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

1.1. Product identifier

Product name : CATALASI Vega
This substance-mixture contains nanoforms (according to Reach Regulation)
Product code: refer to sales department

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

Clarifying Agents
Sectors of use:
Manufacture of food products[SU4]
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
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AEB OCEANIA PTY LTD
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Produced by
AEB SpA
Via Vittorio Arici 104 S. Polo
25134 Brescia

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.

Contains:

Ingredients: activated bentonite, pea vegetable protein, PVPP, silica gel.
Food use, oenological use. Not intended for the final consumer. In accordance with current regulations on the specific matter.

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

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

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Synthetic hydrated amorphous silica CAS No. 112926-00-8: substance containing nanoforms (Reg EC 1907/2006), particle information: section 9 (experimental data)

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
ACTIVED BENTONITE substance for which there are Community workplace exposure limits	>= 25 < 50%			1302-78-9	215-108-5	
Synthetic amorphous silica hydrated (Silica gel) substance for which there are Community workplace exposure limits	> 5 <= 10%				231-545-4	

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation: Ventilate the area. Immediately remove the patient from the contaminated area and keep him or her at rest in a well-ventilated area.
If you feel unwell, consult a doctor. Direct skin contact: Remove shoes and clothing and wash thoroughly with soap and water.
If you feel unwell, consult a doctor. Direct eye contact: Remove any contact lenses, protect the uninjured eye, and immediately flush with plenty of water for at least 10 minutes.
If you feel unwell, consult a doctor. Ingestion: Rinse mouth immediately. Do not give anything to an unconscious person.
If you feel unwell, consult a doctor.

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

If you feel unwell, go to a doctor or emergency room with this document. 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 respiratory protection, a safety helmet, and complete protective clothing. Self-contained breathing apparatus is recommended, especially if working in closed, poorly ventilated areas. Cool containers with water jets.

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.

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 cool, dry place away from direct light and heat. Batch number (BN) and best before (EXP): See barcode.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

==========
Related to contained substances:
ACTIVED BENTONITE:
INHALABLE, DUST

TLV - TWA (Threshold Limit Value - Time Weighted Average) - Eight hours (ppm)/(mg/m³)
Austria: x/10
Belgium: x/10
Denmark: x/10
France: x/4 (1) General remarks: Bold type: Restrictive statutory limit values - Remarks: (1) Inhalable fraction
Germany (AGS): x/10(1)(2)(3) Remarks: (1) Insoluble particulates (2) not applicable for ultra-fine dusts and dusts with specific toxicity (3) the limit value is a general upper limit for technical measures, as long as no specific regulations for toxic or carcinogenic substances are available
Germany (DFG): x/4
Hungary: x/10
Ireland: x/10
Poland: x/10
Singapore: x/10
Spain: x/10
Sweden: x/10
Switzerland: x/10

TLV-STEL Threshold limit value − short-term exposure limit (ppm)/(mg/m³)
Austria: x/20
Denmark: x/20
Germany (AGS): x/20(1)(2)(3) Remarks: (1) Insoluble particulates (2) not applicable for ultra-fine dusts and dusts with specific toxicity (3) the limit value is a general upper limit for technical measures, as long as no specific regulations for toxic or carcinogenic substances are available

RESPIRABLE DUST

TLV - TWA (Threshold Limit Value - Time Weighted Average) - Eight hours (ppm)/(mg/m³)
Austria: x/5
Belgium: x/3
France: x/0,9 Remarks: (1) type: Restrictive statutory limit values
Germany (AGS): x/1,25 (1)(2)(3)(4)(5) Remarks: (1) Insoluble particulates (2) not applicable for ultra-fine dusts and dusts with specific toxicity (3) the limit value is a general upper limit for technical measures, as long as no specific regulations for toxic or carcinogenic substances are available (4) the limit value was derived for dusts with an average density of 2.5 mg/m³ (5) at work areas where all technical and further measures are state of the art but the LV is still not adhered, the old LV can be applied for a transitional period until 31st December 2018 (8 h-LV: 3.0 mg/m³, 15 minutes average value: 6.0 mg/m³)
Germany (DFG): x/0,3 (1) Remarks: (1) For granular, bio-resistant dusts, except ultra-fine particles (2) 15 minutes average value
Hungary: x/6
Ireland: x/4
Spain: x/3
Switzerland: x/3
USA – OSHA: x/5

