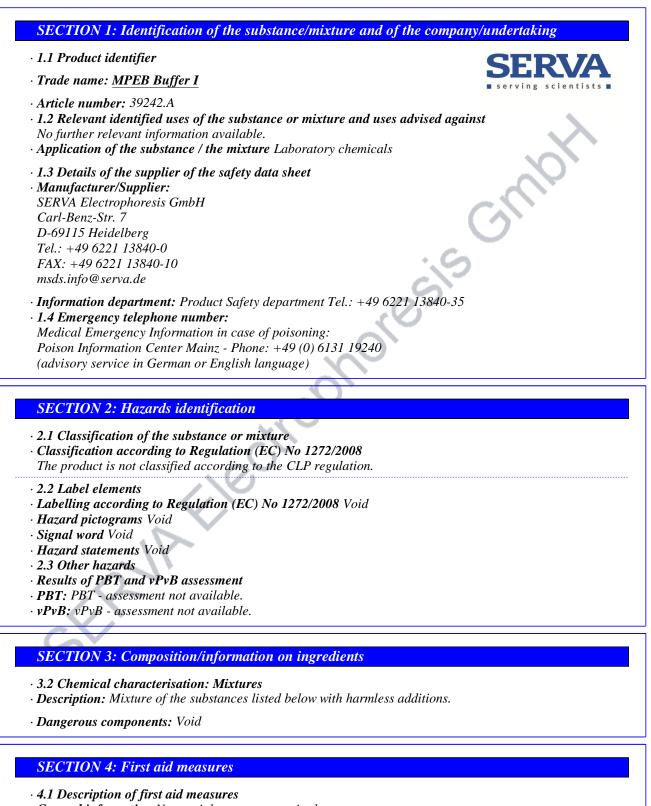
03.05.2018	Kit Components
Product code	Description
39242	Mammalian Membrane Protein Extraction Kit
Components:	
39242.A	MPEB Buffer I
39242.B	MPEB Buffer II
39242.C	MPEB Buffer III
39102	Protease Inhibitor Mix M

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- · General information No special measures required.
- · 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.

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#### Trade name: MPEB Buffer I

- After swallowing Wash out mouth. Seek medical advice if discomfort occurs.
- 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents
- $CO_2$ , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • 5.2 Special hazards arising from the substance or mixture
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### **SECTION 6: Accidental release measures**

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing. Ensure adequate ventilation

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
  6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
- 6.4 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.

#### **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: Store at +2 to +8 °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.
- 7.3 Specific end use(s) No further relevant information available.

# SECTION 8: Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.

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#### Trade name: MPEB Buffer I

(Contd. of page 2) · 8.2 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 Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work. · Breathing equipment: Suitable respiratory protective device recommended. · Protection of hands: 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/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves 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. 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. 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 observed. For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Nitrile rubber, NBR Natural rubber, NR · Eye protection: Safety glasses · Body protection: Protective work clothing. **SECTION 9: Physical and chemical properties** 9.1 Information on basic physical and chemical properties General Information

· Appearance:		
Form:	Fluid	
Colour:	Not determined.	
· Odour:	not determined	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
· Change in condition		
Melting point/freezing point:	undetermined	
Initial boiling point and boiling range:	undetermined	
· Flash point:	Not applicable	
· Ignition temperature:	no information available	
· Decomposition temperature:	Not determined.	
· Self igniting:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
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Trade name: MPEB Buffer I

	(Contd. of page
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Soluble
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· VOC %:	0.00 %
· VOC g/l:	0.0 g/l
• 9.2 Other information	No further relevant information available.

#### SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No further relevant informations available.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: In case of fire: See Section 5

#### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.*
- · STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- $\cdot$  Aspiration hazard Based on available data, the classification criteria are not met.

# SECTION 12: Ecological information

- · 12.1 Toxicity
- $\cdot$  Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.

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Trade name: MPEB Buffer I

- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

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

· 12.5 Results of PBT and vPvB assessment

· **PBT:** PBT - assessment not available.

- · **vPvB**: vPvB assessment not available.
- 12.6 Other adverse effects No further relevant information available.

#### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- *Recommendation Disposal must be made according to official regulations.*
- · Uncleaned packagings:
- · Recommendation:

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

# SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA · Class · Label	Void -
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	No relevant informations available.
· 14.6 Special precautions for user	No relevant informations available.
· 14.7 Transport in bulk according to Annex 1 Marpol and the IBC Code	<b>II of</b> No relevant informations available.

# SECTION 15: Regulatory information

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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#### Trade name: MPEB Buffer I

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#### **SECTION 16: Other information**

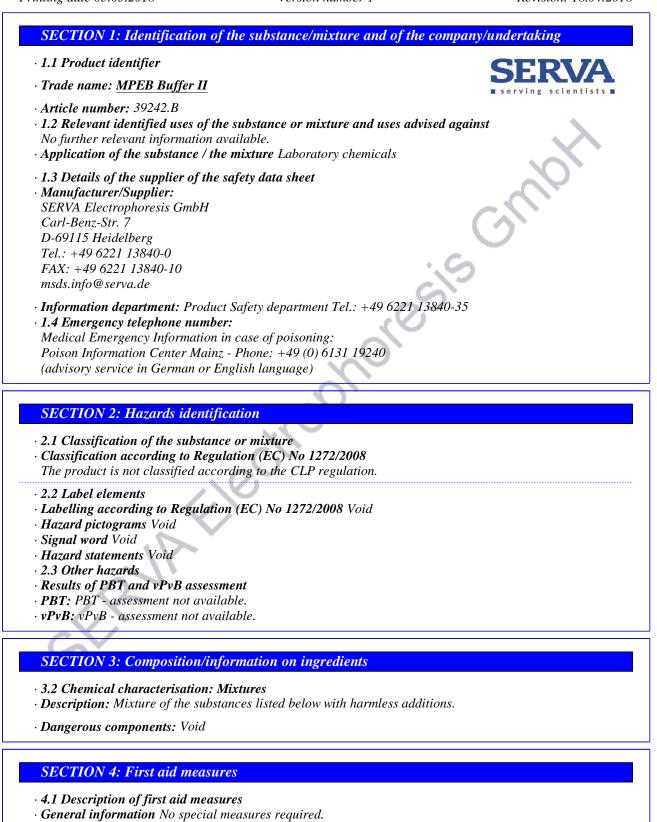
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

Abbreviations and acronyms:
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
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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: Chemical Abstracts Service (division of the American Chemical Society)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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- 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.

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Trade name: MPEB Buffer II

- After swallowing Wash out mouth. Seek medical advice if discomfort occurs.
- $\cdot$  4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents
- $CO_2$ , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • 5.2 Special hazards arising from the substance or mixture
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### **SECTION 6:** Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing. Ensure adequate ventilation

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
  6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13. • **6.4 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.

# **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: Store at +2 to +8 °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.
- 7.3 Specific end use(s) No further relevant information available.

# SECTION 8: Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.

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#### Trade name: MPEB Buffer II

· 8.2 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 Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work. · Breathing equipment: Suitable respiratory protective device recommended. · Protection of hands: 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/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves 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. 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. 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 observed. For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Nitrile rubber, NBR Natural rubber, NR · Eye protection: Safety glasses · Body protection: Protective work clothing. **SECTION 9: Physical and chemical properties** · 9.1 Information on basic physical and chemical properties General Information

· Appearance:		
Form:	Fluid	
Colour:	Not determined.	
· Odour:	not determined	
· Odour threshold:	Not determined.	
· pH-value:	Not determined.	
<ul> <li>Change in condition Melting point/freezing point: Initial boiling point and boiling range:</li> </ul>	undetermined undetermined	
· Flash point:	Not applicable	
· Ignition temperature:	no information available	
· Decomposition temperature:	Not determined.	
· Self igniting:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
		(Contd. on page

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Trade name: MPEB Buffer II

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· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
· Density:	Not determined
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Soluble
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· VOC %:	0.00 %
· VOC g/l:	0.0 g/l
$\cdot$ 9.2 Other information	No further relevant information available.

#### SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No further relevant informations available.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: In case of fire: See Section 5

#### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.*
- STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-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
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.

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Trade name: MPEB Buffer II

- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

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

· 12.5 Results of PBT and vPvB assessment

· **PBT:** PBT - assessment not available.

