06/14/2022	Kit Components
Product code	Description
7033200	(MPure-32) MagBeads FastDNA® Kit for Feces
Components:	
7033101	Lysing Matrix E
7033102	RNase A Solution
7033201	Pre-Wash Buffer
7033202	Lysis Buffer F1
7033203	Lysis Buffer F2
7033204	PPS (Protein Precipitate Solution)
7033206	Reagent Plate (96 well plate *6)
7033107	8 Strips Tip Comb



Printing date 06/14/2022

Reviewed on 06/02/2022

- **1** Identification
- · Product identifier
- · Trade name: Lysing Matrix E
- Article number: 7033101
- · 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 product 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 \bigcirc Health = 0FIRE \bigcirc Fire = 0REACTIVITY \bigcirc Reactivity = 0

· Other hazards

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

3 Composition/information on ingredients

- · CAS No. Description
- Matrix E
- · Chemical characterization: Mixtures
- · Description: Mixture: consisting of the following components.

(Contd. on page 2)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysing Matrix E

(Contd. of page 1)

· Dangerous components: Void

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:

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 No special measures required.
- Information about protection against explosions and fires: No special requirements.

(Contd. on page 3)

US -

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysing Matrix E

(Contd. of page 2)

- · 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:
- 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 \cdot **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: Not required.

Information on basic physical and General Information	chemical properties	
Appearance:		
Form:	Solid material	
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):	Not determined.	

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysing Matrix E

		(Contd. of page
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 applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with	Not Determined	
Water:	Not determined.	
	Insoluble.	
Partition coefficient (n-octanol/wa	ter): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
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.
- \cdot on the eye: Irritant and potentially harmful
- Sensitization: No sensitizing effects known.

(Contd. on page 5)

US -

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysing Matrix E

· Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

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.

· 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 of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Discard must be made according to official regulations.

14 Transport information · UN-Number · DOT, ADR, ADN, IMDG, IATA · UN proper shipping name · DOT, ADR, ADN, IMDG, IATA Not regulated (Contd. on page 6) US

(Contd. of page 4)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysing Matrix E

		(Contd. of page 5)
· Transport hazard class(es)		
· DOT, ADR, ADN, 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 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.

· 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 Void

· Hazard pictograms Void

(Contd. on page 7)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysing Matrix E

· 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 06/14/2022 / -

(Contd. of page 6)



Printing date 06/14/2022

Reviewed on 06/10/2022

- **1** Identification
- · Product identifier
- · Trade name: RNase A Solution
- · Article number: 7033102
- 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 product 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)

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· HMIS-ratings (scale 0 - 4)



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

3 Composition/information on ingredients

• CAS No. Description 9001-99-4 Ribonuclease • EC number: 232-646-6

(Contd. on page 2)

[–] us

Printing date 06/14/2022

Reviewed on 06/10/2022

Trade name: RNase A Solution

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

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.
- \cdot 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.
- \cdot 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).
- · 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.

(Contd. on page 3)

US

(Contd. of page 1)

Printing date 06/14/2022

Reviewed on 06/10/2022

(Contd. of page 2)

Trade name: RNase A Solution

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:

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:

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. 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: Goggles recommended during refilling.

9 Physical and chemical properties · Information on basic physical and chemical properties · General Information · Appearance: Form: According to product specification According to product specification Color: · Odor: Indeterminate Not determined. · Odor threshold: Not determined. · pH-value: (Contd. on page 4) US

Printing date 06/14/2022

Reviewed on 06/10/2022

Trade	name:	RNase A	Solution

	(Contd. of page 3
· 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: 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 Fully miscible.	
· Partition coefficient (n-octanol/wa	t ter): Not determined.	
· Viscosity: Dynamic: Kinematic:	Not determined. 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.

