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

**NZYtech** 

# CZ0416 - Phospho-β-Glucosidase 1C, Erwinia chrysanthemi

Date of	compilation: 23/06/202	20 Revised: 12/10/2023 Version: 2 (Replaced 1)
SECT	TION 1: IDENTIFIC	ATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier:	: CZ0416 - Phospho-β-Glucosidase 1C, Erwinia chrysanthemi
		Glycerol
	CAS:	56-81-5
	EC:	200-289-5
	Index:	Non-applicable
	REACH:	01-2119471987-18-XXXX
	Other means of ide	entification:
	Non-applicable	
1.2	Relevant identified	d uses of the substance or mixture and uses advised against:
	Relevant uses: Labor	ratory. For professional users only.
	Uses advised against	t: All uses not specified in this section or in section 7.3
1.3	Details of the supp	plier of the safety data sheet:
	NZYTech Estrada do Paco do L 1649-038 Lisboa - Li info@nzytech.com www.nzytech.com	Lumiar Campus do Lumiar - Edif. E, r/c .isboa - Portugal
1.4	Emergency telepho	one number: Contact Local Poison Information Center or Local Emergency Number
SECT	TION 2: HAZARDS I	IDENTIFICATION **
2.1	Classification of th	he substance or mixture:
	CLP Regulation (E	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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Version: 2 (Replaced 1)

# 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			Concentration
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) (2)	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	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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FOT		· · · · · · · · · · · · · · · · · · ·						
ECT	ION 7: HANDLING AND STORAGE (	continued)						
	Product is non-flammable under norr to avoid the generation of electrosta conditions and materials that should	atic charges that can a						
	C Technical recommendations on general occupational hygiene							
	PREGNANT WOMEN SHOULD NOT E necessary safety conditions (emerge equipment, especially on the hands a drink during the process, washing he D Technical recommendations to preven	ency showers and eye and face (See section & ands afterwards with	wash stations in o 3). Limit manual ti	close proximity), ransfers to small	using persona	I protection		
	It is recommended to have absorben	t material available at	close proximity to	the product (Se	e subsection 6.	3)		
.2	Conditions for safe storage, includin	ig any incompatibilit	ies:					
	A Technical measures for storage							
	Store in a cool, dry, well-ventilated lo	ocation						
	B General conditions for storage							
	Avoid sources of heat, radiation, stat	ic electricity and conta	ct with food. For	additional inform	ation see subse	ection 10.5		
.3	Specific end use(s):	,						
	Except for the instructions already specif	fied it is not necessary	to provide any sp	ecial recommend	dation regardin	a the uses of this		
	product.	neu le lo noc necessur y	to provide driv sp		addonnegarann	g the uses of this		
	ION 8: EXPOSURE CONTROLS/PERS Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp	e limits have to be mo	nitored in the wor			ntry-specific		
	<b>Control parameters:</b> Substances whose occupational exposur legislation):	e limits have to be mo	nitored in the wor bstances containe	ed in the product				
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers):	e limits have to be mo	nitored in the wor bstances containe Short	ed in the product	Lon	ng exposure		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification	e limits have to be mo	nitored in the wor bstances containe Short	ed in the product exposure Local	Lon	ig exposure		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers):	e limits have to be mo posure limits for the su	nitored in the wor bstances containe Short	ed in the product	Lon	ng exposure		
ECT	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole	e limits have to be mo posure limits for the su Oral	nitored in the wor bstances containe Short Systemic Non-applicable	ed in the product exposure Local Non-applicable	Lon Systemic Non-applicable	ig exposure Local Non-applicable		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4	e limits have to be mo posure limits for the su Oral Dermal	nitored 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	ng exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2	e limits have to be mo posure limits for the su Oral Dermal	nitored 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	ng exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population):	e limits have to be mo posure limits for the su Oral Dermal	nitored 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	ng exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable	e limits have to be mo posure limits for the su Oral Dermal	nitored 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	ng exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC:	e limits have to be mo posure limits for the su Oral Dermal	nitored 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 <sup>3</sup>	ng exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole CAS: 288-32-4	e limits have to be mo posure limits for the su Oral Dermal Inhalation STP Soil	nitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable	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 <sup>3</sup>	Ing exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,013 mg/L		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole	e limits have to be mo posure limits for the su Oral Dermal Inhalation STP Soil Intermittent	nitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable	ed in the product et a sposure Local Non-applicable Non-applicable Non-applicable Fresh water Marine water Sediment (Fresh	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ng exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,013 mg/L 0,336 mg/kg		
1	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole CAS: 288-32-4 EC: 206-019-2	e limits have to be mo posure limits for the su Oral Dermal Inhalation STP Soil	nitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable	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 <sup>3</sup>	Ing exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,013 mg/L		
	Control parameters: Substances whose occupational exposur legislation): There are no applicable occupational exp DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole CAS: 288-32-4	e limits have to be mo bosure limits for the su Oral Dermal Inhalation STP Soil Intermittent Oral	nitored in the wor bstances containe Short Non-applicable Non-applicable Non-applicable	ed in the product et a sposure Local Non-applicable Non-applicable Non-applicable Fresh water Marine water Sediment (Fresh	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ng exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,013 mg/L 0,336 mg/kg		