- · **vPvB**: vPvB assessment not available.
- 12.6 Other adverse effects No further relevant information available.

#### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- *Recommendation Disposal must be made according to official regulations.*
- · Uncleaned packagings:
- · Recommendation:

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

# SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA · Class · Label	Void -
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	No relevant informations available.
· 14.6 Special precautions for user	No relevant informations available.
· 14.7 Transport in bulk according to Annex 1 Marpol and the IBC Code	<b>II of</b> No relevant informations available.

# **SECTION 15: Regulatory information**

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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#### Trade name: MPEB Buffer II

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#### **SECTION 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.

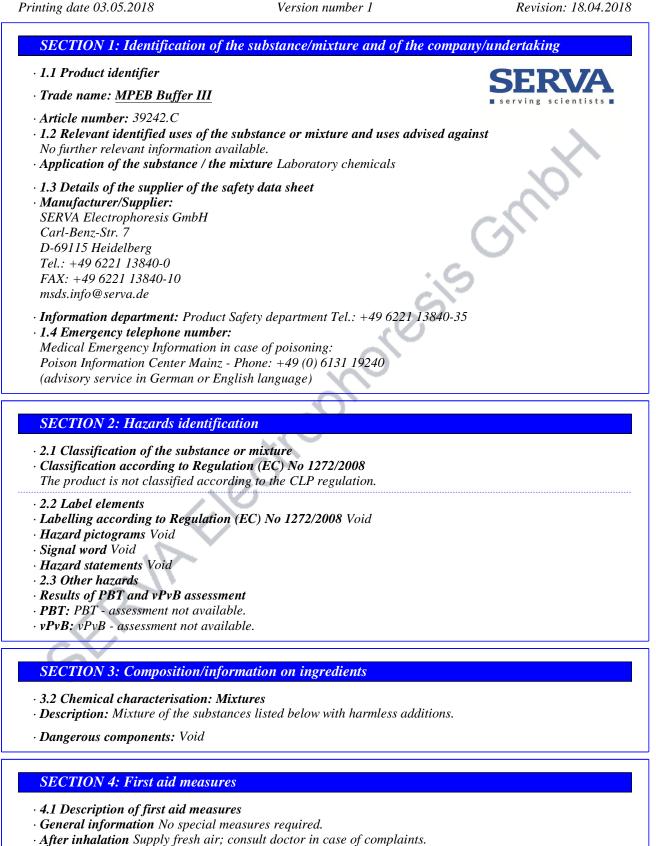
· Department issuing SDS: Product safety department

· Abbreviations and acronyms: 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 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 IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative  $\cdot$  \* Data compared to the previous version altered.

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- · 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.

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Trade name: MPEB Buffer III

- After swallowing Wash out mouth. Seek medical advice if discomfort occurs.
- $\cdot$  4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents
- $CO_2$ , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • 5.2 Special hazards arising from the substance or mixture
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### **SECTION 6:** Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing. Ensure adequate ventilation

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
  6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Dispose contaminated material as waste according to item 13. • **6.4 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.

# **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: Store at +2 to +8 °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.
- 7.3 Specific end use(s) No further relevant information available.

# SECTION 8: Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists that were valid during the creation were used as basis.

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#### Trade name: MPEB Buffer III

· Explosive properties:

(Contd. of page 2) · 8.2 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 Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work. · Breathing equipment: Suitable respiratory protective device recommended. · Protection of hands: 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/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves 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. 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. 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 observed. For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Nitrile rubber, NBR Natural rubber, NR · Eve protection: Safety glasses · Body protection: Protective work clothing. **SECTION 9: Physical and chemical properties** · 9.1 Information on basic physical and chemical properties General Information · Appearance: Form: Fluid Colour: Not determined. · Odour: not determined · Odour threshold: Not determined. · pH-value: Not determined. · Change in condition Melting point/freezing point: undetermined Initial boiling point and boiling range: undetermined no information available · Flash point: · Ignition temperature: no information available · Decomposition temperature: Not determined. · Self igniting: Product is not selfigniting.

Product does not present an explosion hazard.

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Trade name: MPEB Buffer III

	(Contd. of page
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not determined.
Density:	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Soluble
Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Solvent content:	
Organic solvents:	0.0 %
• VOC %:	0.00 %
· VOC g/l:	0.0 g/l
• 9.2 Other information	No further relevant information available.

