

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

1 / 13

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

Product name : POLYGEL Plus
Contains synthetic polymer microplastics (SPM)
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
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: aebocania@aeb-group.com - Internet: www.aeb-group.com

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

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

2 / 13

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

111 N Cluff Avenue

Lodi CA 95240 (USA)

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

Fax: +12092248953

Email: info@aebusa.com - Internet: www.aeb-group.com

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:

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.

Ingredients: pure polyvinylpolypyrrolidone (PVPP) with very high molecular weight, enabling to grant a large adsorption

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

3 / 13

surface. For food, for brewing. Not intended for the final consumer. In accordance with current regulations on the specific matter.

2.3. Other hazards

Based on available data, there are no PBT or vPvB substances according to Regulation (EC) 1907/2006, Annex XIII. Based on available data, there are no endocrine disrupting substances according to Regulation (EU) 2017/2100 and Regulation (EU) 2018/605.

May form an explosive dust-air mixture if dispersed.

Polyvinylpolypyrrolidone containing synthetic polymer microparticles (SPM) in concentrations greater than 0.01% by weight, as per Regulation (EU) 2023/2055, by way of derogation as per Paragraph 4a of Annex XVII - entry 78 of Regulation (EC) 1907/2006.

Use according to good working practices, avoiding dispersion of the product in the environment.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrrelevant

3.2 Mixtures

Polyvinylpolypyrrolidone (PVPP) - CAS No. 9003-39-8/25249-54-1 - containing synthetic polymer microparticles (SPM) in a concentration of 32-34% w/w

SECTION 4. First aid measures

4.1. Description of first aid measures

General information: Do not abandon the victim without assistance.

If inhaled: If unconscious, place the victim on their side in a stable position and seek medical advice. If symptoms persist, seek medical advice.

If on skin: Wash with soap and plenty of water.

If in eyes: Remove contact lenses. Protect the uninjured eye. If eye irritation persists, seek medical advice.

If swallowed: Keep the respiratory tract clean. Do not give milk or alcoholic beverages. Do not give anything to an unconscious person. If symptoms persist, seek medical advice.

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.

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

4 / 13

5.2. Special hazards arising from the substance or mixture

No data available.

Hazardous combustion products: CO₂, carbon monoxide, nitrogen oxides (NO_x).

5.3. Advice for firefighters

Special protective equipment for firefighters: In case of fire, wear self-contained breathing apparatus. Specific extinguishing methods: Standard procedure for chemical fires. Further information: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

6.1.1 For non-emergency personnel:

Move away from the area surrounding the spill or release. Do not smoke. Wear gloves and protective clothing.

6.1.2 For emergency responders:

Eliminate all open flames and possible sources of ignition. Do not smoke. Provide adequate ventilation. Evacuate the danger area and, if necessary, consult an expert.

6.2. Environmental precautions

Contain spills. Dispose of residue in accordance with current regulations.

Prevent the product from entering drains, surface water or groundwater; if the product has entered a watercourse, sewer system or contaminated the soil or vegetation, notify the relevant authorities.

6.3. Methods and material for containment and cleaning up

The product is immiscible with water and will settle in water systems.

Large spills:

Stop the flow of material if it is safe to do so. Contain the spilled material where possible.

Absorb with vermiculite, dry sand or earth and place in containers. After recovering the product, rinse the area with water.

Small spills:

clean up with absorbent material (e.g. cloth). Clean the surface thoroughly to remove residual contamination. Never return spills to original containers for reuse. Sweep or vacuum up the spill and collect in a suitable container for disposal.

For waste disposal, see section 13 of the SDS.

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

5 / 13

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**

Avoid contact with eyes and skin.

Handle the product after consulting all other sections of this safety data sheet.

Ensure adequate ventilation.

The products supplied are intended for industrial use only.

Observe good industrial hygiene practices. During handling, avoid spillage as it is harmful to the environment.

The product must not be released into the environment – it must not be discharged into drains, watercourses or the soil. Wash thoroughly after use.

Please refer to the regulations in force.

Accidental release measures

In case of accidental release, prevent the product from entering drains, waterways or water supplies.

Personal precautions

Keep unnecessary personnel away. Keep people away and upwind of the spill/leak.

Wear appropriate protective equipment and clothing during clean-up.

Notify local authorities if significant spills cannot be contained.

Environmental precautions

Avoid discharge into drains, waterways or the ground.

Containment methods

Stop the flow of material if this does not involve any risk.

Cleaning methods

Ventilate the contaminated area. Wear appropriate protective equipment and clothing during cleaning.

Stop the flow of material if this does not pose a risk. Collect with a broom or vacuum cleaner and place in suitable containers for disposal. Never return spilled material to the original containers for reuse.

After recovering the product, wash the area with water.

Have the material disposed of by authorised companies.

We recommend consulting AEB's sales department and any technical documents.

