

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: AEROSIL® COK 84

Other means of identification

Recommended restrictions

Recommended use: Agricultural products Adhesive Personal care Paints and varnishes. Dispersant

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

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable

Precautionary Statements Not a hazardous substance or mixture.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%) [*]
Silicon dioxide, chemically prepared (CAS 112945-52-5 resp. 7631-86-9)	112945-52-5	
Aluminium oxide	1344-28-1	

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

Composition Comments: 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.

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

Most important symptoms/effects, 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 a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical: None known.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
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.
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):	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 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.
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.

Storage

Safe storage conditions:	Take precautionary measures against static discharges. Keep containers tightly closed 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 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
Aluminium oxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (03 2016)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air

			Contaminants (29 CFR 1910.1000) (03 2016)
Aluminium oxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
Aluminium oxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminium oxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)

Appropriate Engineering Controls No data available.

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: Use impermeable gloves.

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.

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

Appearance

Physical state:	solid
Form:	Powder
Color:	White
Odor:	Odorless
Odor Threshold:	Not applicable
pH:	3.6 - 4.3 (40 g/l, 20 °C) Suspension
Melting Point:	approx. 1,700 °C
Boiling Point:	not determined
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not applicable

Explosive limit - upper (%):	Not applicable
Explosive limit - lower (%):	Not applicable
Vapor pressure:	Not applicable

Vapor density (air=1):	No data available.
Density:	approx. 2.4 g/cm ³ (20 °C)
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	Insoluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable
Self Ignition Temperature:	Not applicable
Decomposition Temperature:	> 2,000 °C
Kinematic viscosity:	No data available.
Dynamic viscosity:	Not applicable
Other information	
Explosive properties:	not to be expected, given the composition employed
Oxidizing properties:	not to be expected, given the composition employed
Minimum ignition energy:	Not applicable
Minimum ignition temperature:	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:	See Sect. 10.1 Reactivity.
Conditions to avoid:	Operations that create dust.
Incompatible Materials:	No further information available
Hazardous Decomposition Products:	None known.

11. Toxicological information

General information: Silicosis or other product specific illnesses of the respiratory tract have not been reported.

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)****Oral**

Product: Acute toxicity estimate: > 5,000 mg/kg
LD 50 (Rat): > 5,000 mg/kg tested substance:
LD 50 (Rat): > 5,000 mg/kg tested substance:

Dermal

Product: LD 50 (Rabbit): > 5,000 mg/kg literature

Inhalation

Product: LC0 (Rat): 0.139 mg/l (maximum concentration attainable in experiments), No deaths occurred., literature, tested substance:, Silicon dioxide, derived from chemical synthesis

Repeated dose toxicity

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

Skin Corrosion/Irritation

Product: literature (Rabbit): Not irritating.

Serious Eye Damage/Eye Irritation

Product: Rabbit: Not irritating.

Respiratory or Skin Sensitization

Product: Not known.

Carcinogenicity

Product: No data available.

Components:

Silicon dioxide, Not classified

chemically prepared
(CAS 112945-52-5 resp.
7631-86-9)

Aluminium oxide Not classified

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**US. National Toxicology Program (NTP) Report on Carcinogens:****US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):****Germ Cell Mutagenicity****In vitro**

Product: No data available.

In vivo

Product: No evidence of mutagenic effects reported in literature.

Reproductive toxicity

Product: No data available.

Components:

Silicon dioxide, Not classified
chemically prepared
(CAS 112945-52-5 resp.
7631-86-9)
Aluminium oxide Not classified

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:

Silicon dioxide, Not classified
chemically prepared
(CAS 112945-52-5 resp.
7631-86-9)
Aluminium oxide Not classified

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

Silicon dioxide, Not classified
chemically prepared
(CAS 112945-52-5 resp.
7631-86-9)
Aluminium oxide Not classified

Aspiration Hazard

Product: No data available.

Components:

Silicon dioxide, Not classified
chemically prepared
(CAS 112945-52-5 resp.
7631-86-9)
Aluminium oxide Not classified

Other effects: No data available.

12. Ecological information**Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

Product: LC 50 ((Brachydanio rerio), 96 h): > 10,000 mg/l The reported toxic effects relate to the nominal concentration. tested substance: Silicon dioxide, derived from chemical synthesis
LC 50 (Salmo trutta, 96 h): > 100 mg/l literature tested substance: aluminium oxide

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
EC 50 (Daphnia magna, 48 h): > 100 mg/l literature tested substance: aluminium oxide

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.**Components:**

Aluminium oxide EC 50 (Pseudokirchneriella subcapitata (microalgae), 72 h): > 100 mg/l literature

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:** Log Kow: Not applicable**Mobility in soil:**

No remarkable mobility in soil is to be expected.

Other adverse effects:

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

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 and local regulations. Incineration is the preferred method.

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)

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

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

SARA 311/312 Hazardous Chemical
Chemical Identity **Threshold Planning Quantity**

None present or none present in regulated quantities.

SARA 313 (TRI Reporting)

<u>Chemical Identity</u>	<u>Reporting threshold for other users</u>
Aluminium oxide	Otherwise used (non-manufacturing/processing)

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

Chemical Identity
Aluminium oxide

US. Massachusetts RTK - Substance List

Chemical Identity
Silicon dioxide, chemically prepared (CAS 112945-52-5 resp. 7631-86-9)
Aluminium oxide

US. Pennsylvania RTK - Hazardous Substances

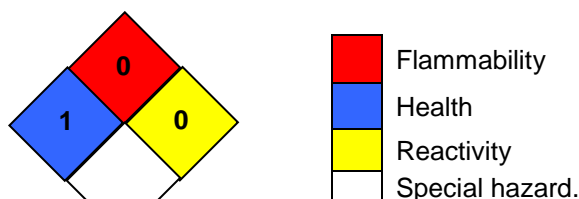
Chemical Identity
Silicon dioxide, chemically prepared (CAS 112945-52-5 resp. 7631-86-9)
Aluminium oxide

US. Rhode Island RTK

Chemical Identity
Aluminium oxide

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: 07/09/2019

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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