SAFETY DATA SHEET

POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#1/12

In conformity to Regulation (EU) 2020/878

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

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

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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

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Produced by AEB SpA Via Vittorio Arici 104 S. Polo 25134 Brescia

1.4. Emergency telephone number

AEB SpA



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#2/12

In conformity to Regulation (EU) 2020/878

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

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, polyvinylpolypyrrolidone (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



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#3/12

In conformity to Regulation (EU) 2020/878

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

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	>= 50 < 100%			112926-00-8	1 231-545-4	01-2119379 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 thorougly 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, 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.

SAFETY DATA SHEET

POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#4/12

In conformity to Regulation (EU) 2020/878

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.

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:

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.



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#5/12

In conformity to Regulation (EU) 2020/878

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

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

 $(ppm)/(mg/m^3)$

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

SAFETY DATA SHEET

POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#6/12

In conformity to Regulation (EU) 2020/878

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. 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	
рН	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	



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#7/12

In conformity to Regulation (EU) 2020/878

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

POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

In conformity to Regulation (EU) 2020/878

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 / I / 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.

Geowin SDS rel. 10 - Use - Industrial

#8/12



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

#9/12

In conformity to Regulation (EU) 2020/878

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 / I / 96h):> 10000

Acute toxicity - crustaceans EC50 (mg / I / 24h):> 10000

Acute toxicity algae ErC50 (mg / I / 72-96h): na

Chronic toxicity - fish NOEC (mg / I): na

Chronic toxicity - shellfish NOEC (mg / I): na

Chronic toxicity algae NOEC (mg / I): na

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

12.2. Persistence and degradability

Related to contained substances:

Silica Gel:

Not applicable (inorganic)

12.3. Bioaccumulative potential

Related to contained substances:

Silica Gel:

Not applicable (inorganic)

12.4. Mobility in soil

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.

SAFETY DATA SHEET

POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

10 / 12

In conformity to Regulation (EU) 2020/878

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



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

11 / 12

In conformity to Regulation (EU) 2020/878

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): irrilevant

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



POLYGEL BH

Issued on 04/09/2021 - Rel. # 6 on 04/09/2021

12 / 12

In conformity to Regulation (EU) 2020/878

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: compliance with Regulations 2020/878.