TLV-STEL Threshold limit value − short-term exposure limit (ppm)/(mg/m³)
Austria: x/10
Germany (DFG): x/2,4 (1)(2) Remarks: (1) For granular, bio-resistant dusts, except ultra-fine particles (2) 15 minutes average value

Synthetic amorphous silica hydrated (Silica gel):
Silica, amorphous

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

Australia: -/2 (1)
Austria: -/4 (1) inhalable aerosol
Belgium: -/10
Canada – Ontario: -/10
Canada - Québec: -/6(1)(2)
Denmark: 0-/ 2 inhalable aerosol
Finland: -/5
Germany (AGS): -/1 (1)
Germany (DFG): -/0,02 (1)
Ireland: (1) -/6 (1)
Latvia: -/1
New Zealand: -/1
People's Republic of China: -/2(1)
Poland: -/10(1)
Singapore: -/10
South Africa minining: -/6 (1)
South Korea: -/10
Switzerland: -/4 (1)
USA - NIOSH: -/6

USA - OSHA: 20 (1)(2)
United Kingdom: :-/6 (1)

Limit value - Short term STEL
(ppm)/(mg/m³)

Australia: -/-
Austria: -/-
Belgium: -/-
Canada – Ontario: -/-
Canada - Québec: -/-
Denmark: 0-/-
Finland: -/-
Germany (AGS): -/8 (1)(2)
Germany (DFG): -/0.16 (1)
Ireland: (1) -/-
Latvia: -/-
New Zealand: -/-
People's Republic of China: -/-
Poland: -/-
Singapore: -/-
South Africa minining: -/-
South Korea: -/-
Switzerland: -/-
USA - NIOSH: -/-
USA - OSHA: -/-
United Kingdom: :-/-

Remarks:

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Austria (1) Inhalable fraction
Canada - Québec (1) Respirable fraction (2) The standard corresponds to dust containing no asbestos and the percentage in crystalline silica is less than 1%.
Germany (AGS): Colloidal amorphous silica including fumed silica and wet-process silica (precipitated silica, silica gel) (1) Inhalable fraction (2) 15 minutes average value
Ireland: (1) Inhalable fraction
New Zeland: (1) Inhalable fraction
Norway: (1) Respirable fraction
People's Republic of China: (1) Inhalable fraction
Poland: (1) Inhalable fraction
South Africa Mining: (1) Inhalable fraction
Switzerland: (1) inhalable aerosol
USA (OSHA) : (1) mppcf (2) mppcf × 35.3 = million particles per cubic meter = particles per c.c.
UK: (1) Inhalable fraction

- Substance: Synthetic amorphous silica hydrated (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 necessary for normal use, unless otherwise specified by the employer and/or by environmental hygiene assessments
(b) Skin protection

(i) Hand protection
Not necessary for normal use, unless otherwise specified by the employer and/or by environmental hygiene assessments.
Rubber and PVC gloves recommended

(ii) Other
Wear normal work clothing.

(c) Respiratory protection
Not necessary for normal use, unless otherwise specified by the employer and/or by environmental hygiene assessments

(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
Physical state	Fine powder	
Colour	White cream	
Odour	odorless	
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	8,5 ± 0,5 (20°C; sol. 5%)	
Kinematic viscosity	not determined as it is considered not relevant for the characterization of the product	

Physical and chemical properties	Value	Determination method
Solubility	in water	
Water solubility	miscible in all proportions	
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	0,40 ± 0,05 (20ºC)	
Relative vapour density	not determined as it is considered not relevant for the characterization of the product	
Particle characteristics	This substance-mixture contains nanoforms (according to REACH Regulation)	

9.2. Other information

Particle characteristics: micron-sized aggregates and agglomerates with an internal structure in the range of 1-100 nm

9.2.1 Information with regard to physical hazard classes

Irrilevant

9.2.2 Other safety characteristics

Irrilevant

SECTION 10. Stability and reactivity

10.1. Reactivity

==========
Related to contained substances:
ACTIVED BENTONITE:
Inert - Non-reactive

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 any dust formation.

