This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

CZ0050 - Carbohydrate Binding Module 62A, *Clostridium thermocellum*

Date of	compilation: 23/06/202	0 Revised: 12/10/2023 Version: 2 (Replaced 1)
SEC	TION 1: IDENTIFICA	TION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier:	CZ0050 - Carbohydrate Binding Module 62A, Clostridium thermocellum
		Glycerol
	CAS:	56-81-5
	EC:	200-289-5
	Index:	Non-applicable
	REACH:	01-2119471987-18-XXXX
	Other means of ide	ntification:
	Non-applicable	
1.2	Relevant identified	uses of the substance or mixture and uses advised against:
	Relevant uses: Labora	atory. For professional users only.
	Uses advised against	: All uses not specified in this section or in section 7.3
1.3	Details of the supp	lier of the safety data sheet:
	NZYTech Estrada do Paco do Lu 1649-038 Lisboa - Lis info@nzytech.com www.nzytech.com	umiar Campus do Lumiar - Edif. E, r/c sboa - Portugal
1.4	Emergency telepho	one number: Contact Local Poison Information Center or Local Emergency Number
SEC	TION 2: HAZARDS I	DENTIFICATION **
2.1	Classification of the	e substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Eye Irrit. 2: Eye irritation, Category 2, H319 Repr. 1B: Reproductive toxicity, Category 1B, H360D Skin Irrit. 2: Skin irritation, Category 2, H315

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Labelling of packages where the contents do not exceed 125 ml:

Danger



Hazard statements:

Repr. 1B: H360D - May damage the unborn child.

Precautionary statements:

P201: Obtain special instructions before use.

P280: Wear protective gloves/face protection/protective clothing/respiratory protection/protective footwear.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

Imidazole (CAS: 288-32-4)

Additional Labelling:

Restricted to professional users

2.3 Other hazards:

** Changes with regards to the previous version

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SECTION 2: HAZARDS IDENTIFICATION ** (continued)

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

Revised: 12/10/2023

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

	Identification	Chemical name/Classification			
CAS:	288-32-4	Imidazole ⁽¹⁾		Self-classified	
EC: Index: REACH:	206-019-2 Non-applicable 01-2119485825-24- XXXX	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Repr. 1B: H360D; Skin Corr. 1C: H314 - Danger	(I) (I) (I) (I) (I) (I) (I) (I) (I) (I)	1 - <2,5 %

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

3.2 Mixture:

Non-applicable

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acu	te toxicity	Genus
Imidazole	LD50 oral	500 mg/kg (ATEi)	
CAS: 288-32-4	LD50 dermal	Non-applicable	
EC: 206-019-2	LC50 inhalation	Non-applicable	

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eve contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

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SECTION 4: FIRST AID MEASURES (continued)

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 **Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

