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

NZYtech

CZ0668 - Feruloyl esterase 1A, Spiribacter salinus

Date of	compilation: 23/06/20	20 Revised: 12/10/2023 Version: 2 (Replaced 1)
SECT	FION 1: IDENTIFIC	ATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1	Product identifier	: CZ0668 - Feruloyl esterase 1A, Spiribacter salinus
		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 identifie	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 l 1649-038 Lisboa - L info@nzytech.com www.nzytech.com	Lumiar Campus do Lumiar - Edif. E, r/c isboa - Portugal
1.4	,	one number: Contact Local Poison Information Center or Local Emergency Number
L		
SECT	FION 2: HAZARDS	IDENTIFICATION **
2.1	Classification of t	he substance or mixture:
	CLP Regulation (I	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			
CAS:	288-32-4	Imidazole ⁽¹⁾		Self-classified		
EC: Index: REACH:	206-019-2 Non-applicable 01-2119485825-24- XXXX	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Repr. 1B: H360D; Skin Corr. 1C: H314 - Danger	(1)	1 - <2,5 %	

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

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

3.2 Mixture:

Non-applicable

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

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

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

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

By inhalation:

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

By skin contact:

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

By 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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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

e of	compilation: 23/06/2020	Revised: 12/10/2	023 Ve	ersion: 2 (Replace	d 1)				
EC1	FION 7: HANDLING AND S	STORAGE (continu	ued)						
	Product is non-flammabl to avoid the generation conditions and materials C Technical recommendation	of electrostatic char that should be avo	ges that can a ided.	ffect flammable p					
	PREGNANT WOMEN SHO necessary safety conditi equipment, especially or drink during the process D Technical recommendation	ons (emergency sho the hands and face , washing hands aft	owers and eyeve (See section 8 terwards with s	wash stations in c). Limit manual tr	lose proximity), ansfers to small	using persor	nal protection		
	It is recommended to ha	ve absorbent materi	ial available at o	close proximity to	the product (See	subsection	6.3)		
. 2	Conditions for safe storage	ge, including any i	incompatibiliti	es:					
	A Technical measures for s	torage							
	Store in a cool, dry, well-	ventilated location							
	B General conditions for s	torage							
	Avoid sources of heat, ra	adiation, static electr	icity and contac	ct with food. For a	additional informa	ation see sub	section 10.5		
.3	Specific end use(s):								
		Iready specified it is	not necessary	to provide any sp	ecial recommenc	ation regard	Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this		
	TION 8: EXPOSURE CONT Control parameters: Substances whose occupation				kplace (Europear	n OEL, not co	untry-specific		
	Control parameters:	onal exposure limits	have to be mor	nitored in the wor		n OEL, not co	untry-specific		
	Control parameters: Substances whose occupation legislation): There are no applicable occu	onal exposure limits	have to be mor	nitored in the wor			untry-specific		
	Control parameters: Substances whose occupation legislation): There are no applicable occu	onal exposure limits Ipational exposure li	have to be mor	nitored in the wor	d in the product		ong exposure		
	Control parameters: Substances whose occupation legislation): There are no applicable occu DNEL (Workers):	onal exposure limits Ipational exposure li	have to be mor	hitored in the wor ostances containe Short	ed in the product	Ŀ	ong exposure		
	Control parameters: Substances whose occupation legislation): There are no applicable occu DNEL (Workers): Identification Imidazole CAS: 288-32-4	onal exposure limits Ipational exposure li	have to be mor imits for the sul Oral Dermal	hitored in the wor ostances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Systemic Non-applicable 1,5 mg/kg	ong exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupation legislation): There are no applicable occu DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2	onal exposure limits upational exposure li	have to be mor imits for the sul Oral	nitored in the wor postances containe Short Systemic Non-applicable	ed in the product exposure Local Non-applicable	Li Systemic Non-applicable	ong exposure Local Non-applicable		
	Control parameters: Substances whose occupation legislation): There are no applicable occur DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population	onal exposure limits upational exposure li	have to be mor imits for the sul Oral Dermal	hitored in the wor ostances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Systemic Non-applicable 1,5 mg/kg	ong exposure Local Non-applicable Non-applicable		
_	Control parameters: Substances whose occupation legislation): There are no applicable occu DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable	onal exposure limits upational exposure li	have to be mor imits for the sul Oral Dermal	hitored in the wor ostances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Systemic Non-applicable 1,5 mg/kg	ong exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupation legislation): There are no applicable occur DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population	onal exposure limits upational exposure li	have to be mor imits for the sul Oral Dermal	hitored in the wor ostances containe Short Systemic Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Systemic Non-applicable 1,5 mg/kg	ong exposure Local Non-applicable Non-applicable		
	Control parameters: Substances whose occupation legislation): There are no applicable occur DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification	onal exposure limits upational exposure li ion	have to be mor imits for the sul Oral Dermal Inhalation	hitored in the wor ostances containe Short Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable	Systemic Non-applicable 1,5 mg/kg	ong exposure Local Non-applicable Non-applicable		
5EC1	Control parameters: Substances whose occupation legislation): There are no applicable occumon DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification Inidazole	onal exposure limits upational exposure li ion	have to be mor imits for the sul Oral Dermal Inhalation	hitored in the wor ostances containe Short Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Fresh water Fresh water	Systemic Non-applicable 1,5 mg/kg	ong exposure Local Non-applicable Non-applicable Non-applicable		
	Control parameters: Substances whose occupation legislation): There are no applicable occumon DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification Inidazole CAS: 288-32-4	onal exposure limits upational exposure li ion	have to be mor imits for the sul Oral Dermal Inhalation STP Soil	hitored in the wor postances 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 Non-applicable Fresh water Marine water	Non-applicable 1,5 mg/kg 10,6 mg/m ³	ong exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L		
	Control parameters: Substances whose occupation legislation): There are no applicable occumon DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification Inidazole	onal exposure limits upational exposure li ion	have to be mor imits for the sul Oral Dermal Inhalation	hitored in the wor ostances containe Short Non-applicable Non-applicable Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Fresh water Fresh water	Variable Var	ong exposure Local Non-applicable Non-applicable Non-applicable		
.1	Control parameters: Substances whose occupation legislation): There are no applicable occumon DNEL (Workers): Identification Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification Inidazole CAS: 288-32-4	onal exposure limits upational exposure li ion	have to be mor imits for the sul Oral Dermal Inhalation STP Soil Intermittent	hitored in the wor postances containe Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg 1,3 mg/L	ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Fresh water Sediment (Fresh	Variable Var	Image: ong exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,336 mg/kg		
	Control parameters: Substances whose occupation legislation): There are no applicable occur 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	onal exposure limits upational exposure li ion 1):	have to be mor imits for the sul Oral Dermal Inhalation STP Soil Intermittent Oral	hitored in the wor ostances containe Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg 1,3 mg/L Non-applicable	ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Fresh water Sediment (Fresh	Variable Var	Image: ong exposure Local Non-applicable Non-applicable Non-applicable 0,13 mg/L 0,336 mg/kg		