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# CZ0416 - Phospho-β-Glucosidase 1C, *Erwinia chrysanthemi*

		CONTROLS/PERSONA				
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory respiratory tract protection	Filter mask for gases and vapours	CAT III	EN 405:2002+A1:2010	с	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 deterioratio
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 i risk of splashing.
E	Body protection					
	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	tandards	Emergency measure	ure	Standards
	Emergency sho	ISO 3864-1:20	SI Z358-1 111, ISO 3864-4:201	.1 Eyewash station	ıs	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Env	vironmental exp			-		1
	-		for the protectio	on of the environment it i	s recon	nmended to avoid environmental
spil	lage of both the p	roduct and its container				
	latile organic co	-				
		ve 2010/75/EU, this proc		owing characteristics:		
	V.O.C. (Supply):		weight			
	V.O.C. density at	-	m³ (0 g/L)			
	Average carbon n	umber: Non-a	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.

- CONTINUED ON NEXT PAGE -

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SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTIES	S (continued)
	For complete information see the product 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 <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: Particle characteristics:	Non-applicable *
	Median equivalent diameter:	Non-applicable
9.2	Other information:	Νοι-αμμιζαυιε
5.2	Information with regard to physical hazard clas	2000.
	Explosive properties:	Non-applicable *
	Oxidising properties:	Non-applicable *
	Corrosive to metals:	Non-applicable *
	Heat of combustion:	Non-applicable *
	Aerosols-total percentage (by mass) of flammable	Non-applicable *
	components:	
	Other safety characteristics:	
	Surface tension at 20 °C:	Non-applicable *
	*Not relevant due to the nature of the product, not providing infor	rmation property of its hazards.

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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.	TON 10: STABILITY AND	REACTIVITY					
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. <b>D.2 Chemical stability:</b>						
	Chemically stable under the	e indicated conditions of st	torage, handling and use.				
10.3	Possibility of hazardous	reactions:					
	Under the specified condition	ons, hazardous reactions t	hat lead to excessive temp	eratures or pressure are	not expected.		
10.4	Conditions to avoid:						
	Applicable for handling and	i storage at room tempera	ture:				
	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		
	Acius	Avoid strong acids         Not applicable         Precaution         Not applicable         Avoid alkalis or strong bases					

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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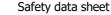
# CZ0416 - Phospho-β-Glucosidase 1C, Erwinia chrysanthemi

