8 NZYtech

# CZ0447 - Cellulase 9Q, Clostridium cellulolyticum

Date of	compilation: 23/06/	2020 Revised: 12/10/2023 Version: 2 (Replaced 1)				
SEC	TION 1: IDENTIF	ICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING				
1.1	Product identifi	er: CZ0447 - Cellulase 9Q, <i>Clostridium cellulolyticum</i>				
		Glycerol				
	CAS:	56-81-5				
	EC:	200-289-5				
	Index:	Non-applicable				
	REACH:	01-2119471987-18-XXXX				
	Other means of	identification:				
	Non-applicable					
1.2	Relevant identif	ied uses of the substance or mixture and uses advised against:				
	Relevant uses: La	boratory. For professional users only.				
	Uses advised agai	nst: All uses not specified in this section or in section 7.3				
1.3	Details of the su	Ipplier of the safety data sheet:				
	NZYTech Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c 1649-038 Lisboa - Lisboa - Portugal info@nzytech.com www.nzytech.com					
1.4	Emergency tele	phone number: Contact Local Poison Information Center or Local Emergency Number				
SEC	TION 2: HAZARD	S IDENTIFICATION **				
2.1	<b>Classification of</b>	the substance or mixture:				
	CLP Regulation	(EC) No 1272/2008:				
	Classification of t	nis product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.				
	Eye Irrit. 2: Eye ir	ritation, Category 2, H319				

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.

\*\* 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 <sup>(1)</sup>		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	                   	1 - <2,5 %	

<sup>(1)</sup> 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	Acute 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 eye 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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Version: 2 (Replaced 1)

# 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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of	compilation: 23/06/2020	Revised: 12/10	/2022 Ve	ersion: 2 (Replace	d 1)		
	1 , ,				u 1)		
	ION 7: HANDLING AND	STORAGE (contil	nued)				
	Product is non-flammab to avoid the generation conditions and material C Technical recommendat	of electrostatic ch s that should be av	arges that can a /oided.	ffect flammable p			
	PREGNANT WOMEN SH necessary safety condit equipment, especially o drink during the proces D Technical recommendati	ions (emergency s n the hands and fac s, washing hands a	howers and eyev ce (See section 8 afterwards with s	wash stations in c 3). Limit manual tr	lose proximity), ansfers to small	using persor	nal protection
	It is recommended to ha	ave absorbent mate	erial available at o	close proximity to	the product (Se	e subsection	6.3)
2	Conditions for safe stora	ge, including any	/ incompatibiliti	ies:			
	A Technical measures for	storage					
	Store in a cool, dry, well	-ventilated location	ı				
	B General conditions for s						
	Avoid sources of heat, r	2	tricity and conta	ct with food For a	additional inform	ation see sub	section 10 5
3	Specific end use(s):						5000110.5
•	Except for the instructions a product.	already specified it	is not necessary	to provide any sp	ecial recomment	dation regard	ing the uses of th
_	·						
	ION 8: EXPOSURE CONT Control parameters: Substances whose occupati legislation):				kplace (Europea	n OEL, not co	ountry-specific
	<b>Control parameters:</b> Substances whose occupati legislation): There are no applicable occ	onal exposure limit	s have to be mor	nitored in the wor			ountry-specific
	<b>Control parameters:</b> Substances whose occupati legislation):	onal exposure limit	s have to be mor	nitored in the wor	ed in the product		
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers):	onal exposure limit upational exposure	s have to be mor	nitored in the wor bstances containe Short	ed in the product	L	ong exposure
ECT 1	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identifica	onal exposure limit upational exposure	s have to be mor limits for the sul	nitored in the wor bstances containe Short Systemic	ed in the product exposure Local	L Systemic	ong exposure
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers):	onal exposure limit upational exposure	s have to be mor	nitored in the wor bstances containe Short	ed in the product	L	ong exposure
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identifica Imidazole	onal exposure limit upational exposure	s have to be mor limits for the sul	nitored in the wor bstances containe Short Systemic Non-applicable	ed in the product exposure Local Non-applicable	L Systemic Non-applicable	ong exposure c Local e Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4	onal exposure limit upational exposure tion	s have to be mor limits for the sul Oral Dermal	nitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg	ong exposure Local e Non-applicable Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2	onal exposure limit upational exposure tion	s have to be mor limits for the sul Oral Dermal	nitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg	ong exposure Local e Non-applicable Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population	onal exposure limit upational exposure tion	s have to be mor limits for the sul Oral Dermal	nitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg	ong exposure Local e Non-applicable Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC:	onal exposure limit upational exposure tion <b>n):</b>	s have to be mor limits for the sul Oral Dermal	nitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg	ong exposure Local e Non-applicable Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable	onal exposure limit upational exposure tion <b>n):</b>	s have to be mor limits for the sul Oral Dermal	nitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg	oong exposure Local e Non-applicable Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identificat	onal exposure limit upational exposure tion <b>n):</b>	s have to be mor limits for the sul Oral Dermal Inhalation	nitored in the wor bstances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg	ong exposure Local e Non-applicable Non-applicable
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identificat Imidazole	onal exposure limit upational exposure tion <b>n):</b>	s have to be mor limits for the sul Oral Dermal Inhalation	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ong exposure Local e Non-applicable Non-applicable 0,13 mg/L
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identificat Imidazole CAS: 288-32-4 EC: 206-019-2	onal exposure limit upational exposure tion <b>n):</b>	s have to be mor limits for the sul Oral Dermal Inhalation STP Soil	hitored in the wor bstances containe Systemic Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Non-applicable	L Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ong exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L
1	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identificat Imidazole CAS: 288-32-4	onal exposure limit upational exposure tion <b>n):</b>	s have to be mor limits for the sul Oral Dermal Inhalation STP Soil Intermittent	hitored in the wor bstances containe Short Systemic 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 Marine water Sediment (Fresh	L Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ong exposure       Local       Non-applicable       Non-applicable       Non-applicable       0,13 mg/L       0,336 mg/kg
	Control parameters: Substances whose occupati legislation): There are no applicable occ DNEL (Workers): Identificat Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identificat Imidazole CAS: 288-32-4 EC: 206-019-2	onal exposure limit upational exposure tion n):	s have to be mor e limits for the sul Oral Dermal Inhalation STP Soil Intermittent Oral	hitored in the wor bstances containe Short Systemic Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Marine water Sediment (Fresh	L Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ong exposure       Local       Non-applicable       Non-applicable       Non-applicable       0,13 mg/L       0,336 mg/kg

