SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name : SILIGEL
Product code: refer to sales department
Chemical Name: SILICA GEL CAS: 112926-00-8 - EC No: 231-545-4 - REACH: 01-2119379499-16-xxxx

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

AEB SpA - Via Vittorio Arici 104 S.Polo - 25134 Brescia (BS) Italy
Tel. +39.030.2307.1 Fax +39.030.2307281
E-mail: info@aeb-group.com - Internet: www.aeb-group.com
E-mail tecnico competente/technical dept.: sds@aeb-group.com

AEB USA
111 N Cluff Avenue
Lodi CA 95240 (USA)
Tel: +1 2096258139 Fax: +1 2092248953
Email: info@aebusa.com - Internet: www.aeb-group.com

AEB AFRICA (PTY) LTD
18 Track Crescent, Cor. Station Road
Montague Gardens 7441
Cape Town (South Africa)
Tel.: +27 215512700 - Fax: +27 (0) 215511919
Email: info@aeb.co.za - Internet: www.aeb-group.com

AEB OCEANIA PTY LTD
178A Wakaden Street
Griffith NSW 2680
T: 1300 704 971
Email: aeboceania@aeb-group.com - Internet: www.aeb-group.com

1.4. Emergency telephone number

AEB SpA
Centralino/Switchboard: +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT +1; Lingua/Language: Italiano, English)

AEB USA
Switchboard: +1 2096258139 (GMT -8; Language: English)

AEB AFRICA (PTY) LTD
Switchboard: +27 215512700 (GMT +1; Language: English, Afrikaans)

AEB OCEANIA PTY LTD
Switchboard: +61 1300 704 971 (GMT +9; Language: English)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

CAS 112926-00-8 EINECS 231-545-4 REACH 01-2119379499-16-xxxx

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: silica gel.

Food use, brewery use. Not intended for the final consumer. In accordance with current regulations on the specific matter.

2.3. Other hazards

The substance / mixture does NOT contain substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

Do not ingest. Keep out of reach of children.

SECTION 3. Composition/information on ingredients

3.1 Substances

No dangerous substance to report.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
Silica Gel substance for which there are Community workplace exposure limits	100%	NC	ND	112926-00-8	231-545-4	01-2119379 499-16-xxxx

3.2 Mixtures

Irrilevant

SECTION 4. First aid measures

4.1. Description of first aid measures

Contact with eyes: wash with plenty of water. Seek medical examination.
Skin contact: wash with plenty of water. In case of symptoms, seek medical attention.
In case of inhalation: remove the person from exposure and keep him at rest. If symptoms appear, seek medical attention.
In case of ingestion: do not induce vomiting. If the amount ingested is significant and there are symptoms of discomfort, consult a CAV or physician

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

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 protection for the breathing apparatus
Safety helmet and full protective clothing.
The water spray can be used to protect the people involved in the extinction.
You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas.
Keep containers cool with water spray

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. Do not smoke.
Privide 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:
Synthetic amorphous silica is inert. Contain the spilled material, suck it up and recover it in suitable containers. Start for disposal.

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 clean, dry and ventilated place, away from heat sources and direct sunlight. Keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

==========
Related to contained substances:
Silica Gel:
Silica gel (45% synthetic amorphus silica idrated)

silica, amorphous

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

Australia: -/2 (1)
Austria: -/4 inhalable aerosol
Belgio: -/10
Canada – Ontario: -/10
Canada - Québec: -/6(1)
Denmark: 0-/ 2 inhalable aerosol
Finland: -/5
Germany (AGS): -/4 inhalable aerosol
Germany (DFG): -/4 (1)
Ireland: -/6 (1); -/2,4 (2)
Latvia: -/1
New Zealand: -/1
People's Republic of China: -/2(1)
Poland: -/10(1); -/2 (2)
Singapore: -/10
South Korea: -/10
Switzerland: -/4 inhalable aerosol aerosol
USA - OSHA: 80% silica totale dust
United Kingdom: :-/6 inhalable aerosol; -/2,4 respirable aerosol

Limit value - Short term
(ppm)/(mg/m³)
Denmark: -/4 inhalable aerosol

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Canada - Québec (1) Respirable fraction
Germany (DFG) (1) Inhalable fraction
Ireland (1) Inhalable fraction (2) Respirible fraction

People's Republic of China (1) Inhalable fraction
Poland (1) Inhalable fraction (2) Respirable fraction

L'ACGIH® considers that biologically inert particles, insoluble or insoluble particles can also have adverse effects and therefore recommends that the concentration of such dusts in the air be kept below: 3 mg/m3, for respirable particles; 10 mg/m3, for inhalable particles, until a TLV is established for the particular substance.

- Substance: 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 needed for normal use. in the presence of dust, wear protective goggles (EN 166).

(b) Skin protection

(i) Hand protection
Not needed for normal use.When handling the pure product use chemical resistant protective gloves (EN374-3)

(ii) Other
Wear normal work clothing.

