Safety data sheet legislation

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## CZ0611 - Feruloyl esterase 1A, Amycolatopsis mediterranei

Date of	compilation: 23/06/20	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	<b>Product identifier</b>	: CZ0611 - Feruloyl esterase 1A, Amycolatopsis mediterranei
		Glycerol
	CAS:	56-81-5
	EC:	200-289-5
	Index:	Non-applicable
	REACH:	01-2119471987-18-XXXX
	Other means of id	entification:
	Non-applicable	
1.2	Relevant identified	d uses of the substance or mixture and uses advised against:
	Relevant uses: Labo	ratory. For professional users only.
	Uses advised agains	t: All uses not specified in this section or in section 7.3
1.3	Details of the sup	plier of the safety data sheet:
	NZYTech Estrada do Paco do I 1649-038 Lisboa - L info@nzytech.com www.nzytech.com	-umiar Campus do Lumiar - Edif. E, r/c isboa - Portugal
1.4	Emergency teleph	one number: Contact Local Poison Information Center or Local Emergency Number
0.5.07		
SECI	ION 2: HAZARDS	IDENTIFICATION **
2.1	Classification of the	ne 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.

\*\* 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 - <2,5 %

<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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Revised: 12/10/2023

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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ECT	ION 7: HANDLING AND STORAG	E (continued)				
	Product is non-flammable under n to avoid the generation of electro conditions and materials that sho C Technical recommendations on ge	static charges that can uld be avoided.	affect flammable p			
	PREGNANT WOMEN SHOULD NO necessary safety conditions (eme equipment, especially on the hand drink during the process, washing D Technical recommendations to pre	rgency showers and ey Is and face (See sectior 9 hands afterwards witl	rewash stations in c 18). Limit manual tr 1 suitable cleaning	close proximity), ransfers to small	using persona	l protection
	It is recommended to have absorb	ent material available a	t close proximity to	the product (Se	e subsection 6.	3)
.2	Conditions for safe storage, inclu	ding any incompatibi	ities:			
	A Technical measures for storage					
	Store in a cool, dry, well-ventilated	location				
	B General conditions for storage					
	Avoid sources of heat, radiation, s	tatic electricity and con	tact with food For :	additional inform	ation see subse	action 10 5
						10.5
.3	Specific end use(s):	10 J. 1			1.1	
	Except for the instructions already spe product.	ecified it is not necessai	y to provide any sp	ecial recommen	dation regardin	g the uses of this
ECT	TON 8: EXPOSURE CONTROLS/PE Control parameters: Substances whose occupational expor- legislation): There are no applicable occupational	sure limits have to be m	onitored in the wor			ntry-specific
_	<b>Control parameters:</b> Substances whose occupational exponentiation):	sure limits have to be m	onitored in the wor	ed in the product		
_	Control parameters: Substances whose occupational expor- legislation): There are no applicable occupational DNEL (Workers):	sure limits have to be m	onitored in the wor substances containe Short	ed in the product	Lon	ng exposure
	Control parameters: Substances whose occupational exponence legislation): There are no applicable occupational DNEL (Workers): Identification	sure limits have to be m exposure limits for the s	onitored in the wor substances containe Short	ed in the product exposure Local	Lon Systemic	ng exposure
	Control parameters: Substances whose occupational expon- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole	sure limits have to be m exposure limits for the s Oral	onitored in the wor substances containe Short Systemic Non-applicable	ed in the product exposure Local Non-applicable	Lon Systemic Non-applicable	ng exposure Local Non-applicable
	Control parameters: Substances whose occupational exponence legislation): There are no applicable occupational DNEL (Workers): Identification	sure limits have to be m exposure limits for the s	onitored in the wor substances containe Short	ed in the product exposure Local	Lon Systemic	ng exposure
_	Control parameters: Substances whose occupational exposing legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2	sure limits have to be m exposure limits for the s Oral Dermal	onitored in the wor substances 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 expon- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population):	sure limits have to be m exposure limits for the s Oral Dermal	onitored in the wor substances 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 exposi- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable	sure limits have to be m exposure limits for the s Oral Dermal	onitored in the wor substances 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 exposi- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC:	sure limits have to be m exposure limits for the s Oral Dermal	onitored in the wor substances 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 expon- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification	sure limits have to be m exposure limits for the s Oral Dermal Inhalation	onitored in the wor substances 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 Non-applicable
_	Control parameters: Substances whose occupational exposi- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC:	sure limits have to be m exposure limits for the s Oral Dermal	onitored in the wor substances 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 expon- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole	sure limits have to be m exposure limits for the s Oral Dermal Inhalation	onitored in the wor substances containe Short Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Fresh water	Lon Systemic Non-applicable 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ng exposure Local Non-applicable Non-applicable Non-applicable
.1	Control parameters: Substances whose occupational expor- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole CAS: 288-32-4	sure limits have to be mexposure limits for the second sec	onitored in the wor substances 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 <sup>3</sup>	Ing exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,013 mg/L
.1	Control parameters: Substances whose occupational expor- legislation): There are no applicable occupational DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population): Non-applicable PNEC: Identification Imidazole CAS: 288-32-4	sure limits have to be mexposure limits for the second sec	onitored in the wor substances 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 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
	Control parameters: Substances whose occupational expos- legislation): There are no applicable occupational 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	sure limits have to be m exposure limits for the s Oral Dermal Inhalation STP Soil Intermittent Oral	onitored in the wor substances 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 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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	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 th 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)		EN ISO 21420:2020	Rep	lace the gloves at any sign of deteriorati
D	Eye and face prot	ection	1			
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory face protection	Face shield		EN 166:2002 EN 167:2002 EN 168:2002 EN 150 4007:2018		n daily and disinfect periodically accordin 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 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 periodical ording to the manufacturer's instruction
	Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2019	R	eplace boots at any sign of deterioration
F /	Additional emerge	ency measures				1
	Emergency mea	asure S	Standards	Emergency mea	sure	Standards
	Emergency sho	ISO 3864-1:2	NSI Z358-1 011, ISO 3864-4:20	011 Eyewash statio	ins	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:201
In a spill	vironmental exp	osure controls: ne community legislation product and its contained			is recon	I nmended to avoid environmenta .D
	-	ive 2010/75/EU, this pro	duct has the fol	lowing characteristics:		
	V.O.C. (Supply):		weight			
	V.O.C. density at		/m <sup>3</sup> (0 g/L)			
	Average carbon r	-	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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SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTIES	G (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: pH:	Non-applicable *
	μπ. Vapour density at 20 ºC:	7,2 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 hazard class	ses:
	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 components: Other safety characteristics:	Non-applicable *
	Surface tension at 20 °C:	Non-applicable *
	*Not relevant due to the nature of the product, not providing infor	mation property of its hazards.