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# CZ0447 - Cellulase 9Q, Clostridium cellulolyticum

TION	8: EXPOSURE	CONTROLS/PERSONA	L PROTECTIC	N (continued)		
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory respiratory tract protection	Filter mask for gases and vapours	CAT III	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 gloves (Material: PVC, Breakthrough time: > 480 min, Thickness: 0.7 mm)	CAT III	EN ISO 21420:2020	Rep	lace the gloves at any sign of deterioration
D	Eye and face prot	ection				
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory face protection	Face shield	CAT II	EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018		n daily and disinfect periodically according nanufacturer´s instructions. Use if there is risk of splashing.
E	Body protection		L L			
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory complete body protection	Disposable clothing for protection against chemical risks	CAT III	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 periodically ording to the manufacturer's instructions.
	Mandatory foot protection	Safety footwear for protection against chemical risk	CAT III	EN ISO 20345:2011 EN 13832-1:2019	R	eplace boots at any sign of deterioration.
F	Additional emerge	ency measures				
	Emergency mea	asure St	andards	Emergency meas	ure	Standards
	Emergency sho	ISO 3864-1:20	SI Z358-1 111, ISO 3864-4:201	1 Eyewash station	าร	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Env	vironmental exp	osure controls:				
In a spil	- accordance with th	e community legislation roduct and its container.				nmended to avoid environmental .D
Wit	h regard to Directi	ve 2010/75/EU, this proc	luct has the follo	owing characteristics:		
	V.O.C. (Supply):	0 % \	weight			
	V.O.C. density at	20 °C: 0 kg/	m³ (0 g/L)			
	Average carbon n	number: Non-a	applicable			
	Average molecular	r woighty Non-	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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ate of compilation: 23/06/2020 Revised: 12/10	V/2023 Version: 2 (Replaced 1)						
SECTION 9: PHYSICAL AND CHEMICAL PROP	ERTIES (continued)						
For complete information see the product data	asheet.						
Appearance:	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 <sup>3</sup>						
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						
9.2 Other information:							
Information with regard to physical haza	Ird 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 flamma components: <b>Other safety characteristics:</b>	able Non-applicable *						
Surface tension at 20 °C:	Non-applicable *						
*Not relevant due to the nature of the product, not provi							

