	acco	rding to Regulation	(EC) No 1907/2006 (REACH) as amended		
		Phytohe	magglutinin (PHA)		
Creati	on date 21s	t July 2023	Revision no.		
Revisi	on date		Version 1		
SECT	ION 1: Identification of th	e substance/mixt	ure and of the company/undertaking		
. 1 .	Product identifier		Phytohemagglutinin (PHA)		
	Substance / mixture		mixture		
	Number		ED7634		
.2.	Relevant identified uses of the substance or mixture and uses advised against				
	Mixture's intended use				
	stimulation reagents				
	The use descriptors				
	SU 24	Scientific rese	arch and development		
	PC 21	Laboratory ch	emicals		
	PROC 15	Use as laborat	cory reagent		
	Mixture uses advised ag	ainst			
	The product should not be	used in ways other	than those referred in Section 1.		
.3.	Details of the supplier of the safety data sheet				
	Manufacturer				
	Name or trade name		EXBIO Praha, a.s.		
	Address		Nad Safinou II / 341, Vestec, 25	5250	
			Czech Republic		
	Phone		+420261090666		
	E-mail		orders@exbio.cz		
	Web address		www.exbio.cz		
	Competent person responsible for the safety data sheet				
	Name		EXBIO Praha, a.s.		
	E-mail		orders@exbio.cz		
.4.	Emergency telephone number				
	National Health Service (N	HS) 111			
	National poisoning informa	tion centre Scotland	i, NHS 24: 111		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

Full text of all classifications and hazard statements is given in the section 16.

2.2. Label elements

none

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 9008-97-3	PHA-P	≤0,05		

Full text of all classifications and hazard statements is given in the section 16.

	according to Regulation (EC) No 1907/2006 (REACH) as amended Phytohemagglutinin (PHA) Creation date 21st July 2023 Revision no.					
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SECTI	ON 4: First aid m	easures				
4.1.		rst aid measures				
	information from	r own safety. If any health p this safety data sheet.	problems are manifested or if in	doubt, inform a doctor and show him		
	If inhaled					
	Terminate the exposure immediately; move the affected person to fresh air.					
	If on skin					
	Remove contaminated clothes.					
	If in eyes					
	Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contac lenses immediately if worn by the affected person.					
	If swallowed					
		ith with clean water. In the e	vent of issues, find medical help	L		
.2.	Most important symptoms and effects, both acute and delayed					
	If inhaled					
	Possible irritation of airways, cough, headache.					
	If on skin					
	Not expected.					
	If in eyes					
	Possible irritation.					
	If swallowed					
	Stomach pain, na	usea, diarrhoea.				
1.3.	Indication of any immediate medical attention and special treatment needed					
	Symptomatic trea	tment				

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves. Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

- **6.1. Personal precautions, protective equipment and emergency procedures** Follow the instructions in the Sections 7 and 8.
- 6.2. Environmental precautions
 Prevent contamination of the soil and entering surface or ground water.
 6.3. Methods and material for containment and cleaning up

6.3. Methods and material for containment and cleaning up
 Place the product mechanically in an appropriate manner. Dispose of the collected material according to the
 instructions in the section 13.

 6.4. Reference to other costions

6.4. Reference to other sections See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

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7.3. Specific end use(s)

stimulation reagents

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains no substances for which occupational exposure limits are set.

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection
Protective goggles.
Skin protection
Other protection: protective workwear.
Respiratory protection
Mask with a filter in a poorly ventilated environment.
Thermal hazard
Not available.
Environmental exposure controls
Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
physical state	solid at 20 °C
color	data not available
Odour	data not available
рН	data not available
Melting point/freezing point	data not available
Initial boiling point and boiling range	data not available
Flash point	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
explosive limits	data not available
Vapour pressure	data not available
Solubility(ies)	
solubility in water	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	
Kinematic viscosity	data not available
Other information	
not available	

SECTION 10: Stability and reactivity

10.1. Reactivity not available
10.2. Chemical stability

9.2.

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions Unknown.

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10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

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10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

SECTION 12: Ecological information

- 12.1. Toxicity 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

according to Regulation (EC) No 1907/2006 (REACH) as amended

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Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. No. 871 of 2007). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number

not subject to transport regulations

- 14.2. UN proper shipping name not relevant
- 14.3. Transport hazard class(es)
- not relevant **14.4.** Packing group not relevant
- 14.5. Environmental hazards not relevant
- **14.6.** Special precautions for user Reference in the Sections 4 to 8.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code not relevant

SECTION 15: Regulatory information

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

Clean Air Act 1993 as amended. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Public health act 1961. Environmental Protection Act 1990 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

not available

SECTION 16: Other information

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

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 Key to abbreviations and acronyms used in the safety data sheet
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 ADR
 European agreement concerning the international carriage of dangerous goods by

ADIX	road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Training guidalinas	

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The first edition of the GB version of the safety data sheet.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.