07/12/2022	Kit Components
Product code	Description
7033800	(MPure-32) MagBeads FastDNA® Kit for FFPE
Components:	
7033805	96-Well Reagent Plates
7033801	Proteinase K
7033802	Protease Dissolve Buffer
7033803	Buffer DPS
7033804	Buffer ATL
7033906	8-strip A (Cover for Magnetic Rod)
7033907	Elution Tubes



Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- · Trade name: 96-Well Reagent Plates
- · Article number: 7033805
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com
- · Information department: Quality Control Department · Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



Flam. Liq. 2 H225 Highly flammable liquid and vapor.



Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

GHS07

Acute Tox. 4 H302 Harmful if swallowed. Acute Tox. 4 H332 Harmful if inhaled.

· Label elements

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms



· Signal word Danger

· Hazard-determining components of labeling: Guanidine Thiocyanate Guanidine Hydrochloride

(Contd. on page 2)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 96-Well Reagent Plates

(Contd. of page 1)
TRITON® X-100
· Hazard statements
Highly flammable liquid and vapor.
Harmful if swallowed or if inhaled.
Causes severe skin burns and eye damage.
· Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dusts or mists.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
In case of fire: Use CO2, powder or water spray to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· Classification system:
· NFPA ratings (scale 0 - 4)
Health = 3
$\frac{4}{Fire} = 4$
$\frac{3}{Reactivity} = 0$
· HMIS-ratings (scale 0 - 4)
HEALTH The Health = $*3$
FIRE 4 $Fire = 4$
REACTIVITY O Reactivity = 0
• Other hazards
· Results of PBT and vPvB assessment
• PBT: Not applicable.
• <i>v</i>PvB : Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture: consisting of the following components.

(Contd. on page 3)

⁻ US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 96-Well Reagent Plates

		(Contd. of page 2)
· Dangerous components	:	
CAS: 64-17-5 EINECS: 200-578-6 RTECS: KQ 6300000	ethyl alcohol	10-50%
CAS: 50-01-1 EINECS: 200-002-3	Guanidine Hydrochloride	10%
CAS: 593-84-0 EINECS: 209-812-1	Guanidine Thiocyanate	≥5-≤10%
CAS: 9002-93-1 EC number: 618-344-0 RTECS: MD0907700	TRITON® X-100	≥3-<10%

4 First-aid measures

· Description of first aid measures

· General information:

Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.

• After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.

- · After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist consult a Doctor.

- · 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.
- \cdot Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
 Wear protective equipment. Keep unprotected persons away.
 Environmental precautions:
- Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

• Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

(Contd. on page 4)

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Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 96-Well Reagent Plates

		(Contd. of page 3)
Use neutral	0 0	
	hanically, dispose contaminated material as waste according to Section 13.	
	uate ventilation.	
	o other sections	
	7 for information on safe handling.	
	8 for information on personal protection equipment.	
	13 for disposal information.	
	ction Criteria for Chemicals	
· PAC-1:		
64-17-5	ethyl alcohol	1,800 ppm
593-84-0	Guanidine Thiocyanate	0.98 mg/m ³
77-86-1	TRIS	18 mg/m ³
26628-22-8	Sodium Azide	0.026 mg/m ³
· PAC-2:		
64-17-5	ethyl alcohol	3300* ppm
593-84-0	Guanidine Thiocyanate	11 mg/m ³
77-86-1	TRIS	190 mg/m ³
26628-22-8	Sodium Azide	0.29 mg/m ³
· PAC-3:		
64-17-5	ethyl alcohol	15000* ppm
593-84-0	Guanidine Thiocyanate	65 mg/m ³
77-86-1	TRIS	1,200 mg/m ³
26628-22-8	Sodium Azide	5.3 mg/m ³

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes. Prevent formation of aerosols.

- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- *Storage:* 15-30°C
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- 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 Section 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

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Trade name: 96-Well Reagent Plates

(Contd. of page 4)

At this time, the other constituents have no known exposure limits.

64-17-5 ethyl alcohol

PEL Long-term value: 1900 mg/m³, 1000 ppm

REL Long-term value: 1900 mg/m³, 1000 ppm

TLV Short-term value: 1000 ppm

A3

• 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.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

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. 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- \cdot Information on basic physical and chemical properties
- General Information
- Appearance:
- Form:
- Color:
- Odor: • Odor threshold:

According to product specification According to product specification Indeterminate Not determined.

