

SECTION 1. Identification of the substance/mixture and of the company/enterprise**1.1. Product identifier**

Product name : SILIGEL S

This substance-mixture contains nanoforms (according to Reach Regulation)

Product code: refer to sales department

1.2. Relevant identified uses of the substance or mixture and uses advised against

Stabilizers for beer

Sectors of use:

Manufacture of food products[SU4]

Product category:

Technological adjuvant for beer use

Not recommended uses

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

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SECTION 2. Hazards identification**2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Pictograms:

None

Hazard Class and Category Code(s):

Non hazardous

Hazard statement Code(s):

Non hazardous

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):

None

Hazard statement Code(s):

Non hazardous

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

None in particular.

Information concerning the components: Synthetic amorphous silica hydrated.

Food use, brewery use. In accordance with current regulations on the specific matter.

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, no substances that disrupt the endocrine system are present according to Reg. (EU) 2017/2100 and 2018/605 in concentrations >0.1% w/w.

SECTION 3. Composition/information on ingredients

3.1 Substances

Synthetic hydrated amorphous silica CAS No. 112926-00-8: substance containing nanoforms (Reg EC 1907/2006), particle information: section 9 (experimental data)

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Synthetic amorphous silica hydrated (Silica gel) substance for which there are Community workplace exposure limits	95-100%				231-545-4	

3.2 Mixtures

Irrilevant

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation: Ventilate the area. Immediately remove the patient from the contaminated area and keep him or her at rest in a well-ventilated area.

If you feel unwell, consult a doctor.

Direct skin contact: Remove shoes and clothing and wash thoroughly with soap and water. If you feel unwell, consult a doctor. Direct eye contact: Remove any contact lenses, protect the uninjured eye, and immediately flush with plenty of water for at least 10 minutes.

If you feel unwell, consult a doctor. Ingestion: Rinse mouth immediately. Do not give anything to an unconscious person. If you feel unwell, consult a doctor.

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

No data available.

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

If you feel unwell, go to a doctor or emergency room with this document. Symptomatic treatment.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available

5.3. Advice for firefighters

Use respiratory protection, a safety helmet, and complete protective clothing. Self-contained breathing apparatus is recommended, especially if working in closed, poorly ventilated areas. Cool containers with water jets.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke

Wear gloves and protective clothing

6.1.2 For emergency responders:

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provide a sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills

Inform the competent authorities.

Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment:

Recover the product for reuse, if possible, or for elimination.

6.3.2 Cleaning up:

After wiping up, wash with water the area and materials involved

6.3.3 Other information:

None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

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

At work do not eat or drink.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Manufacture of food products:
Handle with care. Store in a cool, dry place away from direct light and heat.
Batch number (BN) and best before (EXP): See barcode.

SECTION 8. Exposure controls/personal protection**8.1. Control parameters**

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Related to contained substances:
Synthetic amorphous silica hydrated (Silica gel):
Silica, amorphous

Limit value - Eight hours TWA
(ppm)/(mg/m³)

Australia: -/2 (1)
Austria: -/4 (1) inhalable aerosol
Belgium: -/10
Canada – Ontario: -/10
Canada - Québec: -/6(1)(2)
Denmark: 0-/ 2 inhalable aerosol
Finland: -/5
Germany (AGS): -/1 (1)
Germany (DFG): -/0,02 (1)
Ireland: (1) -/6 (1)
Latvia: -/1
New Zealand: -/1
People's Republic of China: -/2(1)
Poland: -/10(1)
Singapore: -/10
South Africa mining: -/6 (1)
South Korea: -/10
Switzerland: -/4 (1)
USA - NIOSH: -/6
USA - OSHA: 20 (1)(2)
United Kingdom: -/6 (1)

Limit value - Short term STEL
(ppm)/(mg/m³)

Australia: -/-
Austria: -/-
Belgium: -/-
Canada – Ontario: -/-
Canada - Québec: -/-
Denmark: 0-/-
Finland: -/-
Germany (AGS): -/8 (1)(2)
Germany (DFG): -/0.16 (1)
Ireland: (1) -/-
Latvia: -/-
New Zealand: -/-
People's Republic of China: -/-
Poland: -/-
Singapore: -/-
South Africa mining: -/-
South Korea: -/-
Switzerland: -/-
USA - NIOSH: -/-
USA - OSHA: -/-
United Kingdom: :-/-

