02/19/2018	Kit Components
Product code	Description
6550900	FastGlycoProtein Isolation Kit, WGA Resin
Components:	
6550804	WGA Lectin Resin
6550802	Binding/Wash Buffer, 5X
6550803	Elution Buffer



Reviewed on 02/19/2018

# **1** Identification

- · Product identifier
- · Trade name: WGA Lectin Resin
- Article number: 6550804
- · Application of the substance / the mixture For Research Use Only
- · 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)



$$Health = 0$$
  
Fire = 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

- · 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.

 $(Contd. \ on \ page \ 2)$ 

<sup>-</sup> US

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(Contd. of page 1)

Trade name: WGA Lectin Resin

- · 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.
- $\cdot$  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: 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:	
26628-22-8 Sodium Azide	$0.026 \text{ mg/m}^3$
· PAC-2:	
26628-22-8 Sodium Azide	$0.29 mg/m^3$
· PAC-3:	
26628-22-8 Sodium Azide	$5.3 mg/m^3$

# 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: 2-8°C
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:

(Contd. on page 3)

<sup>-</sup> US

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#### Trade name: WGA Lectin Resin

(Contd. of page 2)

• 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:	Indeterminate	
Odor:	Indeterminate	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
<b>Boiling point/Boiling range:</b>	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	

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#### Trade name: WGA Lectin Resin

		(Contd. of page
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.	
Partition coefficient (n-octanol/wa	t <b>ter):</b> Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gl	
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.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

#### **11 Toxicological information**

- · Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.

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

ATE (Acute Toxicity Estimate)

Oral LD50 5,000 mg/kg

#### 26628-22-8 Sodium Azide

Oral LD50 5 mg/kg (ATE)

- · Primary irritant effect:
- on the skin: No irritant effect.
- 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:

(Contd. on page 5)

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Reviewed on 02/19/2018

#### Trade name: WGA Lectin Resin

(Contd. of page 4) 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.

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	

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· Packing group

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Trade name: WGA Lectin Resin

	(Contd. of page 5)
Not regulated	

· DOT, ADR, IMDG, IATA · Environmental hazards:

· Special precautions for user

• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

· UN "Model Regulation":

# Not regulated

Not applicable.

Not applicable.

Not applicable.

# **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  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):

26628-22-8 Sodium Azide

· TSCA new (21st Century Act) (Substances not 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 established by ACGIH)

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.

(Contd. on page 7)

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Reviewed on 02/19/2018

#### Trade name: WGA Lectin Resin

(Contd. of page 6)

#### **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.

- · Date of preparation / last revision 02/19/2018 / -
- Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety **OSHA:** Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit



Reviewed on 02/19/2018

# **1** Identification

- · Product identifier
- · Trade name: <u>Binding/Wash Buffer, 5X</u>
- Article number: 6550802
- · Application of the substance / the mixture For Research Use Only
- · 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 Chemical characterization: Mixtures

• Description: Mixture: consisting of the following components.

· Dangerous component	s:		
CAS: 145224-94-8 EINECS: 224-632-3 RTECS: QE3479500	MES Monohydrate, Free Acid	2	2.5-10%
		(Contd.	on page 2

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(Contd. of page 1)

2.5-10%

Trade name: Binding/Wash Buffer, 5X

CAS: 75621-03-3 CHAPS EC number: 616-246-2

#### 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.

 $\cdot$  Methods and material for containment and cleaning up:

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

· Reference to other sections

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals

· PAC-1:

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)

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Reviewed on 02/19/2018

(Contd. of page 2)

Trade name: Binding/Wash Buffer, 5X

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: 2-8°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: Liquid Color: Clear Odor: Indeterminate Not determined. · Odor threshold: · pH-value: Not determined. (Contd. on page 4) US

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02/19/2018

Trade name: Binding/Wash Buffer, 5X

Reviewed	on	02/1	9/2	20

		(Contd. of page
· Change in condition		
<b>Boiling point/Boiling range:</b>	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.	
· Partition coefficient (n-octanol/wa	t <b>ter):</b> Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Water:	80.0 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gl	
• 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.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

#### **11 Toxicological information**

· Information on toxicological effects

• Acute toxicity: Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral LD50 55,367 mg/kg (Daphnia magna)

(Contd. on page 5)

US

Printing date 02/19/2018

Reviewed on 02/19/2018

#### Trade name: Binding/Wash Buffer, 5X

(Contd. of page 4)

• 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.

# **14 Transport information**

· DOT, ADR, IMDG, IATA

· UN-Number

Not regulated

(Contd. on page 6)

US

Printing date 02/19/2018

Reviewed on 02/19/2018

Trade name: Binding/Wash Buffer, 5X

		(Contd. of page 5)
· 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	<b>II of</b> Not applicable.	
· UN ''Model Regulation'':	Not regulated	

# **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  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):
7647-14-5 Sodium Chloride
7732-18-5 Water
· TSCA new (21st Century Act) (Substances not listed)
145224-94-8 MES Monohydrate, Free Acid
75621-03-3 CHAPS
· 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 established by ACGIH)
None of the ingredients is listed.
(Contd. on page 7

US

Printing date 02/19/2018

Reviewed on 02/19/2018

Trade name: Binding/Wash Buffer, 5X

(Contd. of page 6)

· 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.

· Date of preparation / last revision 02/19/2018 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit



Reviewed on 02/19/2018

# **1** Identification

- · Product identifier
- · Trade name: Elution Buffer
- · Article number: 6550803
- $\cdot$  Molecular Formula N/A
- · Application of the substance / the mixture For Research Use Only
- · 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 = 0 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)

HEALTHImage: 0Image: 0FIREImage: 0Image: 0REACTIVITYImage: 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
- FastGlycoProtein Elution Buffer

(Contd. on page 2)

Printing date 02/19/2018

Reviewed on 02/19/2018

#### Trade name: Elution Buffer

(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:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals

#### · PAC-1:

Substance is not listed.

#### · PAC-2:

Substance is not listed.

#### · 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: 2-8°C

Printing date 02/19/2018

Reviewed on 02/19/2018

Trade name: Elution Buffer

- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:
- Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

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

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation • Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

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

• Eye protection: Goggles recommended during refilling.

#### 9 Physical and chemical properties

General Information		
Appearance: Form:	Liquid	
Form: Color:	Liquid Clear	
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:	Not determined.	
Danger of explosion:	See section 10	

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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.	
Partition coefficient (n-octanol/wa	t <b>ter):</b> Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gl	
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.
- $\cdot \textit{Incompatible materials: } No further relevant information available.$
- · Hazardous decomposition products: No dangerous decomposition products known.

# **11 Toxicological information**

· Information on toxicological effects

- Acute toxicity: Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- on the skin: No irritant effect.

• on the eye: Irritant and potentially harmful

- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

The substance is not subject to classification.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

Substance is not listed.

#### · NTP (National Toxicology Program)

Substance is not listed.

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## · OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

#### **12 Ecological information**

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · 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.

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	<b>II of</b> Not applicable.	

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· UN "Model Regulation":

Not regulated

#### **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara

· 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.

· TSCA new (21st Century Act) (Substances 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 established by ACGIH)

Substance is not listed.

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

Substance is not listed.

· GHS label elements Void

· Hazard pictograms Void

· Signal word Void

• Hazard statements Void

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

# **16 Other information**

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

· Department issuing SDS: Quality Control Dept.

· Date of preparation / last revision 02/19/2018 / -

Abbreviations and acronyms:
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation

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IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit (Contd. of page 6)

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