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	Pictogram	PPE	Labelling	CEN Standard		Remarks
		Filter mask for gases and	CE	EN 405:2002+A1:2010	C	place when there is a taste or smell of th ontaminant inside the face mask. If the
	Mandatory respiratory tract protection	vapours	CAT III			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 deterioration
D	Eye and face prot	ection				
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory face protection	Face shield	CATI	EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018		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		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				
	Emergency mea	asure St	andards	Emergency mea	sure	Standards
	Emergency sho	ISO 3864-1:20	5I Z358-1 11, ISO 3864-4:20	11 Eyewash statio	ons	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:201:
Env	/ironmental exp	osure controls:				
In a spil	accordance with th lage of both the p	e community legislation for product and its container.				nmended to avoid environmental .D
	atile organic co	-	Line Harrison and the Pro-	and a share to the		
	-	ive 2010/75/EU, this prod		owing cnaracteristics:		
	V.O.C. (Supply):		weight			
	V.O.C. density at	_	m ³ (0 g/L)			
	Average carbon n	number: 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.



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SECT	TION 9: PHYSICAL AND CHEMICAL PROPERTIE	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/m³
	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 hazard clas	
	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 info	

Safety data sheet legislation

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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.					
SECT	SECTION 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. 0.2 Chemical stability:					
	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 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	
	Avoid strong acids	Not applicable	Precaution	Not applicable	Avoid alkalis or strong bases	
10.6	Hazardous decompositio	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 (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

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

Dangerous health implications:

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

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

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SECT	ION 11: TOXICOLOGICAL INFORMATION (continued)			
	E- Sensitizing effects:			
	 Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3. Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3. F- Specific target organ toxicity (STOT) - single exposure: 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. 			
	G- Specific target organ toxicity (STOT)-repeated exposure:			
	 Specific target organ toxicity (STOT)-repeated exposure: Based on it does not contain substances classified as hazardous for this effect. Skin: Based on available data, the classification criteria are not met hazardous for this effect. For more information see section 3. H- Aspiration hazard: 	For more informat	ion see section 3.	
	Based on available data, the classification criteria are not met, as it doe this effect. For more information see section 3. Other information:	es not contain subs	tances classified as haz	ardous for
	Non-applicable			
	Specific toxicology information on the substances:			
	Identification	Act	ute toxicity	Genus
	Imidazole	LD50 oral	500 mg/kg (ATEi)	
	CAS: 288-32-4	LD50 dermal	>2000 mg/kg	
		LC50 inhalation	>5 mg/L	
11.2	Information on other hazards:			
	Endocrine disrupting properties			
	Endocrine disrupting properties Endocrine-disrupting properties: The product does not meet the criteria.			
	Endocrine-disrupting properties: The product does not meet the criteria.			
	Endocrine-disrupting properties: The product does not meet the criteria. Other information			
SECT	Endocrine-disrupting properties: The product does not meet the criteria. Other information			
	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION	oduct itself is not a	vailable	
The ex Based For me	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable			this effect.
The ex Based For me	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro on available data, the classification criteria are not met, as it does not cont ore information see section 3.			this effect.
The ex Based For mo 12.1	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity:			this effect.
The ex Based For mo 12.1	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION xperimental information related to the eco-toxicological properties of the pro on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity: Not available			this effect.
The ex Based For mo 12.1 12.2	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity: Not available Persistence and degradability:			this effect.
The ex Based For mo 12.1 12.2	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity: Not available Persistence and degradability: Not available			this effect.
The ex Based For ma 12.1 12.2 12.3	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION xperimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity: Not available Persistence and degradability: Not available Bioaccumulative potential:			this effect.
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The ex Based For ma 12.1 12.2 12.3 12.4	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity: Not available Persistence and degradability: Not available Bioaccumulative potential: Not available Mobility in soil:			this effect.
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The ex Based For mo 12.1 12.2 12.3 12.4 12.5	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION experimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not cont ore information see section 3. Toxicity: Not available Persistence and degradability: Not available Bioaccumulative potential: Not available Mobility in soil: Not available Results of PBT and vPvB assessment: Product does not meet PBT/vPvB criteria			this effect.
The ex Based For mo 12.1 12.2 12.3 12.4 12.5 12.6	Endocrine-disrupting properties: The product does not meet the criteria. Other information Non-applicable ION 12: ECOLOGICAL INFORMATION Apperimental information related to the eco-toxicological properties of the pro- on available data, the classification criteria are not met, as it does not control ore information see section 3. Toxicity: Not available Persistence and degradability: Not available Bioaccumulative potential: Not available Mobility in soil: Not available Results of PBT and vPvB assessment: Product does not meet PBT/vPvB criteria Endocrine disrupting properties:			this effect.
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- CONTINUED ON NEXT PAGE -

Revised: 12/10/2023



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

legislation

CZ0668 - Feruloyl esterase 1A, Spiribacter salinus

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 No Non-applicable Non-applicable Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	Maritime transport in bulk according to IMO instruments:	Non-applicable
Transpo	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:	
	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

Safety data sheet legislation

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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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NZYtech

CZ0668 - Feruloyl esterase 1A, Spiribacter salinus

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SECTION 16: OTHER INFORMATI	ON ** (continued)	
COMMISSION REGULATION (EU CLP Regulation (EC) No 1272/20 · Hazard statements		ION 16):
Texts of the legislative phra H315: Causes skin irritation. H360D: May damage the unborn H319: Causes serious eye irrita	n child.	ction 2:
Texts of the legislative phrase The phrases indicated do not re individual components which ap	er to the product itself	ction 3: ; they are present merely for informative purposes and refer to the
CLP Regulation (EC) No 127 Acute Tox. 4: H302 - Harmful if Eye Dam. 1: H318 - Causes seri Repr. 1B: H360D - May damage Skin Corr. 1C: H314 - Causes se	2/2008: swallowed. ous eye damage. the unborn child.	e damage.
Advice related to training:	, er to prevent industrial	risks for staff using this product and to facilitate their comprehension and
Principal bibliographical sou http://echa.europa.eu http://eur-lex.europa.eu		
IMDG: International maritime d IATA: International Air Transpo ICAO: International Civil Aviation COD: Chemical Oxygen Deman BOD5: 5day biochemical oxygen BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50 LogPOW: Octanolwater partition Koc: Partition coefficient of orga	erning the internationa angerous goods code rt Association Organisation demand	al carriage of dangerous goods by road
UFI: unique formula identifier IARC: International Agency for F	lesearch 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.