

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

legislation

## CZ1047 - Carbohydrate Binding Module 48A, Rhizobium sp.

	compilation: 23/ TION 1: IDEN	06/2020 Revised: 12/10/2023 Version: 2 (Replaced 1) TIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
1.1		tifier: CZ1047 - Carbohydrate Binding Module 48A, <i>Rhizobium sp.</i>
		Ammonium sulphate
	CAS:	7783-20-2
	EC:	231-984-1
	Index:	Non-applicable
	REACH:	01-2119455044-46-XXXX
	Other means	s of identification:
	Non-applicable	
1.2	Relevant ide	ntified uses of the substance or mixture and uses advised against:
	Relevant uses:	: Laboratory. For professional users only.
	Uses advised a	against: All uses not specified in this section or in section 7.3
1.3	Details of the	e supplier of the safety data sheet:
1.4	Emorgonovt	elephone number: Contact Local Poison Information Center or Local Emergency Number

## 2.1 Classification of the 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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Date of compilation: 23/06/2020 Revised: 12/10/2023 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.

\*\* Changes with regards to the previous version

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance:

### Chemical description: Mixture of substances

### **Components:**

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

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

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

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

#### 3.2 Mixture:

### Non-applicable

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

Identification	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

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

e of	compilation: 23/06/2020	Revised: 12/10/202	23 Ve	rsion: 2 (Replace	d 1)			
SECT	TION 7: HANDLING AND	STORAGE (continue	ed)					
	Product is non-flammal to avoid the generation conditions and materia C Technical recommenda PREGNANT WOMEN SI necessary safety condi equipment, especially of drink during the procest D Technical recommendat	n of electrostatic charg Is that should be avoic tions on general occupa HOULD NOT BE EXPOS tions (emergency show on the hands and face ( ss, washing hands afte	es that can a led. ational hygien ED TO THIS I vers and eyev See section 8 rwards with s	fect flammable p e PRODUCT. Trans vash stations in c ). Limit manual tr	products. Consul fer in designated close proximity), ransfers to small	t section 10 t d areas that o using persor	for info comply nal prot	rmation on with the rection
	It is recommended to h	ave absorbent materia	l available at c	lose proximity to	the product (Se	e subsection	6.3)	
7.2	Conditions for safe stor	age, including any in	compatibiliti	es:				
	A Technical measures for	storage						
	Store in a cool, dry, we	II-ventilated location						
	B General conditions for	storage						
	Avoid sources of heat,	radiation, static electric	ity and contac	t with food. For a	additional inform	ation see sub	osection	10.5
7.3	Specific end use(s):							
	Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this							
SECT	FION 8: EXPOSURE CON	· ·					5	
SECT 8.1	TION 8: EXPOSURE CON Control parameters: Substances whose occupat	TROLS/PERSONAL F	PROTECTION	l		n OEL, not co		
	ION 8: EXPOSURE CON	TROLS/PERSONAL F	PROTECTION ave to be mor	itored in the wor	kplace (Europea ed in the product		puntry-e	specific
	product. TION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers):	TROLS/PERSONAL F	PROTECTION ave to be mor	itored in the wor	kplace (Europea ed in the product	L	ountry-s	specific
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific	TROLS/PERSONAL F	PROTECTION ave to be mor	itored in the wor ostances containe Short Systemic	kplace (Europea ed in the product exposure Local	L	ountry-s	specific psure Local
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole	TROLS/PERSONAL F	PROTECTION ave to be mor hits for the sub	itored in the wor pstances containe Short Systemic Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable	L Systemic Non-applicabl	ountry-s	specific ssure Local
_	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific	TROLS/PERSONAL F	PROTECTION ave to be mor	itored in the wor ostances containe Short Systemic	kplace (Europea ed in the product exposure Local	L	cong expo c e Ne Ne	specific psure Local
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4	TROLS/PERSONAL F	PROTECTION ave to be mornits for the sub Oral Dermal	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg	cong expo c e Ne Ne	specific osure Local on-applicable
	product. TION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2	TROLS/PERSONAL F	PROTECTION ave to be mornits for the sub Oral Dermal	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg	cong expo c e Ne Ne	specific osure Local on-applicable
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population)	TROLS/PERSONAL F	PROTECTION ave to be mornits for the sub Oral Dermal	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg	cong expo c e Ne Ne	specific osure Local on-applicable
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable	TROLS/PERSONAL F ional exposure limits ha cupational exposure lim ation	PROTECTION ave to be mornits for the sub Oral Dermal	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg	cong expo c e Ne Ne	specific osure Local on-applicable
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC:	TROLS/PERSONAL F ional exposure limits ha cupational exposure lim ation	PROTECTION ave to be mornits for the sub Oral Dermal	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg	cong expo c e Ne Ne	specific ssure Local on-applicable on-applicable
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identific	TROLS/PERSONAL F ional exposure limits ha cupational exposure lim ation	PROTECTION ave to be mor hits for the sub Oral Dermal Inhalation	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg	ong expo c N N N	specific ssure Local on-applicable on-applicable
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification Identification Non-applicable	TROLS/PERSONAL F ional exposure limits ha cupational exposure lim ation	PROTECTION ave to be mornits for the sub Oral Dermal Inhalation STP Soil Intermittent	itored in the wor pstances container Short Non-applicable Non-applicable Non-applicable 10 mg/L 0,043 mg/kg 1,3 mg/L	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Marine water Sediment (Frest	L Systemic Non-applicabl 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ountry-s           c           e         Ne           0,13 m           0,013           0,336	specific ssure Local on-applicable on-applicable on-applicable
8.1	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identific Imidazole CAS: 288-32-4 EC: 206-019-2	TROLS/PERSONAL F ional exposure limits ha cupational exposure lim ation	PROTECTION ave to be mornits for the sub Oral Dermal Inhalation STP Soil	itored in the wor ostances containe Short Systemic Non-applicable Non-applicable Non-applicable	kplace (Europea ed in the product exposure <u>Local</u> Non-applicable Non-applicable Non-applicable	L Systemic Non-applicabl 1,5 mg/kg 10,6 mg/m <sup>3</sup>	0,113 m 0,013	specific ssure Local on-applicable on-applicable on-applicable
	product. FION 8: EXPOSURE CON Control parameters: Substances whose occupat legislation): There are no applicable occ DNEL (Workers): Identific Imidazole CAS: 288-32-4 EC: 206-019-2 DNEL (General population Non-applicable PNEC: Identification Inidazole CAS: 288-32-4	TROLS/PERSONAL F	PROTECTION ave to be mor hits for the sub Oral Dermal Inhalation STP Soil Intermittent Oral	itored 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	kplace (Europea ed in the product exposure Local Non-applicable Non-applicable Non-applicable Fresh water Marine water Sediment (Frest	L Systemic Non-applicabl 1,5 mg/kg 10,6 mg/m <sup>3</sup>	ountry-s           c           e         Ne           0,13 m           0,013           0,336	specific ssure Local on-applicable on-applicable on-applicable