- · 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)

[–] ÚS

Printing date 06/14/2022

Reviewed on 06/10/2022

Trade name: RNase A Solution

(Contd. of page 4)

• on the eye: Irritant and potentially harmful

• Sensitization: No sensitizing effects known.

 \cdot Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

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.

· 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.
- \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, ÂDR, IMDG, IATA	Not regulated	

Printing date 06/14/2022

Reviewed on 06/10/2022

Trade name: RNase A Solution

		(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

\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):

9001-99-4 Ribonuclease

· 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.

 \cdot 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 Void

· Hazard pictograms Void

(Contd. on page 7)

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US

Printing date 06/14/2022

Reviewed on 06/10/2022

Trade name: RNase A Solution

· 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 06/14/2022 / -

(Contd. of page 6)



Printing date 06/14/2022

Reviewed on 06/02/2022

1 Identification

- · Product identifier
- · Trade name: <u>Pre-Wash Buffer</u>
- · Application of the substance / the mixture For Research or Further Manufacturing Use.
- \cdot 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

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

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: Lithium Chloride*
- Hazard statements Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
- Precautionary statements
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 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).

(Contd. on page 2)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

(Contd. of page 1) 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)
Health = 2
Fire = 0
$\frac{2}{10} \frac{1}{Reactivity} = 0$
· HMIS-ratings (scale 0 - 4)
HEALTH 2 $Health = 2$
FIRE 0 Fire = 0
$\frac{1}{\text{REACTIVITY}[0]} Reactivity = 0$
REACTIVITY 0 Reactivity = 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

• Description: Mixture: consisting of the following components.

ſ	· Dangerous components:		
	CAS: 751-21-3 EINECS: 205-788-1 RTECS: WT1050000	Sodium Dodecyl Sulfate, Molecular Biology Reagent	1-10%
	CAS: 7447-41-8 EINECS: 231-212-3 RTECS: 0J5950000	Lithium Chloride	1-10%

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: 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. 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.

(Contd. on page 3)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

• *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 Wear protective equipment. Keep unprotected persons away.*
- Environmental precautions: 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). Use neutralizing agent.
- Pick up mechanically, dispose contaminated material as waste according to Section 13.
- · 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:		
751-21-3	Sodium Dodecyl Sulfate, Molecular Biology Reagent	3.9 mg/m ³
7447-41-8	Lithium Chloride	$2.3 mg/m^3$
· PAC-2:		
751-21-3	Sodium Dodecyl Sulfate, Molecular Biology Reagent	43 mg/m ³
7447-41-8	Lithium Chloride	25 mg/m ³
· PAC-3:		
751-21-3	Sodium Dodecyl Sulfate, Molecular Biology Reagent	260 mg/m ³
7447-41-8	Lithium Chloride	150 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.
- \cdot Further information about storage conditions:
- Specific end use(s) No further relevant information available.

(Contd. of page 2)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

(Contd. of page 3)

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 skin. Avoid contact with the eves and skin.
- Breathing equipment: Not required.
- 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 physic General Information 	cal and chemical properties
· Appearance:	
Form:	According to product specification
Color:	According to product specification
· Odor:	Indeterminate
• Odor threshold:	Not determined.
· pH-value:	Not determined.

(Contd. on page 5)

US

Printing date 06/14/2022

Reviewed on 06/02/2022

		(Contd. of page
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:	Not determined.	
	Insoluble.	
Partition coefficient (n-octanol/wa	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.