Date of c	ompilation: 23/06/2020	Revised: 12/10/2023	Version: 2 (Re	placed 1)				
SECT	ION 11: TOXICOLOGICAL	INFORMATION (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> <li>G- Specific target organ toxicity (STOT)-repeated exposure:</li> </ul>							
	<ul> <li>Specific target organ t</li> <li>it does not contain subst</li> <li>Skin: Based on availab</li> </ul>	oxicity (STOT)-repeated exposi- ances classified as hazardous f ole data, the classification criter . For more information see sec	ure: Based on a or this effect. F ia are not met, a	or more informat	ion see section 3.			
	Based on available data, this effect. For more info <b>Other information:</b>	the classification criteria are no rmation see section 3.	t met, as it does	s not contain subs	tances classified as haz	ardous for		
	Non-applicable							
	Specific toxicology inform	ation on the substances:						
		Identification		Act	ute toxicity	Genus		
	Imidazole			LD50 oral	500 mg/kg (ATEi)			
	CAS: 288-32-4			LD50 dermal	>2000 mg/kg			
	EC: 206-019-2 Information on other haz			LC50 inhalation	>5 mg/L			
	Endocrine disrupting prop Endocrine-disrupting propert Other information Non-applicable	perties les: The product does not meet	the criteria.					
SECT	ION 12: ECOLOGICAL IN	FORMATION						
The ev	voerimental information relate	d to the eco-toxicological prope	rties of the prov	luct itself is not a	vailable			
Based For m		cation criteria are not met, as it	-			this effect.		
	Not available			Not available				
12.2	2.2 Persistence and degradability:							
	_	ility:						
	Persistence and degradab Not available	ility:						
12.3	_	-						
12.3	Not available	-						
	Not available Bioaccumulative potentia	-						
	Not available <b>Bioaccumulative potentia</b> Not available	-						
12.4	Not available Bioaccumulative potentia Not available Mobility in soil:	:						
12.4	Not available Bioaccumulative potentia Not available Mobility in soil: Not available	l: assessment:						
12.4 12.5	Not available <b>Bioaccumulative potentia</b> Not available <b>Mobility in soil:</b> Not available <b>Results of PBT and vPvB a</b> Product does not meet PBT/v	l: assessment: /PvB criteria						
12.4 12.5	Not available Bioaccumulative potentia Not available Mobility in soil: Not available Results of PBT and vPvB a Product does not meet PBT/v Endocrine disrupting prop	essessment: /PvB criteria perties:	the criteria.					
12.4 12.5 12.6	Not available <b>Bioaccumulative potentia</b> Not available <b>Mobility in soil:</b> Not available <b>Results of PBT and vPvB a</b> Product does not meet PBT/v <b>Endocrine disrupting propert</b>	l: assessment: /PvB criteria	the criteria.					
12.4 12.5 12.6	Not available Bioaccumulative potentia Not available Mobility in soil: Not available Results of PBT and vPvB a Product does not meet PBT/v Endocrine disrupting prop	essessment: /PvB criteria perties:	the criteria.					

- CONTINUED ON NEXT PAGE -

Version: 2 (Replaced 1)

Revised: 12/10/2023



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legislation

# CZ0416 - Phospho-β-Glucosidase 1C, *Erwinia chrysanthemi*

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:

14.1UN number or ID number:Non-applicable14.2UN proper shipping name:Non-applicable14.3Transport hazard class(es):Non-applicable14.4Packing group:Non-applicable14.5Environmental hazards:No14.6Special precautions for userNon-applicableTunnel 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	
Transport of dangerous goods by sea:	
With regard to IMDG 40-20:	
14.1 UN number or ID number:Non-applicable14.2 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 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 Non-applicable according to IMO instruments:	
Transport of dangerous goods by air:	

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### legislation

# NZYtech CZ0416 - Phospho-β-Glucosidase 1C, *Erwinia chrysanthemi*

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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# CZ0416 - Phospho-β-Glucosidase 1C, *Erwinia chrysanthemi*

Date of compilation: 23/06/2020	Revised: 12/10/2023	Version: 2 (Replaced 1)
SECTION 16: OTHER INFORM	ATION ** (continued)	
COMMISSION REGULATION CLP Regulation (EC) No 1272 · Hazard statements		ION 16):
Texts of the legislative pl H315: Causes skin irritation. H360D: May damage the un H319: Causes serious eye ir	oorn child.	ction 2:
Texts of the legislative p	nrases mentioned in sec	ction 3:
The phrases indicated do no individual components whic		; they are present merely for informative purposes and refer to the
CLP Regulation (EC) No 1 Acute Tox. 4: H302 - Harmfr Eye Dam. 1: H318 - Causes Repr. 1B: H360D - May dam Skin Corr. 1C: H314 - Cause	ul if swallowed. serious eye damage. age the unborn child.	e damage.
Advice related to training	•	
-	order to prevent industrial	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 acrony	ms:	
ADR: European agreement of IMDG: International maritim IATA: International Air Tran	e dangerous goods code	al carriage of dangerous goods by road
ICAO: International Civil Avia COD: Chemical Oxygen Den BOD5: 5day biochemical oxy	hand	
BCF: Bioconcentration facto LD50: Lethal Dose 50		
LC50: Lethal Concentration EC50: Effective concentration LogPOW: Octanolwater part	ı 50	
Koc: Partition coefficient of UFI: unique formula identifi	organic carbon	
IARC: International Agency 1		

\*\* 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.