

SECTION 1: Identification of the substance/mixture and of the company/undertaking:

1.1 Product identifier:

Ez Liz

UFI: EPN7-0251-300V-K462

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

/

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

MONDO SA/NV

Chaussée de Tirlemont, 75 D6

5030 Gembloux

Phone: 081830083 – E-mail: mondo@bechems.eu – Website: <http://www.mondo-spechim.eu/>

1.4 Emergency telephone number:

+32 70 245 245

SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008

H319 Eye Irrit. 2 H412 Aquatic Chronic 3 EUH208

2.2 Label elements:

Pictograms



Signal word

Warning

Hazard statements

H319 Eye Irrit. 2:	Causes serious eye irritation.
H412 Aquatic Chronic 3:	Harmful to aquatic life with long lasting effects.
EUH208:	Contains (Beta-glucanase (endo-1,3(4)-); amylase; cellulase; subtilisin). May produce an allergic reaction.

Precautionary statements

P264:	Wash hands thoroughly after handling.
P273:	Avoid release to the environment.
P280:	Wear protective gloves, protective clothing, eye protection, face protection.
P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313:	If eye irritation persists: Get medical advice/attention.
P501:	Dispose of contents/container in accordance with local/regional/national/international regulations.

Contains

None

2.3 Other hazards:

None

SECTION 3: Composition/information on ingredients:

3.2 Mixtures:

Sodium carbonate	≤ 20 %	CAS number: 497-19-8 EINECS: 207-838-8 REACH Registration number: 01-2119485498-19 CLP Classification: H319 Eye Irrit. 2
Copper sulphate	≤ 1 %	CAS number: 7758-98-7 EINECS: 231-847-6 REACH Registration number: 01-2119520566-40 CLP Classification: H302 Acute tox. 4 H315 Skin Irrit. 2 H318 Eye Dam. 1 H400 Aquatic Acute 1 H410 Aquatic Chronic 1 Additional data: ATE (H302) = 481 mg/kg ; M (H400) = 10
Beta-glucanase (endo-1,3(4)-)	≤ 0.5 %	CAS number: 62213-14-3 EINECS: 263-462-4 REACH Registration number: / CLP Classification: H334 Resp. Sens. 1

amylase	≤ 0.3 %	CAS number: 9000-90-2 EINECS: 232-565-6 REACH Registration number: 01-2119938627-26 CLP Classification: H334 Resp. Sens. 1
cellulase	≤ 0.3 %	CAS number: 9012-54-8 EINECS: 232-734-4 REACH Registration number: 01-2119949289-21 CLP Classification: H334 Resp. Sens. 1
subtilisin	≤ 0.3 %	CAS number: 9014-01-1 EINECS: 232-752-2 REACH Registration number: 01-2119480434-38 CLP Classification: H302 Acute tox. 4 H315 Skin Irrit. 2 H318 Eye Dam. 1 H334 Resp. Sens. 1 H335 STOT SE 3 H400 Aquatic Acute 1

For the full text of the H phrases mentioned in this section, see section 16.

SECTION 4: First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

Skin contact:	Remove contaminated clothing, rinse skin with plenty of water, if necessary seek medical attention.
Eye contact:	Thoroughly rinse with water (contact lenses to be removed if this is easily done) then take to physician.
Ingestion:	Rinse mouth, do not induce vomiting, take to hospital immediately.
Inhalation:	Let sit upright, fresh air, rest and take to hospital.

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

Skin contact:	None
Eye contact:	Redness
Ingestion:	Diarrhoea, headache, abdominal cramps, sleepiness, vomiting
Inhalation:	None

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

None

SECTION 5: Firefighting measures:

5.1 Extinguishing media:

CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

None

5.3 Advice for firefighters:

Extinguishing agents to be avoided: None

SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

Do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible, remove by using absorbent material.

6.4 Reference to other sections:

For further information, check sections 8 & 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

Keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

/



SECTION 8: Exposure controls/personal protection:


8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the workplace exposure limit values are known

cellulase 1 mg/m³

8.2 Exposure controls:

Inhalation protection:	Respiratory protection is not required. Use ABEK type gas masks in case of irritating exposure. If necessary, use with sufficient exhaust ventilation.	
Skin protection:	Handling with nitril-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,35 mm. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
Eye protection:	Keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	

Other protection:	Wear impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	
Environmental controls:	Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions. For further information, check sections 6 and 13.	
Engineering controls:	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Adequate ventilation should be provided so that exposure limits are not exceeded. For further information, check section 7.	

SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Appearance/20°C:	Solid
Colour:	brown
Odour:	characteristic
Melting point/melting range:	/
Boiling point/Boiling range:	100 °C – 100 °C
Flammability (solid, gas):	Not applicable
Lower flammability or explosive limit, (Vol %):	/
Upper flammability or explosive limit, (Vol %):	/
Flash point:	/
Auto-ignition temperature:	/
Decomposition temperature:	/
pH:	/
pH 1% diluted in water:	/
Kinematic viscosity, 40°C:	/
Solubility in water:	Not soluble
Partition coefficient: n-octanol/water:	Not applicable
Vapour pressure/20°C,:	/
Relative density, 20°C:	/
Vapour density:	Not applicable
Particle characteristics:	/

9.2 Other information:

Dynamic viscosity, 20°C:	/
Sustained combustion test:	/
Evaporation rate (n-BuAc = 1):	0.300
Volatile organic component (VOC):	/
Volatile organic component (VOC):	/

SECTION 10: Stability and reactivity:

10.1 Reactivity:

Stable under normal conditions.