(Contd. on page 6)

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Trade name: 96-Well Reagent Plates

	(Contd. of page 5
· pH-value:	Not determined.
• Change in condition Boiling point/Boiling range:	36 °C (96.8 °F)
· Flash point:	<23 °C (<73.4 °F)
· Flammability (solid, gaseous):	Not applicable.
• Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapo mixtures are possible.
Explosion limits: Lower: Upper:	Not Applicable Not Applicable
· Vapor pressure:	Not Applicable
· Density: · Relative density · Vapor density · Evaporation rate	Not Applicable Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Not Determined Soluble.
Partition coefficient (n-octanol/wa	uter): Not determined.
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
Solvent content: Organic solvents: Water: VOC content:	20.0 % 54.8 % 20.00 % 200.0 g/l / 1.67 lb/gal
Solids content:	20.2 %
• 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 dangerous reactions known.
- · Conditions to avoid

No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

- Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

(Contd. on page 7)

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Trade name: 96-Well Reagent Plates

(Contd. of page 6)

	alues that	are relevant for classification:
ATE (Acute	-	
Oral I	LD50	166 mg/kg
	LD50	11,000 mg/kg
Inhalative 1	LC50/4 h	15 mg/L
593-84-0 Gi	uanidine	Thiocyanate
Oral I	LD50	500 mg/kg (ATE)
Dermal I	LD50	1,100 mg/kg (ATE)
Inhalative 1	LC50/4 h	1.5 mg/L (ATE)
9002-93-1 1		
Oral 1	LD50	1,800 mg/kg (rat)
Primary irro on the skin: on the eye: Sensitization Additional t	: No irrita Strong irr n: No sen t oxicologi	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information:
Primary irr on the skin: on the eye: Sensitization Additional t	itant effec No irrita Strong irr n: No sen toxicologi	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information:
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen	itant effect No irrita Strong irr n: No sen toxicologi t shows th ic catego	8,000 mg/kg (rabbit) et: Int effect. The titant with the danger of severe eye injury. Sitizing effects known. cal information: Information: e following dangers according to internally approved calculation methods for preparation ries
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter	itant effect No irrita Strong irr n: No sen toxicologi t shows th ic catego rnational	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer)
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter 64-17-5 eth	itant effect No irrita Strong irr n: No sen toxicologi t shows th ic categou rnational nyl alcoho	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer) 1
Primary irr on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter 64-17-5 eth NTP (Natio	itant effec No irrita Strong irr n: No sen toxicologi t shows th ic categou rnational nyl alcoho nal Toxic	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer) l tology Program)
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter 64-17-5 eth	itant effec No irrita Strong irr n: No sen toxicologi t shows th ic categou rnational nyl alcoho nal Toxic	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer) l tology Program)
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter 64-17-5 eth NTP (Natio None of the	itant effect No irrita Strong irr n: No sen toxicologi t shows th ic categou rnational ayl alcoho nal Toxic ingredien	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer) l tology Program)
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter 64-17-5 eth NTP (Natio None of the	itant effec No irrita Strong irr n: No sen toxicologi t shows th ic categou rnational nyl alcoho nal Toxic ingredien	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer) l tology Program) tts is listed. onal Safety & Health Administration)
Primary irri on the skin: on the eye: Sensitization Additional t The product Harmful Irritant Carcinogen IARC (Inter 64-17-5 eth NTP (Natio None of the OSHA-Ca (itant effec No irrita Strong irr n: No sen toxicologi t shows th ic categou rnational nyl alcoho nal Toxic ingredien	8,000 mg/kg (rabbit) et: nt effect. itant with the danger of severe eye injury. sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparation ries Agency for Research on Cancer) l tology Program) tts is listed. onal Safety & Health Administration)

9002-93-1 TRITON® X-100

Oral LC50/96 h 8.9 mg/L (Pimephales promelas)

· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

 $\cdot \textit{Bioaccumulative potential No further relevant information available}.$

• *Mobility in soil* No further relevant information available.

• Additional ecological information:

· General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 8)

⁻ US

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Trade name: 96-Well Reagent Plates

(Contd. of page 7)

Must not reach bodies of water or drainage ditch undiluted or unneutralized. Danger to drinking water if even small quantities leak into the ground.