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e of	compilation: 23/06/2020	Revised: 12/10/20	23 Ve	ersion: 2 (Replace	d 1)		
SEC1	FION 7: HANDLING AND	STORAGE (continue	ed)				
	Product is non-flammal to avoid the generatior conditions and materia C Technical recommenda	n of electrostatic charg Is that should be avoid	ges that can a ded.	ffect flammable p			
	PREGNANT WOMEN SH necessary safety condi equipment, especially of drink during the proces D Technical recommendat	tions (emergency shown on the hands and face of ss, washing hands afte	wers and eyew (See section 8 erwards with s	wash stations in o). Limit manual tr	close proximity), ransfers to small	using personal	protection
	It is recommended to h	ave absorbent materia	I available at o	close proximity to	the product (Se	e subsection 6.3	3)
7.2	Conditions for safe stor	age, including any ir	ncompatibiliti	ies:			
	A Technical measures for	storage					
	Store in a cool, dry, we	- Il-ventilated location					
	B General conditions for						
	Avoid sources of heat,	2	rity and conta	ct with food For	additional inform	ation see subco	action 10 5
		המנומנוטה, אמנול פופלנחנ	ary and contd				
7.3	Specific end use(s):		_				
	Except for the instructions product.	already specified it is r	not necessary	to provide any sp	ecial recomment	dation regarding	g the uses of this
SECT 8.1	TION 8: EXPOSURE CON Control parameters: Substances whose occupat				kplace (Europea	n OEL, not cour	ntry-specific
	Control parameters:	ional exposure limits h	ave to be mor	nitored in the wor			ntry-specific
	Control parameters: Substances whose occupat legislation):	ional exposure limits h	ave to be mor	nitored in the wor			ntry-specific
	Control parameters: Substances whose occupat legislation): There are no applicable occ	ional exposure limits h	ave to be mor	nitored in the wor			ntry-specific g exposure
	Control parameters: Substances whose occupat legislation): There are no applicable occ	ional exposure limits h cupational exposure lin	ave to be mor	nitored in the wor	ed in the product		
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole	ional exposure limits h cupational exposure lin	nave to be mor nits for the sul Oral	nitored in the wor bstances containe Short Systemic Non-applicable	ed in the product exposure Local Non-applicable	Lon Systemic Non-applicable	g exposure Local Non-applicable
_	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4	ional exposure limits h cupational exposure lin	ave to be mor nits for the sul Oral Dermal	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Lon Systemic Non-applicable 1,5 mg/kg	g exposure Local Non-applicable Non-applicable
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2	ional exposure limits h cupational exposure lin	nave to be mor nits for the sul Oral	nitored in the wor bstances containe Short Systemic Non-applicable	ed in the product exposure Local Non-applicable	Lon Systemic Non-applicable	g exposure Local Non-applicable
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population	ional exposure limits h cupational exposure lin	ave to be mor nits for the sul Oral Dermal	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Lon Systemic Non-applicable 1,5 mg/kg	g exposure Local Non-applicable Non-applicable
	Control parameters: Substances whose occupatilegislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable	ional exposure limits h cupational exposure lin	ave to be mor nits for the sul Oral Dermal	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Lon Systemic Non-applicable 1,5 mg/kg	g exposure Local Non-applicable Non-applicable
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population	ional exposure limits h cupational exposure lin	ave to be mor nits for the sul Oral Dermal	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Lon Systemic Non-applicable 1,5 mg/kg	g exposure Local Non-applicable Non-applicable
	Control parameters: Substances whose occupatilegislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable	ional exposure limits h cupational exposure lin ation	ave to be mor nits for the sul Oral Dermal	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Lon Systemic Non-applicable 1,5 mg/kg	g exposure Local Non-applicable Non-applicable
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC:	ional exposure limits h cupational exposure lin ation	ave to be mor nits for the sul Oral Dermal	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m ³	g exposure Local Non-applicable Non-applicable
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identifica Imidazole CAS: 288-32-4	ional exposure limits h cupational exposure lin ation	Oral Oral Dermal Inhalation STP Soil	hitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg	ed in the product exposure Local Non-applicable Non-applicable Fresh water Marine water	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m ³	g exposure Local Non-applicable Non-applicable Non-applicable
	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identifica Imidazole	ional exposure limits h cupational exposure lin ation	Oral Oral Dermal Inhalation STP Soil Intermittent	hitored in the wor bostances containe Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg 1,3 mg/L	ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Fresh water Sediment (Fresh	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m ³	g exposure Local Non-applicable Non-applicable Non-applicable 0,013 mg/L 0,013 mg/L 0,013 mg/L
8.1	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identifica Imidazole CAS: 288-32-4 EC: 206-019-2	ional exposure limits h cupational exposure lin ation	Oral Oral Dermal Inhalation STP Soil	hitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg	ed in the product exposure Local Non-applicable Non-applicable Fresh water Marine water	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m ³	g exposure Local Non-applicable Non-applicable Non-applicable
_	Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identifica Imidazole CAS: 288-32-4	ional exposure limits h cupational exposure lin ation	Oral Dermal Inhalation STP Soil Intermittent Oral	hitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg 1,3 mg/L Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Fresh water Sediment (Fresh	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m ³	g exposure Local Non-applicable Non-applicable Non-applicable 0,013 mg/L 0,013 mg/L 0,013 mg/L