10.5. Incompatible materials

No one to report

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) acute toxicity: ACTIVED BENTONITE: Ingestion-rat LD50 (mg/kg/bw 24h): > 2000

Skin contact-LC50 rat/coniglio (mg/kg/bw 24h): n.a.

Inhalation-rat LD50 (mg/l/4h): > 5.27
Synthetic amorphous silica hydrated (Silica gel): Ingestion - LD50 rat (mg/kg/24h bw): >5000
Skin contact - LC50 rat/rabbit (mg/kg/24h bw): >2000
Inhalation - LD50 rat (mg/l/4h): nd
(b) skincorrosion/irritation: ACTIVED BENTONITE: Non-corrosive
Synthetic amorphous silica hydrated (Silica gel): Non-corrosive
ACTIVED BENTONITE: Non-irritating
Synthetic amorphous silica hydrated (Silica gel): Non-irritating
(c) serious eye damage/irritation: ACTIVED BENTONITE: Non-corrosive
Synthetic amorphous silica hydrated (Silica gel): Non-corrosive
ACTIVED BENTONITE: Slightly irritating
Synthetic amorphous silica hydrated (Silica gel): Non-irritating
(d) respiratoryorskinsensitisation: ACTIVED BENTONITE: Non-sensitizing
Synthetic amorphous silica hydrated (Silica gel): Non-sensitizing
(e) germ cell mutagenicity: ACTIVED BENTONITE: Non-mutagenic
Synthetic amorphous silica hydrated (Silica gel): Non-mutagenic
(f) carcinogenicity: ACTIVED BENTONITE: Non-carcinogenic
Synthetic amorphous silica hydrated (Silica gel): Not cacerogeno
(g) eproductivetoxicity: ACTIVED BENTONITE: Non-toxic for reproduction
Synthetic amorphous silica hydrated (Silica gel): Non-toxic for reproduction
(h) specific target organ toxicity (STOT) single exposure: ACTIVED BENTONITE: Non-toxic
Synthetic amorphous silica hydrated (Silica gel): Not classified. Oral NOAEL (rat): > 1000 mg/kg body weight/day
(i) specific target organ toxicity (STOT) repeated exposureACTIVED BENTONITE: Non-toxic
Synthetic amorphous silica hydrated (Silica gel): Not available
(j) aspiration hazard: ACTIVED BENTONITE: There are no dangers for aspiration
Synthetic amorphous silica hydrated (Silica gel): Not available

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 in concentrations >0.1.

SECTION 12. Ecological information

12.1. Toxicity

==========
Related to contained substances:
ACTIVED BENTONITE:
Acute toxicity - fish LC50 (mg / l / 96h): 16000
Acute toxicity - crustaceans EC50 (mg / l / 48h): nd
Acute algae toxicity ErC50 (mg / l / 72-96h):> 100

Synthetic amorphous silica hydrated (Silica gel):
Acute toxicity-fish LL50 (mg/l/96H): > 10000
Acute toxicity-crustaceans EL50 (mg/l/24H): > 10000
Acute algae toxicity ErC50 (mg/l/72-96H): n.a.

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

12.2. Persistence and degradability

==========
Related to contained substances:
ACTIVED BENTONITE:
Not persistent

Synthetic amorphous silica hydrated (Silica gel):
not applicable to inorganic substances

12.3. Bioaccumulative potential

==========
Related to contained substances:
ACTIVED BENTONITE:
Not bioaccumulative

Synthetic amorphous silica hydrated (Silica gel):
Not bioaccumulative

12.4. Mobility in soil

==========
Related to contained substances:
ACTIVED BENTONITE:
Not available

Synthetic amorphous silica hydrated (Silica gel):
Minimally soluble. Migration into soil is not expected.

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

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 in concentrations >0.1

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 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.

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 EC Reg. 1907/2006): not applicable
Substances in Candidate list (art. 59 EC Reg. 1907/2006): the product does not contain SVHC in percentage = a 0.1 %.

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, 1.3. Details of the supplier of the safety data sheet, 2.1. Classification of the substance or mixture, 2.2. Label elements, 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, 7.3. Specific end use(s), 8.1. Control parameters, 8.2. Exposure controls, 9.2. Other information, 10.2. Chemical stability, 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, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.4. Mobility in soil, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 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.

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 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)

Changes to the previous edition: documentation update of supplier data.