In particular, we highlight the following useful and necessary information:

- The importance of packaging
- Minimising on-site storage before use/shelf life
- Correct storage conditions
- Thorough testing of the initial quality of the product

AEB spa guarantees that the product, if transported and stored correctly on site and used according to the instructions provided, complies with food contact regulations.

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POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

6 / 13

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. As this is a hygroscopic product, store in a clean, dry, and ventilated area, away from heat and direct sunlight. Store in the tightly closed original container.

Batch number (BN) and best before (EXP): See barcode.

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

No data available.

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 assessments of environmental hygiene

(b) Skin protection

(i) Hand protection

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

(ii) Other

Wear normal work clothing.

(c) Respiratory protection

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

(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

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

7 / 13

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	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	
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	not determined as it is considered not relevant for the characterization of the product	
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	0,25 ± 0,05 (20°C)	
Relative vapour density	not determined as it is considered not relevant for the characterization of the product	
Particle characteristics	contains synthetic polymer microparticles (SPM)	

9.2. Other information**9.2.1 Information with regard to physical hazard classes**Irrelevant

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

8 / 13

9.2.2 Other safety characteristics

Irrelevant

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

Organic dusts at sufficient concentrations can form explosive mixtures in air

10.4. Conditions to avoid

Protect from frost, heat, sunlight and moisture

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition productsCarbon monoxide Carbon dioxide (CO₂) Nitrogen oxides (NO_x)**SECTION 11. Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skin corrosion/irritation: based on available data, the classification criteria are not met.
- (c) serious eye damage/irritation: based on available data, the classification criteria are not met.
- (d) respiratory or skin sensitisation: based on available data, the classification criteria are not met.
- (e) germ cell mutagenicity: based on available data, the classification criteria are not met.
- (f) carcinogenicity: based on available data, the classification criteria are not met.
- (g) reproductive toxicity: based on available data, the classification criteria are not met.
- (h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

9 / 13

met.

(i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.

(j) aspiration hazard: based on available data, the classification criteria are not met.

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.

SECTION 12. Ecological information**12.1. Toxicity**

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

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This substance/mixture does not contain any components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at concentrations > 0.1%.

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Contains SPM: Synthetic polymer microparticles for use at industrial sites - Annex XVII, entry 78 - derogation 4a

SECTION 13. Disposal considerations

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

10 / 13

13.1. Waste treatment methods

Unused product residues should be considered non-hazardous special waste. Disposal should be carried out by a company authorised to manage waste, in accordance with national and local regulations. Solid residues may be suitable for disposal in authorised landfills.

Contaminated packaging

Contaminated packaging must be recovered or disposed of in accordance with national waste management regulations. Prevent spilled material from entering drains, waterways or water supplies. Both product residues and uncleaned empty packaging must be labelled, sealed and sent for disposal by incineration, landfill or recycling in accordance with local, regional and national regulations. For disposal within the EU, it is the user's responsibility to assign the appropriate waste code in accordance with the European Waste List (EWL, formerly EWC), based on the application for which the product was used.

Uncontaminated packaging

Empty, clean containers can be taken to an authorised waste treatment site for recycling or disposal.

Special precautions

Both products and packaging must be disposed of safely and in accordance with relevant local and national regulations. Empty containers or linings may retain product residues: prevent spilled material from entering sewer systems, waterways or water supplies.

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.

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

11 / 13

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 of EC Regulation 1907/2006)

The restriction conditions for the following items must be considered: - list no. 78: the synthetic polymer microparticles supplied are subject to the conditions set out in Annex XVII, item 78, of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council (Reg. (EU) 2023/2055).

Substances in the Candidate List (art. 59 of EC Regulation 1907/2006): the product does not contain SVHC in a percentage $\geq 0.1\%$.

Regulation (EU) No. 649/2012 of the European Parliament and of the Council concerning the export and import of dangerous chemicals: not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances: not applicable.

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 2.3. Other hazards, 3.2 Mixtures 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, 6.1. Personal precautions, protective equipment and emergency procedures, 6.2. Environmental precautions, 6.3. Methods and material for containment and cleaning up, 6.4. Reference to other sections, 7.1. Precautions for safe handling, 7.3. Specific end use(s), 8.2. Exposure controls, 9.2. Other information, 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, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 12.7. Other adverse effects, 13.1. Waste treatment methods, 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.

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

12 / 13

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 Estimat

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>

This msds was made in good faith by technical Office on the basis of the information available at the date of the last revision. The person in charge must regularly inform the employees about the specific risks they encounter when using this substance/product. The information contained here relate only to the substance/the preparation indicated and may not apply if the product is used improperly or in combination with others. Nothing contained herein shall be construed as a guarantee, either express or implied. It is the responsibility of the user to ensure the opportunities and completeness of the information contained herein for their own particular use.

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



Safety data sheet

POLYGEL Plus

Issued on 10/17/2025 - Rel. # 8 on 10/17/2025

In conformity to Regulation (EU) 2020/878

13 / 13

Changes to the previous edition: drawn up in accordance with the information provided for in Regulation 2023/2055.