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## CZ0611 - Feruloyl esterase 1A, Amycolatopsis mediterranei

SECTION 10: STABILIT 10.1 Reactivity: No hazardous react Safety Data Sheet. 10.2 Chemical stability Chemically stable u 10.3 Possibility of haz	:		IES (continued) Non-applicable *		
*Not relevant due to the SECTION 10: STABILIT 10.1 Reactivity: No hazardous react Safety Data Sheet. 10.2 Chemical stability Chemically stable u 10.3 Possibility of haz Under the specified 10.4 Conditions to ave Applicable for hand Shock and friction		aduct not providing in	Non-applicable *		
SECTION 10: STABILT 10.1 Reactivity: No hazardous react Safety Data Sheet. 10.2 Chemical stability Chemically stable u 10.3 Possibility of haz Under the specified 10.4 Conditions to ave Applicable for hand Shock and friction	o the nature of the pr	oduct not providing in			
<ul> <li>10.1 Reactivity: No hazardous react Safety Data Sheet.</li> <li>10.2 Chemical stability Chemically stable u</li> <li>10.3 Possibility of haz Under the specified</li> <li>10.4 Conditions to ave Applicable for hand Shock and friction</li> </ul>		outer, not providing if	nformation property of its hazards.		
<ul> <li>10.1 Reactivity: No hazardous reactivity: Safety Data Sheet.</li> <li>10.2 Chemical stability Chemically stable under the specified</li> <li>10.3 Possibility of haz Under the specified</li> <li>10.4 Conditions to avoir Applicable for hand</li> </ul>					
No hazardous react Safety Data Sheet. 10.2 Chemical stability Chemically stable u 10.3 Possibility of haz Under the specified 10.4 Conditions to ave Applicable for hand Shock and friction					
<ul> <li>10.3 Possibility of haz Under the specified</li> <li>10.4 Conditions to avor Applicable for hand</li> <li>Shock and friction</li> </ul>	et.	cted because the p	product is stable under recon	nmended storage condit	ions. See section 7 from
Under the specified <b>10.4 Conditions to avo</b> Applicable for hand Shock and friction	e under the indica	ated conditions of	storage, handling and use.		
10.4 Conditions to aver Applicable for hand Shock and friction	azardous react	ions:			
Applicable for hand Shock and friction	ied conditions, ha	azardous reactions	s that lead to excessive temp	eratures or pressure are	not expected.
Shock and friction	avoid:				
	andling and stora	ge at room tempe	rature:		
Not applicable	riction	Contact with air	Increase in temperature	Sunlight	Humidity
	able	Not applicable	Not applicable	Not applicable	Not applicable
10.5 Incompatible ma	materials:				
Acids		Water	Oxidising materials	Combustible materials	Others
Avoid strong aci					Avoid alkalis or strong bases