· Results of PBT and vPvB assessment

• *PBT:* Not applicable.

• **vPvB:** Not applicable.

• Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• *Recommendation:* Can not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

• Recommendation: Discard must be made according to official regulations.

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

UN-Number	111/2722
DOT, ADR, IMDG, IATA	UN2733
UN proper shipping name	
DOT	Amines, flammable, corrosive, n.o.s. (Ethanol, Sodium azide)
ADR	2733 AMINES, FLAMMABLE, CORROSIVE, N.O.S. (ETHANO
IMDG	(ETHYL ALCOHOL), SODIUM AZIDE) AMINES, FLAMMABLE, CORROSIVE, N.O.S. (ETHANO
ImDO	(ETHYL ALCOHOL), SODIUM AZIDE)
IATA	AMINES, FLAMMABLE, CORROSIVE, N.O.S. (ETHANO)
	SODIUM AZIDE)
Transport hazard class(es)	
DOT	
POMMER LOOP	
Class	3 Flammable liquids
1.1.1	3, 8
Label	
Label ADR	
	3 Flammable liquids

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	(Contd. of pag
IMDG	
Class	3 Flammable liquids
Label	3/8
IATA	
Class Label	3 Flammable liquids 3 (8)
	5 (6)
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substance TRITON® X-100
Special precautions for user Hazard identification number (Kemler code	Warning: Flammable liquids
EMS Number:	F-E,S-C
Segregation groups	Alkalis
Stowage Category	A
Stowage Code	SW2 Clear of living quarters.
Segregation Code	SG35 Stow "separated from" SGG1-acids
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
ADR	
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (\widetilde{EQ})	Code: E1
-	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN ''Model Regulation'':	UN 2733 AMINES, FLAMMABLE, CORROSIVE, N.O. (ETHANOL (ETHYL ALCOHOL), SODIUM AZIDE), 3 (8), III

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Trade name: 96-Well Reagent Plates

(Contd. of page 9)

	h and environmental regulations/legislation specific for the substance or mixture elevant information available.	
Sara	·	
Section 355	(extremely hazardous substances):	
None of the i	ngredients is listed.	
Section 313	(Specific toxic chemical listings):	
None of the i	ngredients is listed.	
TSCA (Toxi	c Substances Control Act):	
All compone	nts have the value ACTIVE.	
Hazardous A	Air Pollutants	
None of the i	ngredients is listed.	
Proposition	65	
Chemicals k	nown to cause cancer:	
None of the i	ngredients is listed.	
Chemicals k	nown to cause reproductive toxicity for females:	
None of the i	ngredients is listed.	
Chemicals k	nown to cause reproductive toxicity for males:	
None of the i	ngredients is listed.	
Chemicals k	nown to cause developmental toxicity:	
64-17-5 ethy	l alcohol	
Carcinogeni	c categories	
-	onmental Protection Agency)	
None of the i	ngredients is listed.	
TLV (Thresh	nold Limit Value)	
64-17-5 ethy	alcohol	A

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

• *Hazard-determining components of labeling: Guanidine Thiocyanate Guanidine Hydrochloride TRITON*® X-100

• Hazard statements Highly flammable liquid and vapor. Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage.

(Contd. on page 11)

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Trade name: 96-Well Reagent Plates

(Contd. of page 10)
· Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dusts or mists.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Immediately call a poison center/doctor.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
In case of fire: Use CO2, powder or water spray to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· 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: Quality Control Dept.
- · Contact:
- · Date of preparation / last revision 07/12/2022 / -
- Abbreviations and acronyms: Flam. Liq. 2: Flammable liquids – Category 2 Acute Tox. 4: Acute toxicity – Category 4 Skin Corr. 1C: Skin corrosion/irritation – Category 1C Eye Dam. 1: Serious eye damage/eye irritation – Category 1



Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- · Trade name: Proteinase K
- Article number: 7033801
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

Information department: Quality Control Department
 Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

- Hazard-determining components of labeling: Proteinase K
 Hazard statements Causes skin irritation. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling.