· 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 06/14/2022

Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

(Contd. of page 5)

Acute tox	ion on toxicological effects
	ucuy: Values that are relevant for classification:
	Sodium Dodecyl Sulfate, Molecular Biology Reagent
0ral	LD50 1,200 mg/kg (rat)
Dermal	LD50 580 mg/kg (rabbit)
	E LC50/4 h 1.5 mg/L (ATE)
	irritant effect:
	in: Irritant to skin and mucous membranes.
	e: Strong irritant with the danger of severe eye injury.
	tion: No sensitizing effects known.
	Il toxicological information:
The proa	uct shows the following dangers according to internally approved calculation methods for preparations:
Irritant	
	enic categories
0	ternational Agency for Research on Cancer)
	he ingredients is listed.
•	tional Toxicology Program)
-	he ingredients is listed.
v	~
	a (Occupational Safety & Health Administration)
None of i	he ingredients is listed.
Ecologi	cal information
	cal information
Toxicity	Ŭ T
Toxicity Aquatic t	oxicity:
Toxicity Aquatic t Pre-Was	oxicity: h Buffer
Toxicity Aquatic t Pre-Wasl Oral LC.	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L
Toxicity Aquatic t Pre-Wash Oral LC. 751-21-3	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent
Toxicity Aquatic t Pre-Wash Oral LC. 751-21-3	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss)
Toxicity Aquatic t Pre-Wash Oral LC. 751-21-3 Oral LC.	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas)
Toxicity Aquatic t Pre-Wash Oral LC. 751-21-3 Oral LC. Persisten	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available.
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems:
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccum	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available.
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccum Mobility	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available.
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccun Mobility Additiond	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. in soil No further relevant information available. il ecological information:
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccun Mobility Additiona General i	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. in soil No further relevant information available. il ecological information:
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccum Mobility Additiona General I Water ha Do not al	oxicity: h Buffer 50/96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50/96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. al ecological information: notes: zard class 2 (Self-assessment): hazardous for water low product to reach ground water, water course or sewage system.
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccun Mobility Additiona General I Water ha Do not al Must not	oxicity: h Buffer 50 / 96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50 / 96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. al ecological information: notes: zard class 2 (Self-assessment): hazardous for water low product to reach ground water, water course or sewage system. reach bodies of water or drainage ditch undiluted or unneutralized.
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccun Mobility Additiona General n Water ha Do not al Must not Danger ta	oxicity: h Buffer 50/96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50/96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. in soil No further relevant information available. il ecological information: notes: zard class 2 (Self-assessment): hazardous for water low product to reach ground water, water course or sewage system. reach bodies of water or drainage ditch undiluted or unneutralized. o drinking water if even small quantities leak into the ground.
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccun Mobility Additiona General n Water ha Do not al Must not Danger to Results o	oxicity: h Buffer 50/96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50/96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. in soil No further relevant information available. il ecological information: notes: zard class 2 (Self-assessment): hazardous for water low product to reach ground water, water course or sewage system. reach bodies of water or drainage ditch undiluted or unneutralized. o drinking water if even small quantities leak into the ground. f PBT and vPvB assessment
Toxicity Aquatic t Pre-Wasl Oral LC. 751-21-3 Oral LC. Persisten Behavior Bioaccur Mobility Additiona General I Water ha Do not al Must not Danger ta Results o PBT: Not	oxicity: h Buffer 50/96 h 1,052-5,260 mg/L Sodium Dodecyl Sulfate, Molecular Biology Reagent 50/96 h 4.3-8.5 mg/L (Oncorhynchus mykiss) 29 mg/L (Pimephales promelas) 29 mg/L (Pimephales promelas) ce and degradability No further relevant information available. in environmental systems: nulative potential No further relevant information available. in soil No further relevant information available. in soil No further relevant information available. il ecological information: notes: zard class 2 (Self-assessment): hazardous for water low product to reach ground water, water course or sewage system. reach bodies of water or drainage ditch undiluted or unneutralized. o drinking water if even small quantities leak into the ground.

(Contd. of page 6)

Safety Data Sheet acc. to OSHA HCS

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Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

• 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.

