

ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#1/12

In conformity to Regulation (EU) 2015/830

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

1.1. Product identifier

Product name: ANTIBRETT

Product code: refer to sales department

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

Enzyme

Sectors of use:

Industrial Manufacturing[SU3], Manufacture of food products[SU4], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Product category:

Process aid for enological 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

113 Hanwood Avenue

Hanwood

NSW 2680 (Australia)

Tel: +61 1300 704 971

Email: aeboceania@aeb-group.com - Internet: www.aeb-group.com

Produced by

AEB FRANCE Sarl - 10, rue du Stade - 68240 SIGOLSHEIM, France



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#2/12

In conformity to Regulation (EU) 2015/830

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 BIOCHEMICAL 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:

GHS08

Hazard Class and Category Code(s):

Resp. Sens. 1

Hazard statement Code(s):

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

The product, if inhaled, can cause sensitization.

2.2. Label elements

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

Pictogram, Signal Word Code(s):

GHS08 - Danger

Hazard statement Code(s):

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Supplemental Hazard statement Code(s):

not applicable

Precautionary statements:

Prevention

P261 - Avoid breathing dust.

P284 - [In case of inadequate ventilation] wear respiratory protection.

Response

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or a doctor





ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#3/12

In conformity to Regulation (EU) 2015/830

Contains:

ß-glucanase

Information concerning the components

: 92% based on yeast flakes, ß-glucanase 8% enzymes.

Only for professional use. Food use, oenological use. 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

The use of this chemical agent involves the obligation of "risk assessment" by the employer in accordance with the provisions of Dlgs n. 81. April 9, 2008. Workers exposed to this chemical agent should not be subject to health surveillance if the results of the risk assessment show that, depending on the type and quantity of dangerous chemical agent and method and frequency of exposure to the agent, there is only a "moderate Risk" for the health and safety of workers and that the measures laid down in the Decree are sufficient to reduce the risk.

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACh
ß-glucanase	> 5 <= 10%	Resp. Sens. 1, H334		9074-98-0	232-979-7	

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.



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#4/12

In conformity to Regulation (EU) 2015/830

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

Inhalation may cause asthma respiratory failure.

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

If experiencing respiratory symptoms: Call a POISON CENTER or a doctor

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 and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

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.



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#5/12

In conformity to Regulation (EU) 2015/830

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:

Rapidly recover the product, wear a mask and protective clothing 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

In residential areas do not use on large surfaces. 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)

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

Manufacture of food products:

Handle with care.

Store in a clean, dry, ventilated area away from heat and direct sunlight.

Keep container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

AEB

SAFETY DATA SHEET

ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#6/12

In conformity to Regulation (EU) 2015/830

8.1. Control parameters

No data available.

8.2. Exposure controls











Appropriate engineering controls:

Industrial Manufacturing:

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

Manufacture of food products:

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

Public domain (administration, education, entertainment, services, craftsmen):

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

When handling the pure product use safety glasses (EN 166) according to the instructions of the RSPP.

- (b) Skin protection
 - (i) Hand protection

When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3) according to the instructions of the RSPP

(ii) Other

When handling the pure product, wear full protective clothing (generic workwear / antacid, safety shoes S3-EN ISO 20345) or other protective equipment, according to the instructions of the RSPP

(c) Respiratory protection

Use adequate protective respiratory equipment (EN 141) according to the instructions of the RSPP

(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	Powder beige		
· ·	not determined because it is considered not relevant for characterization of the product		



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#7/12

In conformity to Regulation (EU) 2015/830

Physical and chemical properties	Value	Determination method
Odour threshold	not determined because it is considered not relevant for characterization of the product	
рН	5 - 8 (sol.1%, 20°C)	
Melting point/freezing point	not determined because it is considered not relevant for characterization of the product	
Initial boiling point and boiling range	not determined because it is considered not relevant for characterization of the product	
Flash point	not determined because it is considered not relevant for characterization of the product	ASTM D92
Evaporation rate	not determined because it is considered not relevant for characterization of the product	
Flammability (solid, gas)	not determined because it is considered not relevant for characterization of the product	
Upper/lower flammability or explosive limits	not determined because it is considered not relevant for characterization of the product	
Vapour pressure	not determined because it is considered not relevant for characterization of the product	
Vapour density	not determined because it is considered not relevant for characterization of the product	or
Relative density	not determined because it is considered not relevant for characterization of the product	
Solubility	miscible in wine in all proportions	
Water solubility	not determined because it is considered not relevant for characterization of the product	
Partition coefficient: n-octanol/water	not determined because it is considered not relevant for characterization of the product	
Auto-ignition temperature	not determined because it is considered not relevant for characterization of the product	
Decomposition temperature	not determined because it is considered not relevant for characterization of the product	
Viscosity	not determined because it is considered not relevant for characterization of the product	
Explosive properties	not determined because it is considered not relevant for characterization of the product	
Oxidising properties	not pertinentenone determined as it is considered not relevant to the characterization of the produc	

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.

AEB IMPROVEMENT THROUGH BIOTECHNOLOGY

SAFETY DATA SHEET

ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#8/12

In conformity to Regulation (EU) 2015/830

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Exposure to heat

10.5. Incompatible materials

Not known

10.6. Hazardous decomposition products

Acres smoke

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = ∞ ATE(mix) dermal = ∞ ATE(mix) inhal = ∞

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skin corrosion/irritationbased 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 sensitization: Il prodotto, se inalato, può provocare fenomeni di sensibilizzazione. Il prodotto, se inalato, può provocare fenomeni di sensibilizzazione. The product, if inhaled, can cause sensitization.
 - (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 met.
- (i) specific target organ toxicity (STOT) repeated exposurebased on available data, the classification criteria are not met.
 - (j) aspiration hazard: based on available data, the classification criteria are not met.

SECTION 12. Ecological information



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#9/12

In conformity to Regulation (EU) 2015/830

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

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

12.6. 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).



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

10 / 12

In conformity to Regulation (EU) 2015/830

14.2. UN proper shipping name	
None	None
14.3. Transport hazard class(es) None	None
14.4. Packing group	
None	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

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

#11/12

In conformity to Regulation (EU) 2015/830

16.1. Other information

Points modified compared to previous release: 2.2. Label elements, 4.3. Indication of any immediate medical attention and special treatment needed, 11.1. Information on toxicological effects

Description of hazard statements set out in paragraph 3

H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled

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 seg.

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.

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



ANTIBRETT

Issued on 03/05/2018 - Rel. # 5 on 03/05/2018

12 / 12

In conformity to Regulation (EU) 2015/830

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

This msds was made in good faith by AEB 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)

Changes to the previous edition: documental allignment.