

ENDOZYM CAT-0

Issued on 03/06/2024 - Rel. # 5 on 03/06/2024

#1/19

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: ENDOZYM CAT-0 Product code: refer to sales department

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

Enzyme preparations
Sectors of use:
Manufacture of food products[SU4]
Product category:
Technological adjuvant

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

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:

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.

2.1.2 Additional information:

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

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

Precautionary statements:

Prevention

P261 - Avoid breathing vapours/spray.

P284 - In case of inadequate ventilation wear respiratory protection.





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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.

Contains:

Polygalacturonase, arabinanase, pectin lyases, pectin methylesterase.

Ingredients: Potassium chloride, ammomium sulphate, glycerol, polygalacturonase, sucrose, arabinanase, pectin lyases, pectin methylesterase, potassium sorbate, water q.s. to 100.

Food use, oenological use. Not intended for the final consumer. In accordance with current regulations on the specific matter. Only for industrial use.

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, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

The use of this chemical agent implies the obligation of the "risk assessment" by the employer according to the provisions of Legislative Decree April 9, 2008 no. 81 and subsequent amendments. If the results of the risk assessment demonstrate that, in relation to the type, quantity, methods and frequency of exposure, there is only a low risk for the safety and irrelevant for the health of the workers and that the measures referred to in paragraph 1 of Legislative Decree April 9, 2008 no. 81 are sufficient to reduce the risk, the provisions of articles 225, 226, 229, 230 of the same Legislative Decree do not apply

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
potassium chloride substance for which there are Community workplace exposure limits	>= 10 < 25%			7447-40-7	231-211-8	
Glycerol substance for which there are Community workplace exposure limits	>= 3 < 5%			56-81-5	200-289-5	
polygalacturonase	>= 1 < 2,5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; STOT SE 3, H335	3.2.1.15	9032-75-1	232-885-6	



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Substance	Concentration[w/w]	Classification	IUB N°	CAS	EINECS	REACh
Saccharose substance for which there are Community workplace exposure limits	>= 0,1 < 1%			57-50-1	200-334-9	
Arabinanase	>= 0,1 < 1%	Resp. Sens. 1, H334	3.2.1.99	37325-54-5	253-463-8	
pectin lyases	>= 0,1 < 1%	Resp. Sens. 1, H334	4.2.2.10	9033-35-6	232-894-5	
Pectin methylesterase	>= 0,1 < 1%	Resp. Sens. 1, H334	3.1.1.11	9025-98-3	232-807-0	

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).:

Rinse immediately under running water for 10 to 15 minutes, keeping the eyelid open. Remove contact lenses if worn and if they can be easily removed.

Ingestion:

Not dangerous. In case of malaise 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 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.



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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 with earth or sand.

If the product has entered a watercourse, sewers or has contaminated soil or vegetation, notify the 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 (for specifications refer to section 8.2. SDS) Recover the product for reuse, if possible, or for removal. Possibly absorb it with inert materia or sucked it. Prevent it from entering the sewer system.

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

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SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid contact and inhalation of vapors
Handle the product after consulting all other sections of this safety data sheet.
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 its original sealed packaging away from light in a cool dry place free of odors, at a temperature < 20°C. Do not freeze. Batch number (BN) and Best before date (EXP): See Barcode.

7.3. Specific end use(s)

Manufacture of food products:

Store in its original sealed packaging away from light in a cool dry place free of odors, at a temperature < 20°C. Do not freeze. Batch number (BN) and Best before date (EXP): See Barcode.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances: potassium chloride: Limit value - Eight hours Latvia: 5 mg/m³

Glycerol:

Limit value - Eight hours Australia 10 (1) mg/m3 Belgium 10 mg/m3 Canada - Ontario 10 mg/m3