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.
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

ACTIVE
ACTIVE
(Contd. on page 8

Printing date 06/14/2022

· Proposition 65

Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

(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: Lithium Chloride · Hazard statements Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. · Precautionary statements Wash thoroughly after handling. Do not eat, drink or smoke when using this product. 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 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. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. on page 9)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Pre-Wash Buffer

(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 06/14/2022 / -
- 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 06/14/2022

Reviewed on 06/02/2022

1 Identification

- · Product identifier
- · Trade name: Lysis Buffer F1
- · 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

GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- 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. Causes serious eye irritation. · Precautionary statements Wash thoroughly after handling. Do not eat, drink or smoke when using this product. *Wear eye protection / face protection.* If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 2)

m page 2)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

(Contd. of page 1)

0.1-1%

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

 $\begin{array}{c} \textbf{Health} = 2\\ \textbf{Fire} = 0\\ \textbf{Reactivity} = 0 \end{array}$

· HMIS-ratings (scale 0 - 4)

HEALTH2Health = 2FIRE0Fire = 0REACTIVITY0Reactivity = 0

· 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: 751-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent

EINECS: 205-788-1 RTECS: WT1050000

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: 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: 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.

(Contd. on page 3)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

(Contd. of page 2)

· Personal precautions, protective equipment and emergency procedures	
Wear protective equipment. Keep unprotected persons away.	
Environmental precautions: Do not allow to enter sewers/ surface or gro	ound water.
Methods and material for containment and cleaning up:	
Absorb with liquid-binding material (sand, diatomite, acid binders, unive Use neutralizing agent.	ersal binders, sawdust).
Pick up mechanically, dispose contaminated material as waste according	z to Section 13.
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:	
751-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent	3.9 mg/m
PAC-2:	
	43 mg/m
751-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent	

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. 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.

(Contd. on page 4)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

(Contd. of page 3)

· Breathing equipment: Not required.

• 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

Information on basic physical and	chemical properties	
General Information		
Appearance: Form:	According to product specification	
Form: Color:	According to product specification According to product specification	
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.	

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

		(Contd. of page 4
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with	Not Determined	
· Water:	Not determined.	
	Insoluble.	
· Partition coefficient (n-octanol/wo	ater): 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.
- · 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:

· LD/LC50 values	that are	relevant	for	classification:
------------------	----------	----------	-----	-----------------

· LD/LC50 values that are relevant for classification:				
Lysis Buffer F1				
Inhalative I	LC50/4 h	150-1,500 mg/L		
751-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent				
Oral I	LD50	1,200 mg/kg (rat)		
Dermal I	LD50	580 mg/kg (rabbit)		
Inhalative I	LC50/4 h	1.5 mg/L (ATE)		
· Primary irritant effect:				
on the abine No invitant effect				

• on the skin: No irritant effect.

• on the eye: Strong irritant with the danger of severe eye injury.

· Sensitization: No sensitizing effects known.

· Additional toxicological information:

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

Irritant

(Contd. on page 6)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

(Contd. of page 5)

· 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:

Lysis Buffer F1

Oral LC50/96 h 430-8,500 mg/L (Oncorhynchus mykiss)

751-21-3 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. 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.

14 Transport information

· DOT, ADR, IMDG, IATA

· UN-Number

Not regulated

(Contd. on page 7)

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Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

		(Contd. of page 6)
· 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.	
· 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

Suru	
· 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):	
751-21-3 Sodium Dodecyl Sulfate, Molecular Biology Reagent	ACTIVE
7558-80-7 Sodium Phosphate Monobasic	ACTIVE
· 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.	
· TLV (Threshold Limit Value)	
None of the ingredients is listed.	

