

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

SECTION 1: Identification of the substance/mixture and of the company/undertaking ***

1.1. Product identifier

Silica colloid anhydr

Item No. 06762000

Substance / product identification ***

CAS-No. 112945-52-5

CAS-No. 7631-86-9

EINECS-No. 231-545-4

REACH Registry No. 01-2119379499-16-0000

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG

Industriestrasse 35

9100 Herisau

Telephone no. 0041 (0)71 353 58 58

E-mail address of sdb@haenseler.ch

person responsible
for this SDS

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification ***

2.1. Classification of the substance or mixture

Voluntary product information following the Safety Data Sheet format

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

The product does not require a hazard warning label in accordance with Regulation (EC) No 1272/2008.

2.3. Other hazards

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients ***

Further ingredients ***

Silicon dioxide, chemically prepared, amorphous

CAS No. 7631-86-9

EINECS no. 231-545-4

Registration no. 01-2119379499-16-0000 (TPR)

Concentration >= 95 %

Advice: [4]

Name of set of nanoform Nanoaggregate
>100 nm

Shape and aspect ratio of Spheroidal

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

particles

Nanoaggregate
>100 nmShape and aspect ratio of
particles

amorphous

Particle size distribution

Nano particles
d50 2.5-50 nm

Method Transmission Electron Microscopy (TEM)

Note

[4] Voluntary information

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Ensure supply of fresh air.

After skin contact

After contact with skin, wash immediately with plenty of water.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.).

After ingestion

Rinse out mouth and give plenty of water to drink. Consult a physician if necessary.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water, Foam, Dry chemical extinguisher, Carbon dioxide

5.3. Advice for firefighters**Special protective equipment for fire-fighting**

Use personal protective clothing.

Other information

Collect contaminated fire-fighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Avoid dust formation. Do not inhale dust.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

For tall amounts: Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

Advice on safe handling

Take action to prevent static discharges. Provide good ventilation of working area (local exhaust ventilation if necessary).

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep tightly closed in a dry and cool place.

Storage classes

Storage class according to TRGS 510	13	Non- combustible solids
Storage category (Switzerland)	NG	Other solid hazardous substances without classification/labelling hazardous

SECTION 8: Exposure controls/personal protection *****8.1. Control parameters****Exposure limit values *******Silicon dioxide, chemically prepared, amorphous**

List	SUVA
Type	MAK
Value	4 mg/m ³
Pregnancy group: S; Remarks: SSc; LungenfibKT AN	

8.2. Exposure controls**General protective and hygiene measures**

Remove contaminated, soaked clothing immediately and dispose of safely. Wash hands and face before breaks and after work. General industrial hygiene practice. Do not eat, drink or smoke during work time.

Respiratory protection

Breathing apparatus in the event of aerosol, mist or fume formation. Particle filter P2

Hand protection

necessary

Eye protection

Safety glasses with side protection shield; Safety goggles

Body protection

Protective clothing

SECTION 9: Physical and chemical properties *****9.1. Information on basic physical and chemical properties**

Physical state	solid		
Colour	white		
Odour	odourless		
Physical state	Powder		
Melting point			
Value	appr.	1700	°C
Flash point			
Value		°C	
Remarks	Not applicable		
Decomposition temperature			
Value	>	2000	°C

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

pH value

Value	-	3.5	to	5.5
Concentration/H ₂ O		40	g/l	
Temperature		20	°C	
Remarks	Suspension in water			

Density and/or relative density

Value	appr.	2.2		g/cm ³
Temperature		20	°C	

Particle characteristics

Type	d50			
Particle size	2.5	to	50	nm
Method	Transmission Electron Microscopy (TEM)			

9.2. Other information**Solubility in water**

Value	>	1		mg/l
Temperature		20	°C	

SECTION 10: Stability and reactivity**10.1. Reactivity**

No decomposition if stored and applied as directed.

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

No hazardous reactions known.

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide, None under normal use.

SECTION 11: Toxicological information *****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

ATE	1'000	mg/kg
Method	calculated value (Regulation (EC) No. 1272/2008)	

Acute oral toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	rat	
LD50	3160	mg/kg

Silicon dioxide, chemically prepared, amorphous

Species	rat	
LD50	> 5000	mg/kg
Method	OECD 401	

Silicon dioxide, chemically prepared, amorphous

NOAEL	>= 1000	mg/kg
-------	---------	-------

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

Duration of exposure 28 d

Acute dermal toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	rabbit		
LD50	>	5000	mg/kg

Acute inhalative toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	rat		
LC50	>	5.01	mg/l
Duration of exposure		4	h
Administration/Form	Dust/Mist		

Skin corrosion/irritation (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	rabbit
evaluation	non-irritant

Serious eye damage/irritation (Components)**Silicon dioxide, chemically prepared, amorphous**

evaluation	non-irritant
------------	--------------

Mutagenicity (Components)**Silicon dioxide, chemically prepared, amorphous**

evaluation	Based on available data, the classification criteria are not met.
Method	OECD 471

Silicon dioxide, chemically prepared, amorphous

Method	OECD 473
--------	----------

Silicon dioxide, chemically prepared, amorphous

evaluation	Not considered mutagenic based on several in vitro and in vivo studies.
------------	---

Reproduction toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

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

Carcinogenicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Remarks	No evidence available on carcinogenicity.
---------	---

11.2 Information on other hazards**Endocrine disrupting properties with respect to humans**

This substance does not have endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information *****12.1. Toxicity****Fish toxicity (Components)****Silicon dioxide, chemically prepared, amorphous**

Species	zebra fish (Brachydanio rerio)		
LC50	>	10000	mg/l
Duration of exposure		96	h
Remarks	The details of the toxic effect relate to the nominal concentration.		

Daphnia toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	Daphnia magna
---------	---------------

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

EC50	>	1000	mg/l
Duration of exposure		24	h
Remarks	The details of the toxic effect relate to the nominal concentration.		

Algae toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	Desmodesmus subspicatus		
EC50	>	173	mg/l
Duration of exposure		72	h
Method	OECD 201		

Bacteria toxicity (Components)**Silicon dioxide, chemically prepared, amorphous**

Species	activated sludge		
EC50	>	2500	mg/l
Duration of exposure		3	h
Method	OECD 209		

12.2. Persistence and degradability**Biodegradability (Components)****Silicon dioxide, chemically prepared, amorphous**

Remarks	Inorganic product, cannot be eliminated from the water by biological purification processes.
---------	--

12.4. Mobility in soil**Mobility in soil (Components)****Silicon dioxide, chemically prepared, amorphous**

Immobile

12.5. Results of PBT and vPvB assessment**Results of PBT and vPvB assessment *****

The Substance does not meet PBT-criteria.
This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties**Endocrine disrupting properties with respect to the environment**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

SECTION 14: Transport information

Trade name: Silica colloid anhydr

Substance number: 067620

Version: 3 / CH

Date revised: 18.07.2023

Replaces Version: 2 / CH

Print date: 18.07.23

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport.	The product does not constitute a hazardous substance in sea transport.	The product does not constitute a hazardous substance in air transport.

SECTION 15: Regulatory information ***

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Water Hazard Class (Germany) ***

Water Hazard Class (Germany) Not water hazardous

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

SECTION 16: Other information

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***
This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.