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		Controls/Persoi				
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory respiratory tract protection	Filter mask for gases and vapours	CAT III	EN 405:2002+A1:2010	c	place when there is a taste or smell of the contaminant 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 glove (Material: PVC, Breakthroug time: > 480 min, Thicknes 0.7 mm)	gh 🕻 🗲	EN ISO 21420:2020	Rep	lace the gloves at any sign of deterioratic
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 1SO 4007:2018		n daily and disinfect periodically according nanufacturer´s instructions. Use if there risk of splashing.
E	Body protection					
	Pictogram	PPE	Labelling	CEN Standard		Remarks
	Mandatory complete body protection	Disposable clothing for protection against chemic risks		EN 13034:2005+A1:2009 EN 168:2002 EN ISO 13982- 1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN 464:1994		or professional use only. Clean periodicall cording to the manufacturer's instructions
	Mandatory foot protection	Safety footwear for protection against chemic risk		EN ISO 20345:2011 EN 13832-1:2019	R	eplace boots at any sign of deterioration.
F	Additional emerge	ency measures				
	Emergency mea	asure	Standards	Emergency me	asure	Standards
	Emergency sho	ISO 3864-1	ANSI Z358-1 :2011, ISO 3864-4:20	011 Eyewash stat	ons	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
En	vironmental exp	osure controls:				
spil <b>Vol</b>	lage of both the p atile organic co	roduct and its contain <b>mpounds:</b>	er. For additiona	l information see subse		nmended to avoid environmental .D
	-	ve 2010/75/EU, this p		lowing characteristics:		
	V.O.C. (Supply):		% weight			
	V.O.C. density at		g/m <sup>3</sup> (0 g/L)			
	Average carbon r	iumber: No	n-applicable			

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties:

