Printing date 09/24/2024

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Reviewed on 09/24/2024

Product identifier		SFB\//
Trade name: <u>Pronase E</u> from Streptomyces griseus	min. 5 DMC-U/mg	serving scientist
Article number: 33635		
CAS Number:		\sim
9036-06-0 EC number:		
232-909-5		
Index number:		
647-014-00-9		
Application of the substance / the mixtu		9
Details of the supplier of the safety data	sheet	
Manufacturer/Supplier: SERVA Electrophoresis GmbH		
Carl-Benz-Str. 7	Co	
D-69115 Heidelberg	.05	
Tel.: +49 6221 13840-0		
FAX: +49 6221 13840-10	\mathbf{O}	
msds.info@serva.de		
Information department: Product Safety	Department Tel.: +49 6221 13840-35	
Emergency telephone number:	of maintaine	
Emergency medical information in case Poison Information Center Mainz-Tel: +		
	+> (0) 0131 172+0	
(Advice in German and English)		
(Advice in German and English)		
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Hazard(s) identification		
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Hazard(s) identification Classification of the substance or mixtu	re	
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Hazard(s) identification Classification of the substance or mixtu		
Hazard(s) identification Classification of the substance or mixtu	H334 May cause allergy of	
Hazard(s) identification Classification of the substance or mixtu		
Hazard(s) identification Classification of the substance or mixtu GHS08 Sensitization - Respiratory 1	H334 May cause allergy of	
Hazard(s) identification Classification of the substance or mixtu	H334 May cause allergy of	
Hazard(s) identification Classification of the substance or mixtu GHS08 Sensitization - Respiratory 1 GHS07	H334 May cause allergy breathing difficulties if	
Hazard(s) identification Classification of the substance or mixtu GHS08 Sensitization - Respiratory 1 GHS07 Skin Irritation 2	H334 May cause allergy o breathing difficulties if H315 Causes skin irritation.	inhaled.
Hazard(s) identification Classification of the substance or mixtu GHS08 Sensitization - Respiratory 1 GHS07 Skin Irritation 2 Eye Irritation 2A	H334 May cause allergy breathing difficulties if H315 Causes skin irritation. H319 Causes serious eye irri	inhaled. tation.
Hazard(s) identification Classification of the substance or mixtu GHS08 Sensitization - Respiratory 1 GHS07 Skin Irritation 2 Eye Irritation 2A	H334 May cause allergy o breathing difficulties if H315 Causes skin irritation.	inhaled. tation.
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Safety Data Sheet acc. to OSHA HCS

Printing date 09/24/2024

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Trade name: Pronase E

from Streptomyces griseus min. 5 DMC-U/mg

· 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.

- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment:
- · PBT: PBT Assessment not available.
- · **vPvB**: vPvB Assessment not available.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description:

9036-06-0 Proteinase, Streptomyces griseus

- · Identification number(s):
- EC number: 232-909-5
- · Index number: 647-014-00-9

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor. • *After eye contact:*

Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.

- · After swallowing:
- Rinse out mouth. Drink plenty of water and provide fresh air. Consult a doctor in case of complaints.
- 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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Trade name: Pronase E

from Streptomyces griseus min. 5 DMC-U/mg

(Contd. of page 2)

· Special hazards arising from the substance or mixture

Formation of hazardous vapors and gases possible during heating or in case of fire. 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 breathing apparatus.

· Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Wear protective clothing. Ensure adequate ventilation Avoid formation of dust.

• 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 section 13. Pick up mechanically.*
- Protective Action Criteria for Chemicals
- · PAC-1: Substance is not listed.
- · PAC-2: Substance is not listed.
- · PAC-3: Substance is not listed.
- · 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.

7 Handling and storage

• *Precautions for safe handling:* Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.

· Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle. Storage at +2 to +8 °C
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store container tightly closed and dry.
- Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

- · 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

• Additional information about design of technical systems: No further data; see section 7.

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Safety Data Sheet acc. to OSHA HCS

Printing date 09/24/2024

Reviewed on 09/24/2024

Trade name: Pronase E

· Personal protective equipment:

· Breathing equipment: Short term filter device:

· Protection of hands:

the chemical mixture.

Protective gloves

degradation · Material of gloves:

observed.

Filter P2

from Streptomyces griseus min. 5 DMC-U/mg

· General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Store protective clothing separately. Immediately remove all soiled and contaminated clothing. Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ Selection of the glove material on consideration of the penetration times, rates of diffusion and the The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. · 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 be

- For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
- Natural rubber, NR Nitrile rubber, NBR
- · Eye protection: Safety glasses
- · Body protection: Protective work clothing

9 Physical and chemical properties

General Information:	
Color:	light ivory color
Odor:	Characteristic
Odor threshold:	Not determined.
Melting point/Melting range:	No information available
Boiling point/Boiling range:	No information available
Flammability (solid, gaseous):	No information available
Explosion limits:	
Lower:	No information available
Upper:	No information available
Flash point:	No information available
Decomposition temperature:	No information available
pH-value:	No information available
Viscosity:	-
Kinematic viscosity:	No information available
Dynamic viscosity:	No information available
Solubility in / Miscibility with:	-
Water:	Soluble.
Partition coefficient (n-octanol/water):	No information available
Vapor pressure:	No information available
Vapor pressure:	*
Density:	No information available

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Safety Data Sheet acc. to OSHA HCS

No information available

lyophilisate

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Trade name: Pronase E

from Streptomyces griseus min. 5 DMC-U/mg

- · Relative density:
- Other information
- · Appearance:
- · Form:
- · Important information on protection of health and
- environment, and on safety:
- · Danger of explosion:

The product is not explosive, but the formation of explosive dust/air mixtures is possible.

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 information available.
- · Conditions to avoid: High temperatures
- · Incompatible materials: Avoid contact with strong oxidizing agents.
- Hazardous decomposition products: In case of fire: see section 5

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.
- on the skin: Causes skin irritation.
- on the eye: Causes serious eye irritation.
- Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- · Specific target organ toxicity single exposure: May cause respiratory irritation.
- · 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.
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Results of PBT and vPvB assessment:
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects:
- · 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

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Trade name: Pronase E

from Streptomyces griseus min. 5 DMC-U/mg

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13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

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	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 No further relevant information available.
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): Substance is not listed.
- · 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) 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
- · Signal word Danger

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Trade name: Pronase E

from Streptomyces griseus min. 5 DMC-U/mg

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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 09/24/2024 / -
 - · 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 relatif au transport international 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 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 Irritation 2: Skin corrosion/irritation - Category 2 Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A Sensitization - Respiratory 1: Respiratory sensitisation - Category 1 Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) - Category 3