#### **SECTION 10: Stability and reactivity**

• 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No further relevant informations available.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: In case of fire: See Section 5

#### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.*
- · STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- $\cdot$  Aspiration hazard Based on available data, the classification criteria are not met.

# SECTION 12: Ecological information

- · 12.1 Toxicity
- $\cdot$  Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.

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Trade name: MPEB Buffer III

- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

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

· 12.5 Results of PBT and vPvB assessment

· **PBT:** PBT - assessment not available.

- · **vPvB**: vPvB assessment not available.
- 12.6 Other adverse effects No further relevant information available.

#### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- *Recommendation Disposal must be made according to official regulations.*
- · Uncleaned packagings:
- · Recommendation:

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

# SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA · Class · Label	Void -
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	No relevant informations available.
· 14.6 Special precautions for user	No relevant informations available.
· 14.7 Transport in bulk according to Annex 1 Marpol and the IBC Code	<b>II of</b> No relevant informations available.

# **SECTION 15: Regulatory information**

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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GR

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#### Trade name: MPEB Buffer III

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#### **SECTION 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.

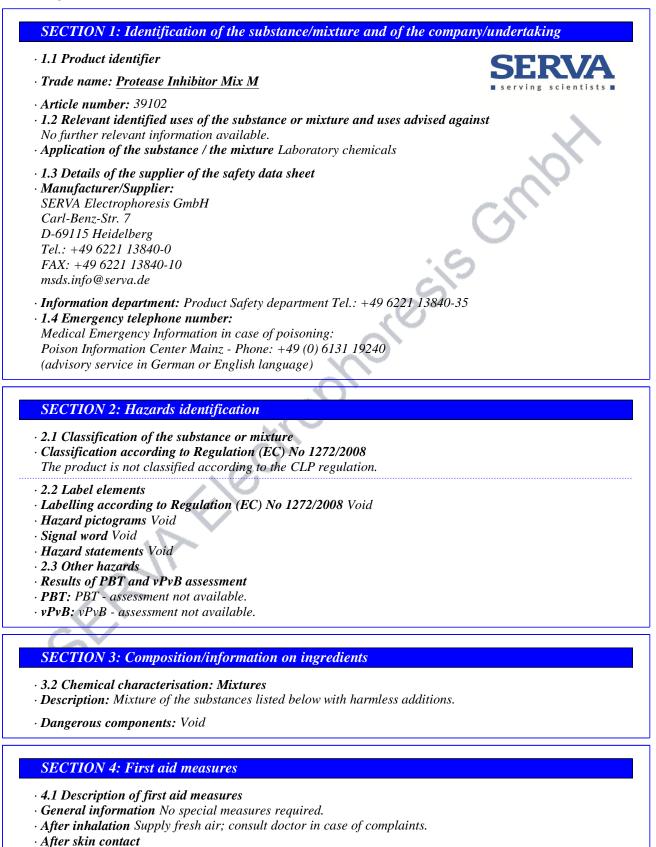
· Department issuing SDS: Product safety department

· Abbreviations and acronyms: 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 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 IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative  $\cdot$  \* Data compared to the previous version altered.

<sup>•</sup> Contact: +49 6221 13840-35

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Revision: 17.04.2018



- Immediately wash with water and soap and rinse thoroughly. Consult doctor if you feel unwell.
- · After eye contact

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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.

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GB

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#### Trade name: Protease Inhibitor Mix M

- · After swallowing
- Wash out mouth. Drink plenty of water and supply fresh air. Seek medical advice if discomfort occurs. • 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available. • **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents
- $CO_2$ , extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • 5.2 Special hazards arising from the substance or mixture
- In case of fire, the following can be formed, but not limited to:
- Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

- Carbon monoxide and carbon dioxide
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### **SECTION 6:** Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing. Ensure adequate ventilation Avoid formation of dust.
  6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
  6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- Dispose contaminated material as waste according to item 13.
- 6.4 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.