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



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ate of c	compilation: 23/06/2020 Revised: 12/10/2023	Version: 2 (Replaced 1)
SECT	ION 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:	Greenish
	Odour:	Odourless
	Odour threshold:	Non-applicable *
	Volatility:	
	Boiling point at atmospheric pressure:	Non-applicable *
	Vapour pressure at 20 ºC:	Non-applicable *
	Vapour pressure at 50 °C:	Non-applicable *
	Evaporation rate at 20 °C:	Non-applicable *
	Product description:	
	Density at 20 °C:	1279,9 kg/m <sup>3</sup>
	Relative density at 20 °C:	1,28
	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: Solubility properties:	Non-applicable * 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	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: <b>Other safety characteristics:</b>	Non-applicable *
	Surface tension at 20 °C:	Non-applicable *
	*Not relevant due to the nature of the product, not providing infor	

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Pate of compilation: 23/06/2020 Revised: 12/10/2023 Version: 2 (Replaced 1)							
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)							
	Refraction index: Non-applicable *						
*Not relevant due to the nature of the product, not providing information property of its hazards.							
SECTION 10: STABILITY AND REACTIVITY							
10.1	Reactivity:						
10.2	No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet. Chemical stability:						
	Chemically stable under the indicated conditions of storage, handling and use.						
	Chemically stable under the	e indicated conditions of	storage, handling and use.				
10.3	Chemically stable under the <b>Possibility of hazardous</b>		storage, handling and use.				
10.3	Possibility of hazardous	reactions:	storage, handling and use. that lead to excessive temp	eratures or pressure are	not expected.		
	<b>Possibility of hazardous</b> Under the specified condition	reactions:		eratures or pressure are	not expected.		
	<b>Possibility of hazardous</b> Under the specified condition	reactions: ons, hazardous reactions	that lead to excessive temp	eratures or pressure are	not expected.		
	Possibility of hazardous Under the specified condition Conditions to avoid:	reactions: ons, hazardous reactions	that lead to excessive temp	eratures or pressure are Sunlight	not expected. Humidity		
10.3 10.4	Possibility of hazardous Under the specified condition Conditions to avoid: Applicable for handling and	reactions: ons, hazardous reactions d storage at room temper	that lead to excessive temp				
10.4	Possibility of hazardous Under the specified condition Conditions to avoid: Applicable for handling and Shock and friction	reactions: ons, hazardous reactions d storage at room temper <u>Contact with air</u> Not applicable	that lead to excessive temp ature:	Sunlight	Humidity		
10.4	Possibility of hazardous Under the specified condition Conditions to avoid: Applicable for handling and Shock and friction Not applicable	reactions: ons, hazardous reactions d storage at room temper <u>Contact with air</u> Not applicable	that lead to excessive temp ature:	Sunlight	Humidity		

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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Date of c	ompilation: 23/06/2020 Revised: 12/10/2023 Versio	on: 2 (Replaced 1)				
SECT	ION 11: TOXICOLOGICAL INFORMATION (continued)					
	E- Sensitizing effects:					
	s not contain substances ntain substances classif ostances classified as ha	ied as				
	this effect. For more information see section 3. G- Specific target organ toxicity (STOT)-repeated exposure:					
	<ul> <li>Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are n it does not contain substances classified as hazardous for this effect. 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 a hazardous for this effect. For more information see section 3.</li> <li>H- Aspiration hazard:</li> </ul>					
	Based on available data, the classification criteria are not met, this effect. For more information see section 3. <b>Other information:</b>	as it does not contain sul	ostances classified as ha	zardous for		
	Non-applicable					
	Specific toxicology information on the substances:					
	Identification	A	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 hazards:	LC50 inhalation	>5 mg/L			
	Other information Non-applicable					
SECT	ION 12: ECOLOGICAL INFORMATION					
The e	perimental information related to the eco-toxicological properties o	f the product itself is not	available			
Based For m	on available data, the classification criteria are not met, as it does not information see section 3. <b>Toxicity:</b>			r this effect.		
	Not available					
12.2	Persistence and degradability:					
	Not available					
12.3	Bioaccumulative potential:					
	Not available					
12.4	Mobility in soil:					
	Not available					
12.5	Results of PBT and vPvB assessment:					
	Product does not meet PBT/vPvB criteria					
12.6	Endocrine disrupting properties:					
	Endocrine-disrupting properties: The product does not meet the cr	iteria.				
12.7	Other adverse effects:					
	Not described					
	- CONTINUED ON N					

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## CZ1047 - Carbohydrate Binding Module 48A, Rhizobium sp.