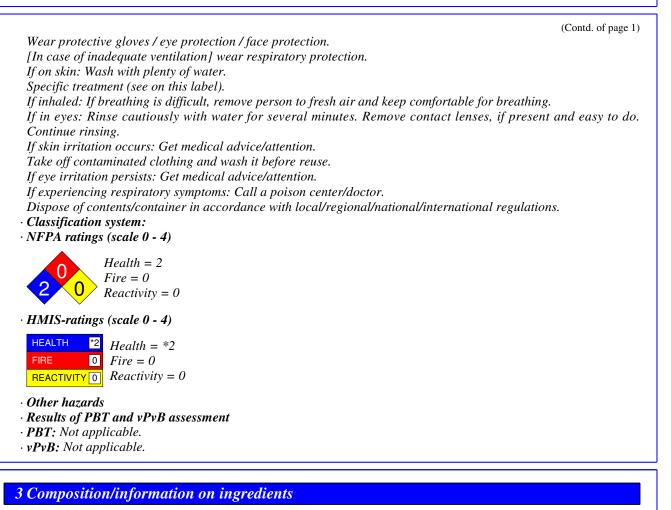
(Contd. on page 2)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Proteinase K



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· Chemical characterization: Mixtures
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· Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 39450-01-6 Proteinase K EINECS: 254-457-8

4 First-aid measures

- · Description of first aid measures
- · General information:

Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.

- After inhalation: If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- After skin contact: Wash off with soap and plenty of water. Consult a Doctor.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: If symptoms persist consult doctor.
- · Information for doctor

· Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

US

10%

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Proteinase K

• *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
 Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

 For personal protection see section 8.
 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

• Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Pick up mechanically, dispose contaminated material as waste according to Section 13.

- Ensure adequate ventilation.
- **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:

None of the ingredients is listed.

· PAC-2:

None of the ingredients is listed.

· PAC-3:

None of the ingredients is listed.

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes. Prevent formation of aerosols.

- Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities

· Storage: 15-30°C

- Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:

(Contd. on page 4)

(Contd. of page 2)

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Trade name: Proteinase K

(Contd. of page 3)

• 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 Section 7.

- · 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.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

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. 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:
 - Form: Color:

According to product specification According to product specification

(Contd. on page 5)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade	name:	Proteinase	K

	(Contd. of pag
Odor:	Indeterminate
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	See section 10
Explosion limits:	
Lower:	Not Applicable
Upper:	Not Applicable
Vapor pressure:	Not Applicable
Density:	Not Applicable
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	Not Determined
Water:	Soluble.
Partition coefficient (n-octanol/wa	ater): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Solids content:	10.0 %
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 dangerous reactions known.

· Conditions to avoid

No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

(Contd. on page 6)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Proteinase K

(Contd. of page 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:
- The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is 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:

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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

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

(Contd. on page 7)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Proteinase K

(Contd. of page 6)

UN-Number	
DOT, ADR, IMDG, IATA	Not regulated
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated
Transport hazard class(es)	
DOT, ADR, IMDG, IATA	
Class	Not regulated
Packing group	
DOT, ADR, IMDG, IATA	Not regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of	f
MARPOL73/78 and the IBC Code	Not applicable.

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 8)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Proteinase K

(Contd. of page 7)

• *TLV* (*Threshold Limit Value*) None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

· Hazard-determining components of labeling:

- Proteinase K
- · Hazard statements
- Causes skin irritation.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- · Precautionary statements
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Wash thoroughly after handling.
- *Wear protective gloves / eye protection / face protection.*
- [In case of inadequate ventilation] wear respiratory protection.
- If on skin: Wash with plenty of water.
- Specific treatment (see on this label).
- If inhaled: If breathing is difficult, 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 skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash it before reuse.
- If eye irritation persists: Get medical advice/attention.
- If experiencing respiratory symptoms: Call a poison center/doctor.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- · 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: Quality Control Dept.
- · Contact:
- · Date of preparation / last revision 07/12/2022 / -
- Abbreviations and acronyms: 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



Page 1/7

Safety Data Sheet acc. to OSHA HCS

Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- · Trade name: Protease Dissolve Buffer
- · Article number: 7033802
- · Molecular Formula N/A
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

Information department: Quality Control Department
 Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

• *Classification of the substance or mixture The substance is not classified, according to the Globally Harmonized System (GHS).*

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- Hazard statements Void
- · Classification system:
- · NFPÅ ratings (scale 0 4)

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· HMIS-ratings (scale 0 - 4)



• Other hazards

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 2)

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Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Protease Dissolve Buffer

(Contd. of page 1)

3 Composition/information on ingredients

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

Non-Hazardous Aqueous Buffer

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Flush eyes with running water as a precaution.
- After swallowing: If symptoms persist consult doctor.
- · 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

• Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

 \cdot Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· 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.