#### **SECTION 7: Handling and storage**

- 7.1 Precautions for safe handling Prevent formation of dust.
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 7.2 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.
- · 7.3 Specific end use(s) No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

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

- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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	that were valid during the creation were used as basis.
8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic r	
Keep away from foodstuffs, bever	
Store protective clothing separate	•
Immediately remove all soiled and	
Avoid contact with the eyes and sk Wash hands before breaks and at	
	espiratory protective device recommended.
Protection of hands:	
The glove material has to be impe Due to missing tests no recommen	ermeable and resistant to the product/ the substance/ the preparation. Indation to the glove material can be given for the product/ the preparation
	on consideration of the penetration times, rates of diffusion and the
degradation Material of gloves	
The selection of the suitable glo quality and varies from manuf- substances, the resistance of the checked prior to the application.	oves does not only depend on the material, but also on further marks of facturer to manufacturer. As the product is a preparation of several glove material can not be calculated in advance and has therefore to b
Penetration time of glove materia	
observed.	to be found out by the manufacturer of the protective gloves and has to b
	a maximum of 15 minutes gloves made of the following materials ar
suitable:	
Natural rubber, NR	
1 miniai 1 nooci, 1 m	
Nitrile rubber, NBR	
Nitrile rubber, NBR Eye protection: Safety glasses	
Nitrile rubber, NBR	clothing.
Nitrile rubber, NBR Eye protection: Safety glasses	clothing.
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work	
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che	emical properties
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information	emical properties
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance:	emical properties
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information	emical properties
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour:	emical properties I and chemical properties Powder
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour:	emical properties I and chemical properties Powder White
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition	emical properties I and chemical properties Powder White
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point:	emical properties I and chemical properties Powder White Odourless undetermined
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling	emical properties I and chemical properties Powder White Odourless undetermined g range: undetermined
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point:	emical properties If and chemical properties Powder White Odourless undetermined g range: undetermined Not applicable
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point: Self igniting:	emical properties I and chemical properties Powder White Odourless undetermined g range: undetermined Not applicable Product is not selfigniting.
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point: Self igniting: Explosive properties:	emical properties emical properties Powder White Odourless undetermined g range: undetermined Not applicable Product is not selfigniting. Product does not present an explosion hazard.
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point: Self igniting: Explosive properties: Density:	emical properties I and chemical properties Powder White Odourless undetermined g range: undetermined Not applicable Product is not selfigniting.
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point: Self igniting: Explosive properties:	emical properties emical properties Powder White Odourless undetermined g range: undetermined Not applicable Product is not selfigniting. Product does not present an explosion hazard.
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point: Self igniting: Explosive properties: Density: Solubility in / Miscibility with	emical properties I and chemical properties Powder White Odourless undetermined g range: undetermined Not applicable Product is not selfigniting. Product does not present an explosion hazard. Not determined
Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work SECTION 9: Physical and che 9.1 Information on basic physical General Information Appearance: Form: Colour: Odour: Change in condition Melting point/freezing point: Initial boiling point and boiling Flash point: Self igniting: Explosive properties: Density: Solubility in / Miscibility with Water: Solvent content:	emical properties  I and chemical properties  Powder White Odourless  undetermined grange: undetermined Not applicable Product is not selfigniting. Product does not present an explosion hazard. Not determined Soluble

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Trade name: Protease Inhibitor Mix M

• 9.2 Other information

No further relevant information available.

#### **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No further relevant informations available.
- 10.4 Conditions to avoid high ttemperatures
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: In case of fire: See Section 5

#### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.
- STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-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
- Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water course or sewage system.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** PBT assessment not available.
- · **vPvB**: vPvB assessment not available.
- 12.6 Other adverse effects No further relevant information available.

#### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- Recommendation Disposal must be made according to official regulations.
- · Uncleaned packagings:
- · Recommendation:

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

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Trade name: Protease Inhibitor Mix M

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

SECTION 14: Transport information	
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA · Class · Label	Void -
· ADN/R Class:	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
$\cdot$ 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Anne Marpol and the IBC Code	e <b>x II of</b> Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

# **SECTION 15: Regulatory information**

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

· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 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

- 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: meintent biogenerulating trais substance (BEACH)
- 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*

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
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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Revision: 17.04.2018

Trade name: Protease Inhibitor Mix M

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

 $\cdot$  \* Data compared to the previous version altered.

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