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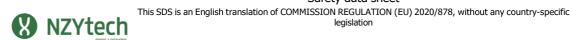
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TION	8: EXPOSURE	CONTROLS/PERSO	NAL PROTECTIO	ON (continued)		
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2002+A1:2010	C	place when there is a taste or smell of the ontaminant inside the face mask. If the contaminant comes with warnings it is commended to use isolation equipment.
C	Specific protection	n for the hands				
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory hand protection	Chemical protective glov (Material: PVC, Breakthrou time: > 480 min, Thicknes 0.7 mm)	gh 🚺 🛑	EN ISO 21420:2020	Repl	ace the gloves at any sign of deterioratic
D	Eye and face prot	ection	I			
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory face protection	Face shield	CATI	EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018		a daily and disinfect periodically according nanufacturer's instructions. Use if there risk of splashing.
E	Body protection					
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory complete body protection	Disposable clothing for protection against chemic risks		EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982- 1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994		r professional use only. Clean periodicall ording to the manufacturer's instructions
	Mandatory foot protection	Safety footwear for protection against chemic risk		EN ISO 20345:2011 EN 13832-1:2019	R	eplace boots at any sign of deterioration.
F	Additional emerge	ency measures				
	Emergency mea	asure	Standards	Emergency meas	ure	Standards
	Emergency sho		ANSI Z358-1 L:2011, ISO 3864-4:20	11 Eyewash station	าร	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
En	vironmental exp	osure controls:				
In a spil	accordance with th lage of both the p	ne community legislation product and its contain		on of the environment it i information see subsect		nmended to avoid environmental .D
	atile organic co	-				
	-	ive 2010/75/EU, this p		owing characteristics:		
	V.O.C. (Supply):		% weight			
	V.O.C. density at		kg/m³ (0 g/L)			
	Average carbon r	number: No	on-applicable			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

*Not relevant due to the nature of the product, not providing information property of its hazards.



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CTION 9: PHYSICAL AND CHEMICAL	
For complete information see the proc	uct datasheet.
Appearance:	
Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Non-applicable *
Volatility:	
Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	1110,8 kg/m ³
Relative density at 20 °C:	1,111
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	7,2
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20	°C: Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	480 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Particle characteristics:	
Median equivalent diameter:	Non-applicable
2 Other information:	
Information with regard to physic	al hazard classes:
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of components: Other safety characteristics:	flammable Non-applicable *
Surface tension at 20 °C;	Non-applicable *
	not providing information property of its hazards.

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Date of compilation: 23/06/2020 Revised: 12/10/2023 Version: 2 (Replaced 1) SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued) Refraction index: Non-applicable * *Not relevant due to the nature of the product, not providing information property of its hazards. SECTION 10: STABILITY AND REACTIVITY 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
 - IARC: Non-applicable

Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Reproductive toxicity: May damage the unborn child.

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SECT	ION 11: TOXICOLOGICAL INFORMATION (continued)	• •			
	 E- Sensitizing effects: Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3. Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3. Specific target organ toxicity (STOT) - single exposure: 				
	Based on available data, the classification criteria are not met, as it do this effect. For more information see section 3.G- Specific target organ toxicity (STOT)-repeated exposure:	es not contain subsi	ances classified as haz	ardous for	
	 Specific target organ toxicity (STOT)-repeated exposure: Based on it does not contain substances classified as hazardous for this effect. Skin: Based on available data, the classification criteria are not met hazardous for this effect. For more information see section 3. H- Aspiration hazard: 	For more informati	on see section 3.		
	Based on available data, the classification criteria are not met, as it do this effect. For more information see section 3. Other information:	es not contain subsi	ances classified as haze	ardous for	
	Non-applicable				
	Specific toxicology information on the substances:	·			
	Identification		te toxicity	Genus	
	Imidazole	LD50 oral	500 mg/kg (ATEi)		
	CAS: 288-32-4 EC: 206-019-2	LD50 dermal LC50 inhalation	>2000 mg/kg >5 mg/L		
			2.3 Mu/L		
11.2	Information on other hazards:		25 Mg/L		
11.2			>3 mg/∟		
11.2	Endocrine disrupting properties		>5 IIIG/L		
11.2			25 mg/L		
11.2	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria. Other information		25 mg/L		
11.2	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria.		23 mg/L		
	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable		23 mg/L		
SECT	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION				
SECT The ex Based	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not cont	oduct itself is not av	railable	this effect.	
SECT The ex Based For mo	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro-	oduct itself is not av	railable	this effect.	
SECT The ex Based For mo	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not cont pro- information see section 3.	oduct itself is not av	railable	this effect.	
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Revised: 12/10/2023