Safety data sheet legislation

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Date of c	ompilation: 23/06/2020	Revised: 12/10/2023	Version: 2 (Replac	ced 1)			
SECT	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.						
CECT							
SECT	ION 10: STABILITY AND	DREACTIVITY					
10.1	Reactivity:						
10.2	No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.						
	Chemically stable under the	e indicated conditions of st	orage, handling and use.				
10.3	Possibility of hazardous	reactions:					
	Under the specified condition	ons, hazardous reactions t	hat lead to excessive temp	peratures 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	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 decompositi	on 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 (CO<sub>2</sub>), 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 INFORM	MATION (continued)				
	E- Sensitizing effects:					
	<ul> <li>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.</li> <li>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.</li> <li>F- Specific target organ toxicity (STOT) - single exposure:</li> <li>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.</li> </ul>					
	<ul> <li>G- Specific target organ toxicity (STOT</li> <li>Specific target organ toxicity (S' it does not contain substances cla</li> <li>Skin: Based on available data, t hazardous for this effect. For more H- Aspiration hazard:</li> </ul>	TOT)-repeated exposure ssified as hazardous for he classification criteria a	this effect. F are not met,	or more informati	on see section 3.	
	Based on available data, the classif this effect. For more information s <b>Other information:</b>		net, as it doe	s not contain subst	ances classified as haz	ardous for
	Non-applicable					
	Specific toxicology information on	the substances:				
	Identifi	cation		Acut	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	
	20. 200 017 2					
11.2	Information on other hazards:				>5 mg/L	
11.2					>5 mg/L	
11.2	Endocrine disrupting properties	roduct door not most th	e critoria		>s mg/L	
11.2	<b>Endocrine disrupting properties</b> Endocrine-disrupting properties: The p	roduct does not meet the	e criteria.		>5 mg/L	
11.2	Endocrine disrupting properties Endocrine-disrupting properties: The p Other information	roduct does not meet the	e criteria.		>5 mg/L	
11.2	<b>Endocrine disrupting properties</b> Endocrine-disrupting properties: The p	roduct does not meet th	e criteria.		>5 mg/L	
	Endocrine disrupting properties Endocrine-disrupting properties: The p Other information Non-applicable		e criteria.		>5 mg/L	
SECT.	Endocrine disrupting properties Endocrine-disrupting properties: The p Other information Non-applicable ION 12: ECOLOGICAL INFORMATI	ION				
SECT. The ex	Endocrine disrupting properties Endocrine-disrupting properties: The p Other information Non-applicable ION 12: ECOLOGICAL INFORMATT	ION co-toxicological propertie	es of the pro	duct itself is not av	ailable	
SECT. The ex Based For mo	Endocrine disrupting properties Endocrine-disrupting properties: The p Other information Non-applicable ION 12: ECOLOGICAL INFORMATI	ION co-toxicological propertie	es of the pro	duct itself is not av	ailable	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

# CZ0447 - Cellulase 9Q, Clostridium cellulolyticum

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:

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

8 NZYtech

# CZ0447 - Cellulase 9Q, Clostridium cellulolyticum

N (continued)					
SECTION 14: TRANSPORT INFORMATION (continued)					
With regard to IATA/ICAO 2023:					
r: Non-applicable					
e: Non-applicable					
): Non-applicable					
Non-applicable					
Non-applicable					
No					
er					
see section 9					
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 ashtrays,

—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

**NZYtech** 

# CZ0447 - Cellulase 9Q, Clostridium cellulolyticum

Date of compilation: 23/06/2020	Revised: 12/10/2023	Version: 2 (Replaced 1)
SECTION 16: OTHER INFORM	IATION ** (continued)	
COMMISSION REGULATION CLP Regulation (EC) No 127 · Hazard statements		ION 16):
Texts of the legislative p H315: Causes skin irritation H360D: May damage the ur H319: Causes serious eye i	born child.	ction 2:
Texts of the legislative p	hrases mentioned in sec	ction 3:
The phrases indicated do no individual components which		; they are present merely for informative purposes and refer to the
CLP Regulation (EC) No Acute Tox. 4: H302 - Harm Eye Dam. 1: H318 - Causes Repr. 1B: H360D - May dan Skin Corr. 1C: H314 - Cause	ful if swallowed. s serious eye damage. nage the unborn child.	e damage.
Advice related to trainin	,	
Training is recommended ir interpretation of this safety		risks for staff using this product and to facilitate their comprehension and label on the product.
Principal bibliographical		'
http://echa.europa.eu http://eur-lex.europa.eu		
Abbreviations and acron	yms:	
IMDG: International maritin IATA: International Air Tra	me dangerous goods code nsport Association	al carriage of dangerous goods by road
ICAO: International Civil Av COD: Chemical Oxygen De BOD5: 5day biochemical ox	mand ygen demand	
BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration		
EC50: Effective concentration LogPOW: Octanolwater par	on 50	
Koc: Partition coefficient of UFI: unique formula identif	ier	
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.