

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

### **1.1. Product identifier**

Product name : POLYGEL BH  
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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### **1.4. Emergency telephone number**

AEB SpA

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

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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:

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):  
EUH210 - Safety data sheet available on request.

Precautionary statements:  
None in particular.

Contains:  
Information concerning the components: silica gel, polyvinylpyrrolidone (PVPP).  
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

## SECTION 3. Composition/information on ingredients

### 3.1 Substances

Irrilevant

### 3.2 Mixtures

No dangerous substance to report.

| Substance   | Concentration[<br>w/w] | Classification | Index | CAS         | EINECS    | REACH                     |
|---|------------------------|----------------|-------|-------------|-----------|---------------------------|
| Silica Gel<br>substance for which there are<br>Community workplace exposure<br>limits | >= 50 < 100%           |                |       | 112926-00-8 | 231-545-4 | 01-2119379<br>499-16-xxxx |

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water for at least 10 minutes.

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or medicinal mineral vaseline oil.

### 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

No data available.

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO<sub>2</sub>, 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. 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 clean, dry, ventilated area away from heat and direct sunlight.  
Keep container tightly closed.

# SECTION 8. Exposure controls/personal protection

## 8.1. Control parameters

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Related to contained substances:

Silica Gel:

Silica gel (45% synthetic amorphous silica hydrated)

silica, amorphous

Limit value - Eight hours  
(ppm)/(mg/m<sup>3</sup>)

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/m<sup>3</sup>)

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) Respirable 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/m<sup>3</sup>, for respirable particles; 10 mg/m<sup>3</sup>, for inhalable particles, until a TLV is established for the particular substance.

- Substance: Silica Gel

DNEL

Local effects Long term Workers inhalation = 4 (mg/m<sup>3</sup>)

## 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. Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

#### (b) Skin protection

##### (i) Hand protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

##### (ii) Other

Wear normal work clothing.

#### (c) Respiratory protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

#### (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                       | Very fine powder  |                      |
| Colour                           | White   |                      |
| 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 it is considered not relevant for the characterization of the product |                      |

| Physical and chemical properties             | Value   | Determination method |
|--|---|----------------------|
| Initial boiling point and boiling range      | 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 | ASTM D92             |
| Evaporation rate                             | not determined as it is considered not relevant for the characterization of the product |                      |
| Flammability (solid, gas)                    | not determined as it is considered not relevant for the characterization of the product |                      |
| Upper/lower flammability or explosive limits | 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 |                      |
| Vapour density                               | not determined as it is considered not relevant for the characterization of the product |                      |
| Relative density                             | 0.25 ± 0.05 (20 ° C)  |                      |
| Solubility                                   | not determined as it is considered not relevant for the characterization of the product |                      |
| Water solubility                             | insoluble   |                      |
| Partition coefficient: n-octanol/water       | 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 |                      |
| 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

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 sources of heat

#### 10.5. Incompatible materials

None

#### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

### SECTION 11. Toxicological information

#### 11.1. Information on toxicological effects

ATE(mix) oral = ∞

ATE(mix) dermal = ∞

ATE(mix) 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/irritation Silica 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 exposure Silica 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**

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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**

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Related to contained substances:

Silica Gel:

Not applicable (inorganic)

**12.3. Bioaccumulative potential**

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Related to contained substances:

Silica Gel:

Not applicable (inorganic)

**12.4. Mobility in soil**

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Related to contained substances:

Silica Gel:

Not applicable

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

No PBT/vPvB ingredient is present

**12.6. Endocrine disrupting properties**

No data available.

### 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

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: 1.2. Relevant identified uses of the substance or mixture and uses advised against, 2.1. Classification of the substance or mixture, 2.2. Label elements, 8.1. Control parameters, 8.2. Exposure controls, 11.1. Information on toxicological effects, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential

Classification based on data of all mixture components

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): irrelevant

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 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: compliance with Regulations 2020/878.

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