Canada - Ontano 10 mg/m3
Canada - Quebec 10 mg/m3

Finland 20 mg/m3 France 10 mg/m3

Germany (AGS) 200 (1) mg/m3

Germany (DFG) 200 (1) mg/m3 Ireland 10 mg/m3

New Zealand 10 (1) mg/m3

Poland 10 mg/m3 Singapore 10 mg/m3

South Africa Mining 10 ppm

South Korea 10 mg/m3

Spain 10 mg/m3 Switzerland 50 inhalable aerosols mg/m3

USA - OSHA 15 (1) mg/m3

5 (2) mg/m3

United Kingdom 10 mg/m3

Limit value - Short-term Germany (AGS) 400 (1)(2) mg/m3



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Germany (DFG) 400 (1)(2) mg/m3 Switzerland 100 inhalable aerosols mg/m3

Remarks

Australia (1) This value refers to inhalable dust containing no asbestos and < 1% crystalline silica.

Germany (AGS) (1) Inhalable fraction (2) Average value 15 minutes

Germany (DFG) (1) Inhalable fraction (2) Average value 15 minutes

New Zealand (1) The value for inhalable dusts containing no asbestos and less than 1% free silica.

USA - OSHA (1) Inhalable fraction (2) Breathable fraction

Saccharose:

Limit value - Eight hours Australia 10 (1) ppm Belgium 10 ppm Canada - Ontario 10 ppm Canada - Québec 10 ppm France 10 ppm Ireland 10 ppm New Zealand 10 (1) ppm Singapore 10 ppm South Africa 10 ppm South Africa Mining 10 ppm South Korea 10 ppm Spain 10 ppm USA - NIOSH 10 (1) ppm 5 (2) ppm USA - OSHA 15 (1) ppm 5 (2) ppm

Limit value - Short term Ireland 20 (1) mg/m³ South Africa Mining 20 (1) mg/m3 United Kingdom 20 mg/m³

United Kingdom 10 ppm

Remarks

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica. Ireland (1) 15 minutes reference period

New Zealand (1) The value for inhalable dust containing no asbestos and less than 1% free silica.

South Africa Mining (1) 15 minutes average value

USA - NIOSH (1) Total dust (2) Respirable fraction

USA - OSHA (1) Inhalable fraction (2) Respirable fraction

- Substance: potassium chloride

DNEL

Systemic effects Long term Workers inhalation = 1064 (mg/m3) Systemic effects Long term Workers dermal = 303 (mg/kg bw/day) Systemic effects Long term Consumers inhalation = 273 (mg/m3) Systemic effects Long term Consumers dermal = 182 (mg/kg bw/day) Systemic effects Long term Consumers oral = 91 (mg/kg bw/day) Systemic effects Short term Workers inhalation = 5320 (mg/m3) Systemic effects Short term Workers dermal = 910 (mg/kg bw/day)

Systemic effects Short term Consumers inhalation = 1365 (mg/m3)

Systemic effects Short term Consumers dermal = 910 (mg/kg bw/day)

Systemic effects Short term Consumers oral = 455 (mg/kg bw/day)

PNEC



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Sweet water = 0,1 (mg/l) Sea water = 0,1 (mg/l) STP = 10 (mg/l)

- Substance: Glycerol

DNEL

Systemic effects Long term Workers inhalation = 56 (mg/m3)

PNEC

Sweet water = 0.885 (mg/I)

sediment Sweet water = 3,3 (mg/kg/sediment)

Sea water = 0.088 (mg/I)

sediment Sea water = 0,33 (mg/kg/sediment)

ground = 0,141 (mg/kg ground)

- Substance: polygalacturonase

PNEC

Sweet water = 0.0237 (mg/I)

Sea water = 0,0237 (mg/l)

STP = 65 (mg/l)

ground = 0.00376 (mg/kg ground)

- Substance: pectin lyases

PNEC

Sweet water = 0.052 (mg/I)

Sea water = $0.00052 \, (mg/l)$

STP = 65 (mg/l)

ground = 0,001 (mg/kg ground)

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, 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



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Use adequate protective respiratory equipment (EN 14387:2008)