(Contd. on page 3)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Protease Dissolve Buffer

(Contd. of page 2)

• PAC-3:

Substance is not listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 15-30°C
- Requirements to be met by storerooms and receptacles: No special requirements.
- Further information about storage 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 Section 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:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

Information on basic physic	cal and chemical properties	
General Information		
Appearance:		
Form:	According to product specification	
Color:	According to product specification	
Odor:	Indeterminate	
• Odor threshold:	Not determined.	

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Protease Dissolve Buffer

		(Contd. of page
pH-value:	Not determined.	
Change in condition		
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	See section 10	
Explosion limits:		
Lower:	Not Applicable	
Upper:	Not Applicable	
Vapor pressure:	Not Applicable	
Density:	Not Applicable	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with	Not Determined	
Water:	Fully miscible.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
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 dangerous reactions known.
- · Conditions to avoid

No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.

(Contd. on page 5)

⁻ US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Protease Dissolve Buffer

(Contd. of page 4)

• on the eye: Irritant and potentially harmful

• Sensitization: No sensitizing effects known.

 $\cdot \textit{Additional toxicological information:}$

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

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

· UN-Number		
DOT, ADR, IMDG, IATA	Not regulated	
· UN proper shipping name		
DOT, ADR, IMDG, IATA	Not regulated	

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Protease Dissolve Buffer

		(Contd. of page 5)
· Transport hazard class(es)		
· DOT, ADR, IMDG, IATA · Class	Not regulated	
· Packing group · DOT, ADR, IMDG, IATA	Not regulated	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
· UN "Model Regulation":	Not regulated	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	
No further relevant information available.	

· Sara

· Section 3.	55 ((extremely	hazardous	substances):	
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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

 \cdot 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.

· Carcinogenic 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 Void

· Hazard pictograms Void

(Contd. on page 7)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Protease Dissolve Buffer

- · Signal word Void
- · Hazard statements Void
- · 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: Quality Control Dept.

· Contact:

· Date of preparation / last revision 07/12/2022 / -

(Contd. of page 6)

US



Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- · Trade name: Buffer DPS
- Article number: 7033803
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

• Information department: Quality Control Department • Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Danger
- · Hazard-determining components of labeling:
- n-Hexadecane
- · Hazard statements
- May be fatal if swallowed and enters airways.
- · Precautionary statements
- If swallowed: Immediately call a poison center/doctor.
- *Do NOT induce vomiting. Store locked up.*
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- · Classification system:
- · NFPA ratings (scale 0 4)



(Contd. on page 2)

Printing date 07/12/2022

Reviewed on 07/12/2022

(Contd. of page 1)

50-90%

Trade name: Buffer DPS

· HMIS-ratings (scale 0 - 4)



• Other hazards

· Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 544-76-3 n-Hexadecane EINECS: 208-878-9 RTECS: ML9200000

4 First-aid measures

· Description of first aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Flush eyes with running water as a precaution.
- · After swallowing: If symptoms persist consult doctor.
- · 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: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
 Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate
 ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
 For personal protection see section 8.
 Environmental precautions:
 Dilute with plenty of water.
 Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer DPS

• Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Pick up mechanically, dispose contaminated material as waste according to Section 13.	(Contd. of page 2)
· 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:	
544-76-3 n-Hexadecane	35 mg/m ³
· PAC-2:	
544-76-3 n-Hexadecane	380 mg/m ³
• PAC-3:	
544-76-3 n-Hexadecane	2,800 mg/m ³

7 Handling and storage

· Handling:

· Precautions for safe handling

Avoid direct contect with skin. Use protective clothing including gloves, lab coat, face/eye protection.

- · Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- Storage: 15-30°C
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage 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 Section 7.
- · 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.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed.
- Wash hands before breaks and at the end of work.
- Breathing equipment: Not required. • 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. 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.

(Contd. on page 4)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer DPS

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

• Information on basic physical and • General Information	chemical properties
• General Information • Appearance:	
Form:	According to product specification
Color:	According to product specification
· Odor:	Indeterminate
• Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	He determined
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
• Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
• Danger of explosion:	See section 10
· Explosion limits:	
Lower:	Not Applicable
Upper:	Not Applicable
· Vapor pressure:	Not Applicable
· Density:	Not Applicable
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	Not Determined
· Water:	Soluble.
· Partition coefficient (n-octanol/way	ter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
• Other information	No further relevant information available.