(Contd. on page 8)

US –

US

Safety Data Sheet acc. to OSHA HCS

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Reviewed on 06/02/2022

Trade name: Lysis Buffer F1

(Contd. of pag
VIOSH-Ca (National Institute for Occupational Safety and Health)
lone of the ingredients is listed.
HS label elements The product is classified and labeled according to the Globally Harmonized System (GHS)
lazard pictograms
\wedge
•
GHS07
ignal word Warning
lazard-determining components of labeling:
odium Dodecyl Sulfate, Molecular Biology Reagent
lazard statements
Iarmful if swallowed.
Causes serious eye irritation.
recautionary statements
Vash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Vear eye protection / face protection.
f swallowed: Call a poison center/doctor if you feel unwell.
inse mouth.
f in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to a
Continue rinsing.
f eye irritation persists: Get medical advice/attention.
Dispose of contents/container in accordance with local/regional/national/international regulations.
hemical 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 06/14/2022 / -

• Abbreviations and acronyms:

Acute Tox. 4: Acute toxicity – Category 4 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A



Printing date 06/14/2022

Reviewed on 06/02/2022

· Product identifier

- Trade name: Lysis Buffer F2
- · 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

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms Void
- · Signal word Warning
- · Hazard statements
- Causes eye irritation.
- · Precautionary statements
- Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

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

(Contd. on page 2)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F2

(Contd. of page 1)

10-50%

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 7447-41-8 Lithium Chloride EINECS: 231-212-3 RTECS: 0J5950000

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:
- 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:

7447-41-8 Lithium Chloride

2.3 mg/m³

· PAC-2:

7447-41-8 Lithium Chloride

 $25 mg/m^3$ (Contd. on page 3)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F2

(Contd. of page 2)

150 mg/m³

7 Handling and storage

7447-41-8 Lithium Chloride

· Handling:

· PAC-3:

- · 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:

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:
- 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. 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: Goggles recommended during refilling.

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 4)

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	(Cont	d. of page
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:	Not determined.	
	Insoluble.	
Partition coefficient (n-octanol/wa	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.

· 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 5)

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Reviewed on 06/02/2022

Trade name: Lysis Buffer F2

(Contd. of page 4)

· Informati · Acute tox	on on toxicological effects icity:
· LD/LC50	values that are relevant for classification:
Lysis Buf	fer F2
Oral LD5	50 1,052-5,260 mg/kg (rat)
· Primary i	rritant effect:
• on the ski	n: No irritant effect.
• on the eye	e: Irritant and potentially harmful
· Sensitizat	ion: No sensitizing effects known.
· Additiona	l toxicological information:
The prod preparation	luct is not subject to classification according to internally approved calculation methods for one:
	d and handled according to specifications, the product does not have any harmful effects according to ience and the information provided to us.
· Carcinog	enic categories
· IARC (In	ternational Agency for Research on Cancer)
None of th	ne ingredients is listed.
· NTP (Nat	ional Toxicology Program)
None of th	ne ingredients is listed.
0.0114.0	

· 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 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.

- · 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.

(Contd. on page 6)

Printing date 06/14/2022

Reviewed on 06/02/2022

(Contd. of page 5)

Trade name: Lysis Buffer F2

· Uncleaned packagings:

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

Transport information		
· 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.	
· 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 355 (extrem	iely hazardous	substances):
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

7447-41-8 Lithium Chloride

9003-39-8 Polyvinylpyrrolidone

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

 \cdot 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)

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Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: Lysis Buffer F2

(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* Void

· Signal word Warning

· Hazard statements

- Causes eye irritation.
- · Precautionary statements
- Wash thoroughly after handling.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- If eye irritation persists: Get medical advice/attention.
- · 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 06/14/2022 / -
- Abbreviations and acronyms:
- Eye Irrit. 2B: Serious eye damage/eye irritation Category 2B



Printing date 06/14/2022

Reviewed on 06/02/2022

- **1** Identification
- · Product identifier
- · Trade name: PPS (Protein Precipitate Solution)
- · Article number: 7033204
- · 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 product 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)



Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTH 0	Health = 0
IRE 0	Fire = 0
	Reactivity = 0

· 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.