(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	Viscous liquid			
Colour	brune to brown			
Odour	not determined as considered not relevant for the characterization of the product			
Odour threshold	not determined as considered not relevant for the characterization of the product			
Melting point/freezing point	not determined as considered not relevant for the characterization of the product			
Boiling point or initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product			
Flammability	not determined as considered not relevant for the characterization of the product			
Lower and upper explosion limit	not determined as considered not relevant for the characterization of the product			
Flash point	not determined as considered not relevant for the characterization of the product			
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product			
Decomposition temperature	not determined as considered not relevant for the characterization of the product			
рН	4.5 - 6.5			
Kinematic viscosity	not determined as considered not relevant for the characterization of the product			
Solubility	in water			
Water solubility	miscible in all proportions			
Partition coefficient n-octanol/water (log value)	not determined as considered not relevant for the characterization of the product			
Vapour pressure	not determined as considered not relevant for the characterization of the product			
Density and/or relative density	0.950 - 1.300			
Relative vapour density	not determined as considered not relevant for the characterization of the product			
Particle characteristics	not determined as considered not relevant for the characterization of the product			



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9.2. Other information

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:

potassium chloride:

The product is not reactive under normal conditions of use, storage and transport.

Glycerol:

Reacts with: Strong acids. Strong foundations

polygalacturonase:

Non pertinent.

Arabinanase:

Not relevant.

pectin lyases:

The product is non-reactive under normal conditions of use, storage and transport.

Pectin methylesterase:

Not relevant.

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



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10.4. Conditions to avoid

Related to contained substances:
potassium chloride:
None under recommended storage and handling conditions.

Glycerol:
Humidity

polygalacturonase:
None.

Arabinanase:

pectin lyases:

Not available

None under recommended storage and handling conditions.

Pectin methylesterase:

Not available

10.5. Incompatible materials

None in particular.

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: potassium chloride: Ingestion - DL50 rat (mg / kg / 24h pc): 3020

Contact avec la peau - CL50 rat / lapin (mg / kg / 24h pc): n.d.

Inhalation - DL50 rat (mg / I / 4h): n.d.

Glycerol: Ingestion - LD50 rat (mg / kg / 24h bw): not available Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): not available

Inhalation - LD50 rat (mg / I / 4h): not available

polygalacturonase: Ingestion - LD50 rat (mg / kg / 24h bw): nd

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): nd

Inhalation - LD50 rat (mg / I / 4h): nd

Saccharose: Ingestion: LD50 (rat) 29700 mg / Kg Skin contact - LD50 rabbit (mg / kg / 24h bw): na

Inhalation - LD50 rat (mg / I / 4h): na

Arabinanase: Ingestion - LD50 rat (mg / kg / 24h bw): not available



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Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): not available

Inhalation - LD50 rat (mg / I / 4h): not available

pectin lyases: Ingestion - LD50 rat (mg / kg / 24h bw): not available Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): not available

Inhalation - LD50 rat (mg / I / 4h): not available

Pectin methylesterase: Ingestion - LD50 rat (mg / kg / 24h bw): not available

Skin contact - LC50 rat / rabbit (mg / kg / 24h bw): not available

Inhalation - LD50 rat (mg / I / 4h): not available

(b) skincorrosion/irritation: potassium chloride: Unclassified

Glycerol: Not classified

polygalacturonase: Unavailable Saccharose: Not corrosive Arabinanase: Not corrosive pectin lyases: Not corrosive

Pectin methylesterase: Not corrosive potassium chloride: Unclassified

Glycerol: Not classified polygalacturonase: Irritating

Saccharose: May cause skin irritation

Arabinanase: Not irritating pectin lyases: Not irritating

Pectin methylesterase: Not irritating

(c) serious eye damage/irritation: potassium chloride: Unclassified

Glycerol: Not classified

polygalacturonase: Unavailable Saccharose: Not corrosive Arabinanase: Not corrosive pectin lyases: Not corrosive