10.2 Chemical stability:

Extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

None

10.4 Conditions to avoid:

Protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

None

10.6 Hazardous decomposition products:

Under recommended usage conditions, hazardous decomposition products are not expected.

SECTION 11: Toxicological information:

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

a) acute toxicity:

Not classified according to the CLP calculation method

Calculated acute toxicity, ATE oral: > 2,000 mg/kg

Calculated acute toxicity, ATE dermal: > 2,000 mg/kg

Sodium carbonate	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Copper sulphate	LD50 oral, rat: 481 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Beta-glucanase (endo-1,3(4)-)	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
amylase	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
cellulase	LD50 oral, rat: ≥ 5,000 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
subtilisin	LD50 oral, rat: 1,800 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l

b) skin corrosion/irritation:

Not classified according to the CLP calculation method

c) serious eye damage/irritation:

H319 Eye Irrit. 2: Causes serious eye irritation.

d) respiratory or skin sensitisation:

Not classified according to the CLP calculation method

e) germ cell mutagenicity:

Not classified according to the CLP calculation method

f) carcinogenicity:

Not classified according to the CLP calculation method

g) reproductive toxicity:

Not classified according to the CLP calculation method

h) STOT-single exposure:

Not classified according to the CLP calculation method

i) STOT-repeated exposure:

Not classified according to the CLP calculation method

j) aspiration hazard:

Not classified according to the CLP calculation method

11.2 Information on other hazards:

No additional data available

SECTION 12: Ecological information:

12.1 Toxicity:

Sodium carbonate	LC50 (Fish): EC50 (Daphnia):	300 mg/L (96h) 200 - 227 mg/L (48h)
amylase	LC50 (Fish): EC50 (Daphnia): EC50 (Algae):	>100 mg/l (96h) >100 mg/l (48h) >100 mg/l (72h)
subtilisin	LC50 (Fish): EC50 (Daphnia): NOEC (Algae):	8,2 mg/l, 96h (Oncorhynchus mykiss) EC0 = 0,17 mg/l 0,041 mg (72h) (Pseudokirchneriella subcapitata)

12.2 Persistence and degradability:

No additional data available

12.3 Bioaccumulative potential:

No additional data available

12.4 Mobility in soil:

Water hazard class, WGK (AwSV): 2
Solubility in water: Not soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Endocrine disrupting properties:

No additional data available

12.7 Other adverse effects:

No additional data available

SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

The product may be discharged in the indicated percentages of utilization, provided it is neutralised to pH 7. Possible restrictive regulations by local authority should always be adhered to.

SECTION 14: Transport information:

14.1 UN number or ID number:

Not applicable

14.2 UN proper shipping name:

ADR, IMDG, ICAO/IATA not applicable

14.3 Transport hazard class(es):

Class(es): Not applicable
Identification number of the hazard: Not applicable

14.4 Packing group:

Not applicable

14.5 Environmental hazards:

Not dangerous to the environment

14.6 Special precautions for user:

Hazard characteristics: Not applicable
Additional guidance: Not applicable

14.7 Maritime transport in bulk according to IMO instruments:

Not applicable

SECTION 15: Regulatory information:

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Water hazard class, WGK (AwsV):	2
Volatile organic component (VOC):	/
Volatile organic component (VOC):	/
Composition by regulation (EC) 648/2004:	Enzymes < 5%

15.2 Chemical Safety Assessment:

No data available

SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:

ADR:	The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE:	Acute Toxicity Estimate
BCF:	Bioconcentration factor
CAS:	Chemical Abstracts Service
CLP:	Classification, Labelling and Packaging of chemicals
EINECS:	European INventory of Existing commercial Chemical Substances
LC50:	median Lethal Concentration for 50% of subjects
LD50:	median Lethal Dose for 50% of subjects
Nr.:	Number
PTB:	Persistent, Toxic, Bioaccumulative
STOT:	Specific Target Organ Toxicity
UFI:	Unique Formula Identifier
vPvB:	very Persistent and very Bioaccumulative substances
WGK:	Water hazard class
WGK 1:	Slightly hazardous for water
WGK 2:	Hazardous for water
WGK 3:	Extremely hazardous for water

Legend to the H Phrases used in the safety data sheet

EUH208 Contains (Beta-glucanase (endo-1,3(4)-); amylase; cellulase; subtilisin). May produce an allergic reaction. H302 Acute tox. 4: Harmful if swallowed. H315 Skin Irrit. 2: Causes skin irritation. H318 Eye Dam. 1: Causes serious eye damage. H319 Eye Irrit. 2: Causes serious eye irritation. H334 Resp. Sens. 1: May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 STOT SE 3: May cause respiratory irritation. H400 Aquatic Acute 1: Very toxic to aquatic life. H400 Aquatic Acute 1: Very toxic to aquatic life. H410 Aquatic Chronic 1: Very toxic to aquatic life with long lasting effects. H412 Aquatic Chronic 3: Harmful to aquatic life with long lasting effects.

CLP Calculation method

Calculation method

Reason of revision, changes of following items

None

SDS reference number

ECM-107489,00

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2020/878. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.