Remarks:

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Austria (1) Inhalable fraction
Canada - Québec (1) Respirable fraction (2) The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%.
Germany (AGS): Colloidal amorphous silica including fumed silica and wet-process silica (precipitated silica, silica gel)
(1) Inhalable fraction (2) 15 minutes average value
Ireland: (1) Inhalable fraction
New Zealand: (1) Inhalable fraction
Norway: (1) Respirable fraction
People's Republic of China: (1) Inhalable fraction
Poland: (1) Inhalable fraction
South Africa Mining: (1) Inhalable fraction
Switzerland: (1) inhalable aerosol
USA (OSHA) : (1) mppcf (2) mppcf × 35.3 = million particles per cubic meter = particles per c.c.
UK: (1) Inhalable fraction

- Substance: Synthetic amorphous silica hydrated (Silica gel)

DNEL

Local effects Long term Workers inhalation = 4 (mg/m³)

8.2. Exposure controls

Appropriate engineering controls:

Manufacture of food products:

No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)

8.2.2 Individual protection measures:

(a) Eye / face protection

Not necessary for normal use, unless otherwise specified by the employer and/or by environmental hygiene assessments

(b) Skin protection

(i) Hand protection

Not necessary for normal use, unless otherwise specified by the employer and/or by environmental hygiene assessments.

Rubber and PVC gloves recommended

(ii) Other

Wear normal work clothing.

(c) Respiratory protection

Not necessary for normal use, unless otherwise specified by the employer and/or by environmental hygiene assessments

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices and avoid to disperse the product into the environment.

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

Physical and chemical properties	Value	Determination method
Physical state	Fine powder	
Colour	White	
Odour	odorless	
Odour threshold	not determined as it is considered not relevant for the characterization of the product	
Melting point/freezing point	not determined as it is considered not relevant for the characterization of the product	
Boiling point or initial boiling point and boiling range	not determined as it is considered not relevant for the characterization of the product	
Flammability	not determined as it is considered not relevant for the characterization of the product	
Lower and upper explosion limit	not determined as it is considered not relevant for the characterization of the product	
Flash point	not determined as it is considered not relevant for the characterization of the product	
Auto-ignition temperature	not determined as it is considered not relevant for the characterization of the product	
Decomposition temperature	not determined as it is considered not relevant for the characterization of the product	
pH	8,0 ± 0,5 (20°C; sol. 5%)	
Kinematic viscosity	not determined as it is considered not relevant for the characterization of the product	
Solubility	not determined as it is considered not relevant for the characterization of the product	
Water solubility	insoluble	

Physical and chemical properties	Value	Determination method
Partition coefficient n-octanol/water (log value)	not determined as it is considered not relevant for the characterization of the product	
Vapour pressure	not determined as it is considered not relevant for the characterization of the product	
Density and/or relative density	0,45 ± 0,05 (20°C)	
Relative vapour density	not determined as it is considered not relevant for the characterization of the product	
Particle characteristics	This substance-mixture contains nanoforms (according to REACH Regulation)	

9.2. Other information

Particle characteristics: micron-sized aggregates and agglomerates with an internal structure in the range of 1-100 nm

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Avoid humidity. Avoid dust formation.

10.5. Incompatible materials

Acids; Mild Steel; Aluminum; Copper

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

- (a) acute toxicity: Synthetic amorphous silica hydrated (Silica gel): Ingestion - LD50 rat (mg/kg/24h bw): >5000
Skin contact - LC50 rat/rabbit (mg/kg/24h bw): >2000
Inhalation - LD50 rat (mg/l/4h): nd
- (b) skin corrosion/irritation: Synthetic amorphous silica hydrated (Silica gel): Non-corrosive
Synthetic amorphous silica hydrated (Silica gel): Non-irritating
- (c) serious eye damage/irritation: Synthetic amorphous silica hydrated (Silica gel): Non-corrosive
Synthetic amorphous silica hydrated (Silica gel): Non-irritating
- (d) respiratory or skin sensitisation: Synthetic amorphous silica hydrated (Silica gel): Non-sensitizing
- (e) germ cell mutagenicity: Synthetic amorphous silica hydrated (Silica gel): Non-mutagenic
- (f) carcinogenicity: Synthetic amorphous silica hydrated (Silica gel): Not carcinogenic
- (g) reproductive toxicity: Synthetic amorphous silica hydrated (Silica gel): Non-toxic for reproduction
- (h) specific target organ toxicity (STOT) single exposure: Synthetic amorphous silica hydrated (Silica gel): Not classified. Oral NOAEL (rat): > 1000 mg/kg body weight/day
- (i) specific target organ toxicity (STOT) repeated exposure: Synthetic amorphous silica hydrated (Silica gel): Not available
- (j) aspiration hazard: Synthetic amorphous silica hydrated (Silica gel): Not available