10 Stability and reactivity

• *Reactivity* No further relevant information available.

(Contd. on page 5)

(Contd. of page 3)

[·]US

Printing date 07/12/2022

Reviewed on 07/12/2022

(Contd. of page 4)

Trade name: Buffer DPS

- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid

No further relevant information available.

- Avoid contact with acids. Contact liberates a toxic gas.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- \cdot on the eye: Irritant and potentially harmful
- Sensitization: No sensitizing effects known.
- \cdot Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is 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:
- Water hazard class 1 (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

(Contd. on page 6)

Printing date 07/12/2022

Trade name: Buffer DPS

Reviewed on 07/12/2022

(Contd. of page 5)

· Uncleaned packagings:

• Recommendation: Discard must be made according to official regulations.

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

UN-Number	
DOT, ADR, IMDG, IATA	Not regulated
· UN proper shipping name · DOT, ADR, IMDG, IATA	Not regulated
Transport hazard class(es)	
DOT, ADR, IMDG, IATA	
· Class	Not regulated
· Packing group	
· DOT, ADR, IMDG, IATA	Not regulated
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.

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

544-76-3 n-Hexadecane

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

• Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

(Contd. on page 7)

ACTIVE

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Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer DPS

(Contd. of page 6)

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Danger

Hazard-determining components of labeling: n-Hexadecane
Hazard statements May be fatal if swallowed and enters airways.
Precautionary statements

If swallowed: Immediately call a poison center/doctor.

Do NOT induce vomiting.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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: Quality Control Dept.
- · Contact:
- · Date of preparation / last revision 07/12/2022 / -
- · Abbreviations and acronyms:
- Asp. Tox. 1: Aspiration hazard Category 1



Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- · Trade name: Buffer ATL
- Article number: 7033804
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

• Information department: Quality Control Department • Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Warning

Hazard-determining components of labeling: Sodium Dodecyl Sulfate, Molecular Biology Reagent
Hazard statements Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye irritation.
Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

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Trade name: Buffer ATL

(Contd. of page 1)
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
If on skin: Wash with plenty of water.
Specific treatment (see on this label).
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 skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.
· Classification system:
· NFPA ratings (scale 0 - 4)
$\begin{array}{c} \textbf{Health} = 2\\ Fire = 0\\ Reactivity = 0 \end{array}$
• HMIS-ratings (scale 0 - 4)
HEALTH *2 $Health = *2$
FIRE 0 $Fire = 0$
REACTIVITY O <i>Reactivity</i> = 0
· Other hazards
· Results of PBT and vPvB assessment
• PBT: Not applicable.
· vPvB: Not applicable.
Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent

10%

EINECS: 205-788-1 RTECS: WT1050000

4 First-aid measures

- · Description of first aid measures
- · General information:

Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.

• After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.

- After skin contact: Wash off with soap and plenty of water. Consult a Doctor.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

• After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist consult a Doctor.

(Contd. on page 3)

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Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer ATL

· 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. E ventilation. Evacuate personnel to safe areas. Avoid breathing dust.	insure adequate
For personal protection see section 8.	
• Environmental precautions:	
Dilute with plenty of water.	
Do not allow to enter sewers/ surface or ground water.	
• Methods and material for containment and cleaning up:	
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Pick up mechanically, dispose contaminated material as waste according to Section 13.	
Ensure adequate ventilation.	
· 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:	
151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent	3.9 mg/m ³
· PAC-2:	
151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent	$43 mg/m^3$
· PAC-3:	
151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent	260 mg/m ³

7 Handling and storage

· Handling:

- · Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes. Prevent formation of aerosols.
- Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities

• Storage: 15-30°C

- Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:

(Contd. on page 4)

(Contd. of page 2)

US -

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer ATL

(Contd. of page 3)

• 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 Section 7.