(Contd. on page 2)

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Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: PPS (Protein Precipitate Solution)

(Contd. of page 1)

· Dangerous components: Void

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. En ventilation. Evacuate personnel to safe areas. Avoid breathing dust.	sure 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).	
· 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:	
127-08-2 Potassium Acetate, ACS	9.8 mg/m ³
· PAC-2:	
127-08-2 Potassium Acetate, ACS	110 mg/m ³
· PAC-3:	
127-08-2 Potassium Acetate, ACS	640 mg/m ³
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(Contd. on page 3)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: PPS (Protein Precipitate Solution)

(Contd. of page 2)

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:

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:

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. 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: Goggles recommended during refilling.*

9 Physical and chemical properties

General Information		
Appearance:		
Form:	Liquid	
Color:	According to product specification	
Odor:	Indeterminate	
Odor threshold:	Not determined.	
pH-value:	Not determined.	

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Reviewed on 06/02/2022

	(Contd. of page 3)		
• 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: 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 Fully miscible.		
· Partition coefficient (n-octanol/water): Not determined.			
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.		
 Solvent content: VOC content: 	0.00 % 0.0 g/l / 0.00 lb/gal		
Solids content:	10-30 %		
• 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 5)

Printing date 06/14/2022

Reviewed on 06/02/2022

Trade name: PPS (Protein Precipitate Solution)

(Contd. of page 4)

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:

The product is not subject to classification according to internally approved calculation methods for preparations:

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.

· 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 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.

(Contd. on page 6)

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Reviewed on 06/02/2022

Trade name: PPS (Protein Precipitate Solution)

(Contd. of page 5)

· 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 MARPOL73/78 and the IBC Code	I 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 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):

127-08-2 Potassium Acetate, ACS

· 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 7)

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Trade name: PPS (Protein Precipitate Solution)

(Contd. of page 6)

· 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 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 06/14/2022 / -



Printing date 06/14/2022

Reviewed on 06/14/2022

- **1** Identification
- · Product identifier
- Trade name: Reagent Plate (96 well plate *6)
- · Article number: 7033206
- · 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.



Eye Dam. 1 H318 Causes serious eye damage.

GHS07

Skin Irrit. 2 H315 Causes skin 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:
- Guanidine Thiocyanate
- · Hazard statements Highly flammable liquid and vapor. Causes skin irritation.

(Contd. on page 2)

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RTECS: KQ 6300000

EINECS: 200-661-7 RTECS: NT8050000

CAS: 67-63-0

Isopropyl Alcohol

Reviewed on 06/14/2022

Trade name: Reagent Plate (96 well plate *6)

	(Contd. of page 1)
Causes serious 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.	
Wash thoroughly after handling.	
Wash morologing after nanaling. Wear protective gloves/protective clothing/eye protection/face protection.	
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	1 . 1
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present of	ind easy to do.
Continue rinsing.	
Immediately call a poison center/doctor.	
Specific treatment (see on this label).	
Take off contaminated clothing and wash it before reuse.	
If skin irritation occurs: Get medical advice/attention.	
In case of fire: Use CO2, powder or water spray to extinguish.	
Store in a well-ventilated place. Keep cool.	
Dispose of contents/container in accordance with local/regional/national/international regulations	
· Classification system:	
· NFPA ratings (scale 0 - 4)	
Fire = 3 Reactivity = 0 HMIS-ratings (scale 0 - 4) HEALTH $[3]Health = *3FIRE$ $[3]REACTIVITY 0Reactivity = 0Other hazardsResults of PBT and vPvB assessmentPBT: Not applicable.vPvB: Not applicable.$	
3 Composition/information on ingredients	
· CAS No. Description	
Reagent Plate (96 well plate *6)	
· Chemical characterization: Mixtures	
• Description: Mixture: consisting of the following components.	
• Description: Mixture: consisting of the following components. • Dangerous components:	
	>10 <500
CAS: 64-17-5 ethyl alcohol	≥10-≤50%
EINECS: 200-578-6	
PTECS, KO 6300000	

(Contd. on page 3) US

≥2.5-<10%

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Reviewed on 06/14/2022

Trade name: Reagent Plate (96 well plate *6)

(Contd. of page 2) CAS: 593-84-0 Guanidine Thiocyanate ≥3-<5% EINECS: 209-812-1

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. Then 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.
- · 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.
- 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 Wear protective equipment. Keep unprotected persons away.*
- 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). Use neutralizing agent.