11.2. Information on other hazards

No data available.

11.2.1. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the endocrine system in accordance with Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 in concentrations >0.1.

SECTION 12. Ecological information

12.1. Toxicity

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Related to contained substances:
Synthetic amorphous silica hydrated (Silica gel):
Acute toxicity-fish LL50 (mg/l/96H): > 10000
Acute toxicity-crustaceans EL50 (mg/l/24H): > 10000
Acute algae toxicity ErC50 (mg/l/72-96H): n.a.

Use according to good working practices and avoid to disperse the product into the environment.

12.2. Persistence and degradability

Inorganic

12.3. Bioaccumulative potential

Inorganic. The substance has no bioaccumulative potential.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Does not contain substances considered to have endocrine disruption in concentrations >0.1% pursuant to Regulations (EU) 2017/2100 and 2018/605.

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies.
Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information**14.1. UN number or ID number**

Not included in the field of application of regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk is not foreseen

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Restrictions relating to the product or the substances contained (Annex XVII EC Reg. 1907/2006): not applicable
Substances in Candidate list (art. 59 EC Reg. 1907/2006): the product does not contain SVHC in percentage = a 0.1 %.

Regulation (EU) 1169/2011: see point 2.2

Regulation (EU) 1308/2013: see point 2.2

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information**16.1. Other information**

Points modified compared to previous release: 1.1. Product identifier, 2.2. Label elements, 2.3. Other hazards, 3.1 Substance 4.1. Description of first aid measures, 4.3. Indication of any immediate medical attention and special treatment needed, 5.2. Special hazards arising from the substance or mixture, 5.3. Advice for firefighters, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 10.1. Reactivity, 10.2. Chemical stability, 10.3. Possibility of hazardous reactions, 10.4. Conditions to avoid, 10.5. Incompatible materials, 10.6. Hazardous decomposition products, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 11.2. Information on other hazards, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

No hazard to report. Classification procedure: Calculation method

Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq.

Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq.

Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable

n.d.: not available

ADR: Accord européen relative au transport International des marchandises dangereuses par route (European

Agreement concerning the International Carriage of Dangerous Goods by Road)

ATE: Acute Toxicity Estimati

BFC: BioconCentration Factor

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstract Service number

CAP: Centre AntiPoison

CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified Chemical Substances)

CL50/LC50: Lethal Concentration 50

DL50/LD50: Lethal Dose 50

COD: Chemical Oxygen Demand

DNEL: Derived No Effect Level

EC50: half maximal Effective Concentration

ERC: Enviroment Release Classes

EU/UE: European Union

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods code

Kow: Octanol water partition coefficient

NOEC: No Observed Effect Concentration

OEL: Occupational Exposure Limit

PBT: Persistent Bioaccumulative and Toxic

PC: Product Categories

PNEC: Predicted No Effect Concentration

PROC: Process Categories

RID: Règlement concernant le transport International ferroviaire des marchandises dangereuses (Regulations concerning International rail transport of dangerous goods)

STOT: Target Organ Systemic Toxicity

STOT (RE): Repeated Exposure

STOT (SE): Single Exposure

STP: Sewage Treatment Plants

SU: Sector of Use

SVCH: Substance of Very High Concern

TLV: Threshold Limit Value

vPvB: Very Persistent Very Bioaccumulative

References and Sources:

- ECHA Registered Substances:

<https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

- SDS raw material supplier

- GESTIS International Limit Value: <http://limitvalue.ifa.dguv.de>

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*** this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: documentation update of supplier data.