Pectin methylesterase: Not corrosive potassium chloride: Unclassified

Glycerol: Not classified polygalacturonase: Irritating

Saccharose: May cause mild irritation

Arabinanase: Not irritating pectin lyases: Not irritating

Pectin methylesterase: Not irritating

(d) respiratoryorskinsensitisation: The product, if inhaled, can cause sensitization.

potassium chloride: Unclassified

Glycerol: Not classified

polygalacturonase: May cause sensitization by inhalation

Saccharose: Not sensitizing

Arabinanase: May cause sensitization by inhalation.

pectin lyases: Sensitizer: May cause sensitization by inhalation. Pectin methylesterase: May cause sensitization by inhalation.

(e) germ cell mutagenicity: potassium chloride: Unclassified

Glycerol: Not classified

polygalacturonase: Unavailable Saccharose: Not mutagenic Arabinanase: Not available pectin lyases: Unavailable

Pectin methylesterase: Unavailable

(f) carcinogenicity: potassium chloride: Unclassified

Glycerol: Not classified

polygalacturonase: Unavailable



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Saccharose: Not carcinogenic Arabinanase: Not available pectin lyases: Unavailable

Pectin methylesterase: Unavailable

(g) eproductivetoxicity: potassium chloride: Unclassified

Glycerol: Not classified - Does not affect fertility. Non-toxic for development.

polygalacturonase: Unavailable

Saccharose: Non toxic Arabinanase: Not available pectin lyases: Unavailable

Pectin methylesterase: Unavailable

(h) specific target organ toxicity (STOT) single exposure: potassium chloride: Unclassified

Glycerol: Not classified Ingestion may cause nausea, vomiting and avoidance.

polygalacturonase: Unavailable

Saccharose: Non toxic Arabinanase: Not available pectin lyases: Unavailable

Pectin methylesterase: Unavailable

(i) specific target organ toxicity (STOT) repeated exposurepotassium chloride: Unclassified

Glycerol: Not classified

polygalacturonase: Unavailable

Saccharose: Non toxic

Arabinanase: Once sensitized, a severe allergic reaction may occur upon subsequent exposure to very low levels. pectin lyases: Once sensitized, a severe allergic reaction can occur upon subsequent exposure to very low levels. Pectin methylesterase: Once sensitized, a severe allergic reaction can occur upon subsequent exposure to very low

levels.

(j) aspiration hazard: potassium chloride: Unclassified

Glycerol: Inhalation: May cause irritation to the respiratory tract and other mucous membranes.

polygalacturonase: Unavailable

Saccharose: May cause respiratory tract irritation

Arabinanase: Not available pectin lyases: Unavailable

Pectin methylesterase: Unavailable

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

SECTION 12. Ecological information

12.1. Toxicity

===========

Related to contained substances:

potassium chloride:

Acute toxicity - fish LC50 (mg / I / 96h): 880 (Pimephales promelas; (OECD method 203))



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Acute toxicity - crustaceans EC50 (mg / I / 48h): 440 (Daphniamagna; (OECD method 202))
Acute toxicity algae EC50 (mg / I / 72h):> 100 (Desmodesmus subspicatus; (method OECD 201))
Chronic toxicity - fish NOEC (mg / I): nd Chronic toxicity - crustaceans NOEC (mg / I): nd
Chronic toxicity algae NOEC (mg / I / 72h):> 100 (Desmodesmus subspicatus; (method OECD 201))
Acute toxicity M-factor = 1
Chronic toxicity M-factor = 1

Glycerol:

Acute aquatic toxicity: Not classified Chronic aquatic toxicity: Not classified LC50-96 h - fish 54000 mg / I Oncorhynchus mykiss EC50-48 h - Daphnia 1955 mg / I EC50-72 h - algae 3200 mg / I Entosiphon sulcatum Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1

polygalacturonase:

Acute toxicity - fish LC50 (mg / I / 96h): n.a.
Acute toxicity - crustaceans EC50 (mg / I / 48h): n.a.
Acute toxicity algae ErC50 (mg / I / 72-96h): n.a
Chronic toxicity - fish NOEC (mg / I): n.a
Chronic toxicity - crustaceans NOEC (mg / I): n.a
Chronic toxicity algae NOEC (mg / I): n.a
Acute toxicity M-factor = 1
Chronic toxicity M-factor = 1

Arabinanase:

Acute toxicity - fish LC50 (mg / I / 96h): not available Acute toxicity - crustaceans EC50 (mg / I / 48h): not available Acute toxicity algae ErC50 (mg / I / 72-96h): not available Chronic toxicity - fish NOEC (mg / I): not available Chronic toxicity - shellfish NOEC (mg / I): not available Chronic toxicity algae NOEC (mg / I): not available Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1

pectin lyases:

Acute toxicity - fish LC50 (mg / I / 96h): not available Acute toxicity - crustaceans EC50 (mg/l/48h) [1]: 2000 mg/l Acute toxicity - crustaceans EC50 (mg/l/48h) [2]: 212 mg/l Acute toxicity algae ErC50 (mg / I / 72-96h): not available Chronic toxicity - fish NOEC (mg / I): not available Chronic toxicity - shellfish NOEC (mg / I): not available Chronic toxicity algae NOEC (mg / I): not available Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1

Pectin methylesterase:

Acute toxicity - fish LC50 (mg/l/96h): not available Acute toxicity - crustaceans EC50 (mg/l/48h): not available Acute algae toxicity ErC50 (mg/l/72-96h): not available Chronic toxicity - fish NOEC (mg/l): not available Chronic toxicity - crustaceans NOEC (mg/l): not available Chronic algae toxicity NOEC (mg/l): not available



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Acute toxicity M-factor = 1 Chronic toxicity M-factor = 1

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

12.2. Persistence and degradability

Related to contained substances: potassium chloride: It does not apply to inorganic substances.

Glycerol:

Persistence and degradability Readily biodegradable. COD value 1.16 g O2 / g substance ThOD (gO2 / g) 1.217 g O2 / g substance BOD (% of ThOD) 71% DTO

polygalacturonase: Unavailable

Arabinanase: Not available

pectin lyases: Readiily biodegradable

rteadily blodegradable

Pectin methylesterase: not available

12.3. Bioaccumulative potential

Related to contained substances: potassium chloride: It does not apply to inorganic substances.

Glycerol:

Log P octanol / water at 20 ° C -1.76 - 2.6 Kow log -1.76 Bioaccumulative potential Not expected to bioaccumulate.

polygalacturonase: Unavailable

Arabinanase: Not available

pectin lyases: not available

Pectin methylesterase: not available



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12.4. Mobility in soil

Related to contained substances:
potassium chloride:
It must have been very mobile in the ground.

Glycerol:
ground Product that penetrates easily into the ground.

polygalacturonase:
Unavailable

Arabinanase:
Not available

pectin lyases:
not available

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 interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

12.7. Other adverse effects

No adverse effects

Pectin methylesterase:

not available

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

AEB

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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

Regulation (EC) 1333/2008; see point 2.2

Regulation (EC) 1332/2008; see point 2.2

REGULATION (EU) No 1357/2014 - waste: HP13 - Sensitising



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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 from previous revision:- 2.2. Label elements - 3.2 Composition/information on ingredients - Mixtures - 7. Handling and storage- 8.2 Exposure controls- 9.1 Information on basic physical and chemical properties - 10. Stability and reactivity- 11.1

Information on hazard classes as defined in Regulation (EC) No 1272/2008 -12. Ecological information - 15- Regulatory information - 16. Other information

Description of hazard statements set out in paragraph 3

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

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

H335 = May cause respiratory irritation.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

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



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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

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*** this tab annuls and replaces any previous edition.

Changes to the previous edition: general update.