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:		
64-17-5	ethyl alcohol	1,800 ppm
67-63-0	Isopropyl Alcohol	400 ppm
593-84-0	Guanidine Thiocyanate	$0.98 \ mg/m^3$
· PAC-2:		
64-17-5	ethyl alcohol	3300* ppm
		(Contd. on page 4)

Printing date 06/14/2022

Reviewed on 06/14/2022

Trade name: Reagent Plate (96 well plate *6)

67-63-0	Isopropyl Alcohol	(Contd. of page 3) 2000* ppm
593-84-0	Guanidine Thiocyanate	11 mg/m ³
· PAC-3:		
	ethyl alcohol	15000* ppm
	Isopropyl Alcohol	12000** ppm
593-84-0	Guanidine Thiocyanate	65 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:
- Keep ignition sources away Do not smoke. Protect against electrostatic charges.
- · 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 constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has 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*

67-63-0 Isopropyl Alcohol

- PELLong-term value: 980 mg/m³, 400 ppmRELShort-term value: 1225 mg/m³, 500 ppm
- *Long-term value: 980 mg/m³, 400 ppm TLV Short-term value: 400 ppm*
 - Long-term value: 200 ppm BEI, A4

· Ingredients with biological limit values:

67-63-0 Isopropyl Alcohol

- BEI 40 mg/L
 - urine
 - end of shift at end of workweek Acetone (background, nonspecific)

(Contd. on page 5)

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Trade name: Reagent Plate (96 well plate *6)

Additional information: The lists that were valid during the creation were used as basis.	(Contd. of page 4
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 skin.	
Avoid contact with the eyes and skin.	
Breathing equipment: Not required.	
Protection of hands:	
Protective gloves	
The glove material has to be impermeable and resistant to the product/ the substance/ the prep	aration.
Due to missing tests no recommendation to the glove material can be given for the product/ t chemical mixture.	the preparation/ th
Selection of the glove material on consideration of the penetration times, rates of diffusion and	the degradation
· Material of gloves	0
The selection of the suitable gloves does not only depend on the material, but also on further m	narks of quality an
varies from manufacturer to manufacturer. As the product is a preparation of several substance	es, the resistance of
the glove material can not be calculated in advance and has therefore to be checked prior to the	
Penetration time of glove material	* *

· 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: According to product specification Color: According to product specification Indeterminate · Odor: · Odor threshold: Not determined. · pH-value: Not determined. · Change in condition Boiling point/Boiling range: Undetermined. <23 °C (<73.4 °F) · Flash point: · Flammability (solid, gaseous): Not applicable. Not determined. · Decomposition temperature: (Contd. on page 6) US

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Trade name: Reagent Plate (96 well plate *6)

	(Contd. of page :
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
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	t ter): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	16-24 %
VOC content:	16-24 %
	240.0 g/l / 2.00 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:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

 Oral
 LD50
 12,500-25,000 mg/kg

 Dermal
 LD50
 27,500-55,000 mg/kg

 Inhalative
 LC50/4 h
 37.5-75 mg/L

(Contd. on page 7)

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Trade name: Reagent Plate (96 well plate *6)

(Contd. of page 6)

1 3

593-84-0 (Guanidine	Thiocyanate
Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1,100 mg/kg (ATE)
Inhalative	LC50/4 h	1.5 mg/L (ATE)

· Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

• on the eye: Strong irritant with the danger of severe eye injury.

• Sensitization: No sensitizing effects known.

· Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

64-17-5 ethyl alcohol

67-63-0 Isopropyl Alcohol

· 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. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 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.

