision date 04/30/2015

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

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.

Legend

ACC	American Chemistry Council
ACGIH	American Conference of Governmental Industrial Hygenists
ACS	Advisory Committee on Sustainability
ADI	Acceptable Daily Intake
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BOD	Biochemical oxygen demand
c.c.	closed cup
CAO	Cargo Aircraft Only
Carc	Carcinogen
CAS	Chemical Abstract Services
CDN	Canada
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response – Compensation and Liability Act
CFR	Code of Federal Regulations
CMR	carcinogenic-mutagenic-toxic for reproduction
COD	Chemical oxygen demand
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
DOT	Department of Transportation
EC50	half maximal effective concentration
EPA	Environmental Protection Agency
ErC50	Reduction of Growth Rate
ERG	Emergency Response Guide Book
FDA	Food and Drug Administration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
HCS	Hazard Communication Standard
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO-TI	International Civil Aviation Organization- Technical Instructions
ICCA	International Council of Chemical Association
ID	Identification number
IMDG	International Maritime Dangerous Goods
IUPAC	International Union of Pure and Applied Chemistry
ISO	International Organization For Standardization
LC50	50 % Lethal Concentration
LD50	50 % Lethal Dose
L(E)C50	LC50 or EC50
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
RQ	Reportable Quantity
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
UN	United Nations
vPvB	very persistent, very bioaccumulative

voc	volatile organic compounds
WHMIS	Workplace Hazardous Materials Information System
WHO	World Health Organization