- · 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.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
- · Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

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. 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:
 - Form: Color:

According to product specification According to product specification

(Contd. on page 5)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade	name:	Buffer	ATL
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	(Contd. of pag
Odor:	Indeterminate
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
• Decomposition temperature:	Not determined.
• Auto igniting:	Product is not selfigniting.
• Danger of explosion:	See section 10
Explosion limits:	
Lower:	Not Applicable
Upper:	Not Applicable
· Vapor pressure:	Not Applicable
· Density:	Not Applicable
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	Not Determined
· Water:	Soluble.
• Partition coefficient (n-octanol/wa	ater): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Solids content:	10.0 %
• 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 dangerous reactions known.

· Conditions to avoid

No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: No dangerous decomposition products known.

(Contd. on page 6)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer ATL

(Contd. of page 5)

1 Toxicolo	gical inf	prmation
		ological effects
· Acute toxic	city:	
		are relevant for classification:
ATE (Acut	•	
Inhalative	LC50/4 h	15 mg/L
151-21-3 S	odium Do	decyl Sulfate, Molecular Biology Reagent
Oral	LD50	1,200 mg/kg (rat)
Dermal	LD50	580 mg/kg (rabbit)
Inhalative	LC50/4 h	1.5 mg/L (ATE)
• on the eye: • Sensitizatio • Additional The produc Harmful Irritant	• Irritating on: No sen toxicologi ct shows th	sitizing effects known. cal information: e following dangers according to internally approved calculation methods for preparations:
· Carcinoge	-	ries Agency for Research on Cancer)
None of the		
•		
None of the		ology Program)
•		
	· •	onal Safety & Health Administration)
None of the	e ingreaier	is is usiea.
2 Ecologic	al inforn	nation
· Toxicity		
• Aquatic to:	*	
ATE (Acut	•	
Oral LC50)/96 h 43	-85 mg/L (Oncorhynchus mykiss)

151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent

Oral LC50/96 h 4.3-8.5 mg/L (Oncorhynchus mykiss)

29 mg/L (Pimephales promelas)

· 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:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 7)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer ATL

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

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

· Uncleaned packagings:

• Recommendation: Discard must be made according to official regulations.

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

UN-Number		
DOT, ADR, IMDG, IATA	Not regulated	
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA		
Class	Not regulated	
Packing group		
DOT, ADR, IMDG, IATA	Not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex I	I of	
MARPOL73/78 and the IBC Code	Not applicable.	

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

• Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

151-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent

· Hazardous Air Pollutants

None of the ingredients is listed.

(Contd. on page 8)

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[·]US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer ATL

· Proposition 65

(Contd. of page 7)

• Chemicals known to cause cancer: None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



· Signal word Warning

· Hazard-determining components of labeling: Sodium Dodecyl Sulfate, Molecular Biology Reagent · Hazard statements Harmful if swallowed or if inhaled. Causes skin irritation. Causes serious eye irritation. · Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves / eye protection / face protection. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. Specific treatment (see on this label). 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 skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 9)

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

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Buffer ATL

(Contd. of page 8)

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: Quality Control Dept.
- · Contact:
- · Date of preparation / last revision 07/12/2022 / -
- Abbreviations and acronyms: Acute Tox. 4: Acute toxicity – Category 4 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A



Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- · Trade name: 8-strip A (Cover for Magnetic Rod)
- Article number: 7033906
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

• Information department: Quality Control Department • Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

• *Classification of the substance or mixture The substance is not classified, according to the Globally Harmonized System (GHS).*

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 0	Health = 0
FIRE 0	Fire = 0
REACTIVITY 0	Reactivity = 0

· Other hazards

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 8-strip A (Cover for Magnetic Rod)

(Contd. on page 2)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 8-strip A (Cover for Magnetic Rod)

(Contd. of page 1)

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Flush eyes with running water as a precaution.
- After swallowing: If symptoms persist consult doctor.
- · 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

• Environmental precautions: Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up: 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 No special measures required.
- Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- Storage: 15-30°C
- · Requirements to be met by storerooms and receptacles: No special requirements.

(Contd. on page 3)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 8-strip A (Cover for Magnetic Rod)

• Further information about storage 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 Section 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:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment: Not required.

• 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Not required.