## 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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Dute of t	ompilation: 23/06/2020	Revised: 12/10/2023	Version: 2 (Re	placed 1)		
SECT	ION 11: TOXICOLOGICA	L INFORMATION (continue	ed)			
	E- Sensitizing effects:		,			
	<ul> <li>Respiratory: Based of hazardous with sensitis</li> <li>Skin: Based on availa hazardous for this effect</li> <li>F- Specific target organ to Based on available data</li> </ul>	on available data, the classificati ing effects. For more information able data, the classification crite ct. For more information see se xicity (STOT) - single exposure: the classification criteria are n	on see section 3. ria are not met, a ction 3.	as it does not co	ntain substances classif	ied as
	G- Specific target organ to:	formation see section 3. kicity (STOT)-repeated exposure				
	it does not contain sub - Skin: Based on availa	toxicity (STOT)-repeated expo stances classified as hazardous able data, the classification crite t. For more information see se	for this effect. F ria are not met, a	or more information	ation see section 3.	
		, the classification criteria are n formation see section 3.	ot met, as it does	s not contain sub	stances classified as ha	zardous for
	Non-applicable					
	Specific toxicology infor	mation on the substances:				
		Identification		А	cute 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 ha			LC50 inhalation	>5 mg/L	
	Other information Non-applicable	ties: The product does not mee	it the chiefful.			
SECT	ION 12: ECOLOGICAL IN					
Based For m		ed to the eco-toxicological prop fication criteria are not met, as i 3.				r this effect.
	Not available					
12.2	Persistence and degrada	bility:				
12.2		bility:				
	Persistence and degrada	-				
	<b>Persistence and degrada</b> Not available	-				
12.3	Persistence and degrada Not available Bioaccumulative potenti	-				
12.3	Persistence and degrada Not available Bioaccumulative potenti Not available	-				
12.3 12.4	Persistence and degrada Not available Bioaccumulative potenti Not available Mobility in soil:	al:				
12.3 12.4	Persistence and degrada Not available Bioaccumulative potenti Not available Mobility in soil: Not available	al: Bassessment:				
12.3 12.4 12.5	Persistence and degrada Not available Bioaccumulative potenti Not available Mobility in soil: Not available Results of PBT and vPvB	al: B assessment: /vPvB criteria				
12.3 12.4 12.5	Persistence and degrada Not available Bioaccumulative potenti Not available Mobility in soil: Not available Results of PBT and vPvE Product does not meet PBT Endocrine disrupting pro	al: B assessment: /vPvB criteria	et the criteria.			
12.3 12.4 12.5 12.6	Persistence and degrada Not available Bioaccumulative potenti Not available Mobility in soil: Not available Results of PBT and vPvE Product does not meet PBT Endocrine disrupting pro	al: B assessment: /vPvB criteria operties:	et the criteria.			
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Date of compilation: 23/06/2020

Version: 2 (Replaced 1)

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

legislation

## CZ0611 - Feruloyl esterase 1A, Amycolatopsis mediterranei

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	UN number or ID number: UN proper shipping name: Transport hazard class(es):	Non-applicable Non-applicable 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
Transpor	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
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 according to IMO instruments:	Non-applicable
Transpo	rt of dangerous goods by air:	

Revised: 12/10/2023

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## NZYtech CZ0611 - Feruloyl esterase 1A, Amycolatopsis mediterranei

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:

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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SECTION 16: OTHER INFORMATION ** (continued) COMMISSION REGULATION (EU) 2020/878
CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16): · Hazard statements
<b>Texts of the legislative phrases mentioned in section 2:</b> 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
<b>CLP Regulation (EC) No 1272/2008:</b> Acute Tox. 4: H302 - Harmful if swallowed. 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 acronyms:
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 Aviation Organisation COD: Chemical Oxygen Demand BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor LD50: Lethal Dose 50
LC50: Lethal Concentration 50 EC50: Effective concentration 50 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.