Printing date 06/04/2020

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Reviewed on 06/04/2020

Identification					
Product identifie	r			CEDI	
-	osin porcine ca. 15 n	nilliAnson units/m	g	JLK	VH
Article number:	-		<u>o</u>	serving scie	entists
CAS Number:	51020				
9001-75-6					
EC number:				X	
232-629-3				\sim	
Index number:					
647-008-00-6	1, /,1		1 • 1		
Application of th	e substance / the mi	xture Laboratory o	cnemicals	(Δ)	
	oplier of the safety d	ata sheet			
Manufacturer/Su				Co	
SERVA Electroph Carl-Benz-Str. 7	ioresis GmbH			(2)	
D-69115 Heidelb	ara		C		
Tel.: +49 6221 1.			03		
FAX: +49 6221 1			0		
msds.info@serva					
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Emergency telep	artment: Product Saj	jery aepariment Te	1 +49 0221 130	640-55	
	none number: ncy Information in co	use of poisoning.			
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	in German or Englis		17210		
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Hazard(s) ident	tification				
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(Contd. of page 1) (Contd. of page 1)
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If experiencing respiratory symptoms: Call a poison center/doctor.
· Classification system:
· NFPA ratings (scale 0 - 4)
Health = 2
Fire = 0
2 0 Reactivity = 0
· HMIS-ratings (scale 0 - 4)
$\frac{\text{HEALTH}}{\text{T}} = \frac{12}{2}$
FIRE O $Fire = 0$
REACTIVITY Reactivity = 0
· Other hazards
· Results of PBT and vPvB assessment
· PBT : PBT - assessment not available.
· vPvB : vPvB - assessment not available.
3 Composition/information on ingredients
- composition information on instructions

- · Chemical characterization: Substances
- CAS No. Description 9001-75-6 Pepsin A
- Identification number(s)
- EC number: 232-629-3
- · Index number: 647-008-00-6
- · Description:
- **MW:** ca. 36 000

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
- Immediately wash with water and soap and rinse thoroughly. Consult doctor if you feel unwell.
- · After eye contact:

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

· After swallowing:

Rinse out mouth and then drink plenty of water.

- Seek medical advice if discomfort occurs.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

5 *Fire-fighting measures*

- · Extinguishing media
- · Suitable extinguishing agents:

CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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- Special hazards arising from the substance or mixture In case of fire, the following can be released: Nitrogen oxides (NOx) Carbon monoxide and carbon dioxide
- · Advice for firefighters

· Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
 Ensure adequate ventilation Avoid contact with the eyes and skin.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up:* Dispose contaminated material as waste according to item 13. Pick up mechanically.
- Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals
- **PAC-1:** Substance is not listed.
- PAC-2: Substance is not listed.
- · PAC-3: Substance is not listed.

7 Handling and storage

· Handling:

- *Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.*
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store at -15 to -25 °C
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed and store in dry conditions.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Store protective clothing separately. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

(Contd. on page 4)

(Contd. of page 2)

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(Contd. of pa	ige 3)
Breathing equipment:	
Short term filter device:	
Filter P2	
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or lor exposure use respiratory protective device that is independent of circulating air.	nger
Protection of hands:	
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Protective gloves	
Due to missing tests no recommendation to the glove material can be given for the product/ the preparat the chemical mixture.	tion/
Selection of the glove material on consideration of the penetration times, rates of diffusion and degradation	the
Material of gloves	
The selection of the suitable gloves does not only depend on the material, but also on further mark quality and varies from manufacturer to manufacturer.	ts of
Penetration time of glove material	
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to observed.	o be
For the permanent contact of a maximum of 15 minutes gloves made of the following materials suitable:	are
Natural rubber, NR	
Nitrile rubber, NBR	
Ena protoction. Safety classes	

- Eye protection: Safety glasses Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and General Information	· · · · · · · · · · · · · · · · · · ·	
Appearance:		
Form:	lyophilisate	
Color:	White	
Odor:	Odorless	
Odor threshold:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Product is not flammable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density:	Not determined.	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	

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		(Contd. of page 4
· Solubility in / Miscibility with	h	
Water:	Soluble.	
• Partition coefficient (n-octan	o l/water): Not determined.	
· Viscosity:		
Dynamic:	no information available	
Kinematic:	no information available	
• Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No further relevant informations available.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: Avoid contact with strong oxidizers.
- · Hazardous decomposition products: In case of fire: See Section 5

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: Sensitization possible through inhalation.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

· Toxicity

- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow product to reach ground water, water course or sewage system. Water hazard class 1 (Self-assessment): slightly hazardous for water

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

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(Contd. of page 5)

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Disposal must be made according to official regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· Recommendation:

Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

• Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

14 Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	e Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

15 Regulatory information

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

- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not listed.
- · Proposition 65 Substance is not listed.
- · Chemicals known to cause cancer: Substance is not listed.
- Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Cancerogenity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms GHS07, GHS08

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(Contd. of page 6) · Signal word Danger · Hazard statements Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. · Precautionary statements Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If experiencing respiratory symptoms: Call a poison center/doctor. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department · Contact: +49 6221 13840-35 • Date of preparation / last revision 06/04/2020 / 9 · Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation PBT: persistent, bioaccumulative, toxic substance (REACH) vPvB: very persistent, very bioaccumulative substance (REACH) REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals CLP: Regulation on classification, labelling and packaging of substances and mixtures bw: body weight ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit **REL:** Recommended Exposure Limit Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A Resp. Sens. 1: Respiratory sensitisation - Category 1 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 • * Data compared to the previous version altered.