9 Physical and chemical properties

· Information on basic physical and chemical properties

[·] General Information

According to product specification
According to product specification
Indeterminate
Not determined.
Not applicable.
Undetermined.
Not applicable.
Product is not flammable.
Not determined.
Not determined.
See section 10
Not Applicable
-

(Contd. of page 2)

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 8-strip A (Cover for Magnetic Rod)

		(Contd. of page 3)
Upper:	Not Applicable	
· Vapor pressure:	Not applicable.	
· Density:	Not Applicable	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	Not Determined	
· Water:	Easily soluble.	
· Partition coefficient (n-octanol/wa	t ter): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
VOC content:	0.00 %	
Solids content:	100.0 %	
• 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 dangerous reactions known.
- · Conditions to avoid
- No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritant and potentially harmful
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

(Contd. on page 5)

⁻ US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: 8-strip A (Cover for Magnetic Rod)

(Contd. of page 4)

· 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:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- \cdot **Mobility in soil** No further relevant information available.
- \cdot Additional ecological information:
- · General notes:

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

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

13 Disposal considerations

- Waste treatment methods
- · Recommendation:
 - Can not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- · Recommendation: Discard must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleaning agents.

UN-Number		
DOT, ADR, IMDG, IATA	Not regulated	
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA		
Class	Not regulated	
Packing group DOT, ADR, IMDG, IATA	Not regulated	
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.	

Reviewed on 07/12/2022

(Contd. of page 5)

Trade name: 8-strip A (Cover for Magnetic Rod)

• UN "Model Regulation":

Printing date 07/12/2022

Not regulated

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

\cdot Section 355 (extremely hazardous substances):

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is not listed.

· Hazardous Air Pollutants

Substance is not listed.

· Proposition 65

· 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.

· Carcinogenic 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 Void

· Hazard pictograms Void

· Signal word Void

• Hazard statements Void

· 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: Quality Control Dept.

· Contact:

· Date of preparation / last revision 07/12/2022 / -



Printing date 07/12/2022

Reviewed on 07/12/2022

- **1** Identification
- · Product identifier
- Trade name: <u>Elution Tubes</u>
- Article number: 7033907
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

Information department: Quality Control Department
 Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

• *Classification of the substance or mixture The substance is not classified, according to the Globally Harmonized System (GHS).*

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 0	Health = 0
FIRE 0	Fire = 0
REACTIVITY 0	Reactivity = 0

· Other hazards

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.

3 Composition/information on ingredients

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

(Contd. on page 2)

US

Printing date 07/12/2022

Reviewed on 07/12/2022

Trade name: Elution Tubes

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4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- After eye contact: Flush eyes with running water as a precaution.
- After swallowing: If symptoms persist consult doctor.
- · 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

• Environmental precautions: Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up: 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 No special measures required.
- Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- Storage: 15-30°C
- · Requirements to be met by storerooms and receptacles: No special requirements.

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- Further information about storage 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 Section 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:
- The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.
- 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Not required.

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information

· Appearance:	
Form:	According to product specification
Color:	According to product specification
· Odor:	Indeterminate
· Odor threshold:	Not determined.
· pH-value:	Not applicable.
· Change in condition	
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:	See section 10
· Explosion limits:	
Lower:	Not Applicable
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Upper:	Not Applicable	
· Vapor pressure:	Not applicable.	
· Density:	Not Applicable	
· Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	Not Determined	
· Water:	Easily soluble.	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
VOC content:	0.00 %	
Solids content:	100.0 %	
• 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 dangerous reactions known.
- · Conditions to avoid
- No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritant and potentially harmful
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

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· 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:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- \cdot **Mobility in soil** No further relevant information available.
- \cdot Additional ecological information:
- · General notes:

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

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

13 Disposal considerations

- Waste treatment methods
- Recommendation:
 - Can not be disposed of together with household garbage. Do not allow product to reach sewage system.
- · Uncleaned packagings:
- · Recommendation: Discard must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleaning agents.

· UN-Number · DOT, ADR, IMDG, IATA	Not regulated	
UN proper shipping name DOT, ADR, IMDG, IATA	Not regulated	
Transport hazard class(es)		
DOT, ADR, IMDG, IATA Class	Not regulated	
Packing group DOT, ADR, IMDG, IATA	Not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
• Transport in bulk according to Annex . MARPOL73/78 and the IBC Code	II of Not applicable.	

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· UN "Model Regulation":

Not regulated

15 Regulatory information

• Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

• Sara

 \cdot 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

· 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.

· Carcinogenic 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 Void

· Hazard pictograms Void

· Signal word Void

• Hazard statements Void

· 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: Quality Control Dept.

· Contact:

· Date of preparation / last revision 07/12/2022 / -