(c) Respiratory protection
Not needed for normal use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Use certified respiratory protection equipment meeting EU requirements (89/656/EEC, 245/2016 UE), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

(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
Appearance	Fine powder	
Colour	white	

Physical and chemical properties	Value	Determination method
Odour	not determined as it is considered not relevant for the characterization of the product	
Odour threshold	not determined as it is considered not relevant for the characterization of the product	
pH	6.5 ± 0.5 (20 ° C sol 5%)	
Melting point/freezing point	not determined as considered not relevant for the characterization of the product	
Initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product	
Flash point	not determined as considered not relevant for the characterization of the product	ASTM D92
Evaporation rate	not determined as considered not relevant for the characterization of the product	
Flammability (solid, gas)	not determined as considered not relevant for the characterization of the product	
Upper/lower flammability or explosive limits	not determined as considered not relevant for the characterization of the product	
Vapour pressure	not determined as considered not relevant for the characterization of the product	
Vapour density	not determined as considered not relevant for the characterization of the product	
Relative density	0.4 ± 0.1 (20 ° C)	
Solubility	not determined as considered not relevant for the characterization of the product	
Water solubility	not determined as it is considered not relevant for the characterization of the product	
Partition coefficient: n-octanol/water	not determined as 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	
Viscosity	not determined as it is considered not relevant for the characterization of the product	
Explosive properties	not determined as it is considered not relevant for the characterization of the product	
Oxidising properties	not determined as it is considered not relevant for the characterization of the product	

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

Stable. Hygroscopic

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Avoid moisture.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE oral = ∞
ATE dermal = ∞
ATE inhal = ∞

(a) acute toxicity: Silica Gel: Silicel gel (45% hydrated amorphous synthetic silica)
Amorphous silica
Ingestion - LD50 rat (mg / kg / 24h bw):> 3100
Skin contact - LC50 rat / rabbit (mg / kg / 24h bw):> 5000
Inhalation - LD50 rat (mg / l / 4h): na
It has little harmful effect on poulosis and does not cause any noteworthy diseases or toxic effects. However, exposure to dust can aggravate existing conditions such as asthma and bronchitis
(b) skin corrosion/irritationSilica Gel: Not corrosive
Silica Gel: Non-irritating Dust can have a dehydrating effect
(c) serious eye damage/irritation: Silica Gel: Not corrosive
Silica Gel: Not irritating. Dust can cause discomfort and mild irritation
(d) respiratory or skin sensitization: Silica Gel: Not sensitizing
(e) germ cell mutagenicity: Silica Gel: Not mutagenic
(f) carcinogenicity: Silica Gel: Not carcinogenic
(g) reproductive toxicity: Silica Gel: No evidence of danger
(h) specific target organ toxicity (STOT) single exposure: Silica Gel: Non toxic
(i) specific target organ toxicity (STOT) repeated exposureSilica Gel: Amorphous silica
Non-toxic NOAEL oral rat:> 4000 mg / kg body weight / day
(j) aspiration hazard: Silica Gel: Non-toxic by aspiration

Health Hazards:
Eye contact: Accidental contact of product with eyes may cause irritation.
Skin Contact: Product is not an irritant. Prolonged or repeated contact may defeat and irritate the skin and cause

dermatitis in some cases.
Ingestion: The ingested product may cause irritation of the mucous membranes of the throat and digestive system leading to digestive symptoms and abnormal bowel disorders.
Inhalation: Prolonged exposure to vapours or mists of product may cause respiratory irritation.

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

==========
Related to contained substances:
Silica Gel:
Silicel gel (45% hydrated amorphous synthetic silica)
Amorphous silica Acute toxicity - fish LC50 (mg / l / 96h):> 10000
Acute toxicity - crustaceans EC50 (mg / l / 24h):> 10000
Acute toxicity algae ErC50 (mg / l / 72-96h): na
Chronic toxicity - fish NOEC (mg / l): na
Chronic toxicity - shellfish NOEC (mg / l): na
Chronic toxicity algae NOEC (mg / l): na

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 bioaccumulation potential.

12.4. Mobility in soil

Not applicable

12.5. Results of PBT and vPvB assessment

Non PBT and vPvB

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

Not available

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

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. Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

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 contained substances (All. XVII Reg. EC 1907/2006): not applicable
Substances in Candidate List (art. 59 Reg. EC 1907/2006): the product does not contain SVHC
Substances subject to authorisation (Ann. XIV Reg. CEC 1907/2006): the product does not contain SVHC
Reg. EC 648/04: see 2.2

Reg. (EU) n. 1169/2011: see 2.2
Reg (UE) 528/2012: see.to 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: 8.1. Control parameters, 8.2. Exposure controls 12.6. Endocrine disrupting properties

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.
Regulation (EC) n. 648 of 31/03/04 (on detergents) et seq.
Regulation (UE) n. 1169/2011 (on the provision of food information to consumers)
Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.
Regulation (UE) 528/2012 (Biocides) et seq.

Procedure used to classify under CLP mixture (Reg . EC 1272/2008):

Physical hazards: On the basis of experimental data
H314 Skin. Corr. 1A: On the basis of experimental data / Calculation Method
Other hazards: Calculation Method

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 europèen relative au transport International des merchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE: Acute Toxicity Estimat
BFC: BioconCentration Factor
BOD: Biochemical Oxigen 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 concernent le transport International ferroviaire des merchandises 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 supplier
• GESTIS DNEL Database: http://www.dguv.de/ifa/gestis/gestis-dnel-datenbank/index-2.jsp
• 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: issued in according to Reg. UE 878/20