AEROSIL® 200

Material no. Specification 99002466

Version Revision date Print Date 4.1 / US 04/30/2015 05/31/2015



Order Number

132138 04196330

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#### 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

Cosmetic ingre 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** 

973-929-8060

Services

#### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

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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

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5.1. Extinguishing media

Suitable extinguishing media:

Water spray, foam, CO2, dry powder., Adapt fire-extinguishing measures to

surroundings

Unsuitable extinguishing media: Do

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 dioxid	e, 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

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### 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.

# **Eve 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 Odour powder odorless

**Odour Threshold** 

not applicable

pΗ

3.7 - 4.5(40 g / I) (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

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not applicable

Density

ca. 2.2 g/cm3

(20 °C)

Water solubility

Vapour density

> 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 / I

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

See Sect. 10.1 Reactivity.

reactions

#### 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.

#### **Toxicological information** 11.

# 11.1. Information on toxicological effects

Acute oral toxicity

LD50 Rat: > 3300 mg/kg

No deaths occurred.

LD50 Rat: > 5000 mg/kg

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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

Assessment of STOT repeat

exposure

Risk of aspiration toxicity

no evidence for hazardous properties

no evidence for hazardous properties

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/o

OSHA.

Toxicity to reproduction

No negative effects.

Human experience

Silicosis or other product specific illnesses of the respiratory tract have

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.

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Toxicity in aquatic

EC50 Daphnia magna: > 1000 mg/l / 24 h

invertebrates

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**

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#### **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

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Flammability:

0

Physical Hazard:

0

# **NFPA Ratings**

Health:
Flammability:
Reactivity:

1

0

#### 16. Other information

#### **Further information**

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

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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

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VOC

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volatile organic compounds

WHMIS WHO Workplace Hazardous Materials Information System

World Health Organization