(Contd. on page 8)

US –

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Trade name: Reagent Plate (96 well plate *6) (Contd. of page 7) · Recommended cleansing agent: Water, if necessary with cleaning agents. 14 Transport information · UN-Number · DOT, ADR, IMDG, IATA UN1219 · UN proper shipping name $\cdot DOT$ Isopropanol 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) · ADR · IMDG, IATA ISOPROPANOL (ISOPROPYL ALCOHOL) · Transport hazard class(es) · DOT · Class 3 Flammable liquids 3 · Label · ADR, IMDG, IATA 3 Flammable liquids · Class · Label 3 · Packing group · DOT, ADR, IMDG, IATA Π · Environmental hazards: Not applicable. · Special precautions for user Warning: Flammable liquids · Hazard identification number (Kemler code): 33 · EMS Number: F-E, S-D· Stowage Category В · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · DOT On passenger aircraft/rail: 5 L · Quantity limitations On cargo aircraft only: 60 L $\cdot ADR$ · Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml (Contd. on page 9) US

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Trade name: Reagent Plate (96 well plate *6)

(Contd. of page 8)

ACTIVE ACTIVE

ACTIVE

·IMDG	
· Limited quantities (LQ)	1L
\cdot Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II

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):

67-63-0 Isopropyl Alcohol • TSCA (Toxic Substances Control Act):

64-17-5 ethyl alcohol

67-63-0 Isopropyl Alcohol

593-84-0 Guanidine Thiocyanate

· 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:

64-17-5 ethyl alcohol

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

64-17-5 ethyl alcohol

67-63-0 Isopropyl Alcohol

· 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). (Contd. on page 10)

- US

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A4

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· H	(Contd. of page Iazard pictograms
<	
	\vee \vee
(GHS02 GHS05
· Si	ignal word Danger
· H	lazard-determining components of labeling:
	Juanidine Thiocyanate
· H	lazard statements
Η	lighly flammable liquid and vapor.
С	Causes skin irritation.
С	lauses serious eye damage.
· P	recautionary statements
K	eep away from heat/sparks/open flames/hot surfaces No smoking.
K	leep container tightly closed.
	Fround/bond container and receiving equipment.
	se explosion-proof electrical/ventilating/lighting/equipment.
	Ise only non-sparking tools.
	ake precautionary measures against static discharge.
	Vash thoroughly after handling.
	Vear protective gloves/protective clothing/eye protection/face protection.
	f on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
	f in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to a
	Continue rinsing.
	nmediately call a poison center/doctor.
	pecific treatment (see on this label).
	ake off contaminated clothing and wash it before reuse.
	skin irritation occurs: Get medical advice/attention.
	n case of fire: Use CO2, powder or water spray to extinguish.
	tore in a well-ventilated place. Keep cool.
	Dispose of contents/container in accordance with local/regional/national/international regulations. Themical 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 06/14/2022 / -
- Abbreviations and acronyms: Flam. Liq. 2: Flammable liquids – Category 2 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Dam. 1: Serious eye damage/eye irritation - Category 1



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Reviewed on 06/10/2022

- **1** Identification
- · Product identifier
- · Trade name: 8 Strips Tip Comb
- Article number: 7033107
- · 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 Strips Tip Comb

(Contd. on page 2)

US

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Reviewed on 06/10/2022

Trade name: 8 Strips Tip Comb

(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)

(Contd. of page 2)

Safety Data Sheet acc. to OSHA HCS

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Trade name: 8 Strips Tip Comb

- 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
	(Contd. on page 4

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Trade name: 8 Strips Tip Comb

		(Contd. of page
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

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Trade name: 8 Strips Tip Comb

(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.	

(Contd. of page 5)

Safety Data Sheet acc. to OSHA HCS

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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

 $\cdot \textit{Chemical safety assessment:} A \textit{ Chemical Safety Assessment has not been carried out.}$

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 06/14/2022 / -