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation NZYtech

CZ0050 - Carbohydrate Binding Module 62A, Clostridium thermocellum

Date of compilation: 23/06/2020

Revised: 12/10/2023

Version: 2 (Replaced 1)

13.1 Waste treatment methods:

SECTION 13: DISPOSAL CONSIDERATIONS

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP10 Toxic for reproduction

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:

	UN number or ID number: UN proper shipping name:	Non-applicable Non-applicable
14.3		Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable
Transpo	t of dangerous goods by sea:	
With rega	rd to IMDG 40-20:	
14.1	UN number or ID number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
	Packing group:	Non-applicable
14.5	Marine pollutant:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable
Transpo	rt of dangerous goods by air:	

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legislation

CZ0050 - Carbohydrate Binding Module 62A, Clostridium thermocellum

Date of compilation:	23/06/2020 Revised: 12/	10/2023	Version: 2 (Replaced 1)
SECTION 14: T	RANSPORT INFORMATION (continued)	
With rega	ard to IATA/ICAO 2023:		
14.1	UN number or ID number:	Non-applicable	
14.2	UN proper shipping name:	Non-applicable	
14.3	Transport hazard class(es):	Non-applicable	
	Labels:	Non-applicable	
14.4	Packing group:	Non-applicable	
14.5	Environmental hazards:	No	
14.6	Special precautions for user		
	Physico-Chemical properties:	see section 9	
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable	

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Product classified hazardous under the CMR. Sale and distribution to the general public is prohibited. Due to its CMR category, it is essential to apply the specific measures for workplace hazard prevention covered in articles 4 and 5 of the 2004/37/EC Directive and later modifications.

Shall not be used in:

-ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtravs.

-tricks and jokes,

-games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION **

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

** Changes with regards to the previous version

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CZ0050 - Carbohydrate Binding Module 62A, Clostridium thermocellum

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Date of compilation: 23/06/2020	Revised: 12/10/2023	Version: 2 (Replaced 1)	
SECTION 16: OTHER INFORM	ATION ** (continued)		
COMMISSION REGULATION (EU) 2020/878 CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16): · Hazard statements			
Texts of the legislative phrases mentioned in section 2:			
H315: Causes skin irritation.			
H360D: May damage the unborn child.			
	H319: Causes serious eye irritation.		
Texts of the legislative phrases mentioned in section 3:			
The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3			
CLP Regulation (EC) No 1272/2008:			
Acute Tox. 4: H302 - Harmful if swallowed.			
Eye Dam. 1: H318 - Causes	Eye Dam. 1: H318 - Causes serious eye damage.		
	Repr. 1B: H360D - May damage the unborn child.		
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.			
Advice related to training:			
Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.			
Principal bibliographical sources:			
http://echa.europa.eu			
http://eur-lex.europa.eu			
Abbreviations and acron	yms:		
ADR: European agreement concerning the international carriage of dangerous goods by road			
IMDG: International maritime dangerous goods code			
	IATA: International Air Transport Association		
ICAO: International Civil Av	ICAO: International Civil Aviation Organisation		
COD: Chemical Oxygen Demand			
	BOD5: 5day biochemical oxygen demand		
BCF: Bioconcentration facto			
LD50: Lethal Dose 50			
LC50: Lethal Concentration	EC50: Effective concentration 50 EC50: Effective concentration 50		
ECSU: Effective concentration SU LogPOW: Octanolwater partition coefficient			
Koc: Partition coefficient of organic carbon			
UFI: unique formula identifier			
IARC: International Agency for Research on Cancer			

** Changes with regards to the previous version

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.