Date of compilation: 23/06/2020

Revised: 12/10/2023

Version: 2 (Replaced 1)

### SECTION 13: DISPOSAL CONSIDERATIONS 13.1 Waste treatment methods: Waste class (Regulation (EU) No Code Description 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: 14.1 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 Special regulations: Non-applicable Tunnel restriction code: Non-applicable see section 9 Physico-Chemical properties: Limited quantities: Non-applicable 14.7 Maritime transport in bulk Non-applicable according to IMO instruments: Transport of dangerous goods by sea: With regard to IMDG 40-20: 14.1 UN number or ID number: Non-applicable Non-applicable 14.2 UN proper shipping name: 14.3 Transport hazard class(es): Non-applicable I abels: Non-applicable 14.4 Packing group: Non-applicable 14.5 Marine pollutant: No 14.6 Special precautions for user Special regulations: Non-applicable EmS Codes: see section 9 Physico-Chemical properties: Limited quantities: Non-applicable Segregation group: Non-applicable 14.7 Maritime transport in bulk Non-applicable according to IMO instruments: Transport of dangerous goods by air: - 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



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: 23/06/2020 Revised: 12,	/10/2023	Version: 2 (Replaced 1)				
SECTION 14: TRANSPORT INFORMATION (continued)						
With regard to IATA/ICAO 2023:						
UN number or ID number:	Non-applicable					
UN proper shipping name:	Non-applicable					
Transport hazard class(es):	Non-applicable					
Labels:	Non-applicable					
Packing group:	Non-applicable					
Environmental hazards:	No					
Special precautions for user						
Physico-Chemical properties:	see section 9					
Maritime transport in bulk according to IMO instruments:	Non-applicable					
	TRANSPORT INFORMATION (         ard to IATA/ICAO 2023:         UN number or ID number:         UN proper shipping name:         Transport hazard class(es):         Labels:         Packing group:         Environmental hazards:         Special precautions for user         Physico-Chemical properties:         Maritime transport in bulk         according to IMO	TRANSPORT INFORMATION (continued)         pard to IATA/ICAO 2023:         UN number or ID number:         UN proper shipping name:         Transport hazard class(es):         Labels:         Packing group:         Environmental hazards:         Special precautions for user         Physico-Chemical properties:         Maritime transport in bulk according to IMO				

## SECTION 15: REGULATORY INFORMATION

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

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

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

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

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

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

## Seveso III:

Non-applicable

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

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

Shall not be used in:

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

—tricks and jokes,

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

## Specific provisions in terms of protecting people or the environment:

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

### Other legislation:

The product could be affected by sectorial legislation

## 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION \*\*

## Legislation related to safety data sheets:

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

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

\*\* Changes with regards to the previous version

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SECTION 16: OTHER INFORMATIO	DN ** (continued)	
COMMISSION REGULATION (EU) CLP Regulation (EC) No 1272/200 · Hazard statements		TON 16):
Texts of the legislative phras	es mentioned in se	ection 2:
H315: Causes skin irritation. H360D: May damage the unborn H319: Causes serious eye irritati		
Texts of the legislative phras	es mentioned in se	ection 3:
The phrases indicated do not ref individual components which ap		If; they are present merely for informative purposes and refer to the
CLP Regulation (EC) No 1272	/2008:	
Acute Tox. 4: H302 - Harmful if s Eye Dam. 1: H318 - Causes serio Repr. 1B: H360D - May damage Skin Corr. 1C: H314 - Causes sev	ous eye damage. the unborn child.	ve damage.
Advice related to training:		, · · · · · 5 ·
Training is recommended in order interpretation of this safety data		al risks for staff using this product and to facilitate their comprehension and e label on the product.
Principal bibliographical sour	ces:	
http://echa.europa.eu http://eur-lex.europa.eu		
Abbreviations and acronyms:		
ADR: European agreement conce IMDG: International maritime da IATA: International Air Transpor	ingerous goods code	al carriage of dangerous goods by road
ICAO: International Civil Aviation COD: Chemical Oxygen Demand BOD5: 5day biochemical oxygen	Organisation	
BCF: Bioconcentration factor LD50: Lethal Dose 50	uemanu	
LC50: Lethal Concentration 50 EC50: Effective concentration 50		
LogPOW: Octanolwater partition Koc: Partition coefficient of orga		
UFI: unique formula identifier IARC: International Agency for R	esearch 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.