

Reviewed on 02/26/2019 Printing date 02/26/2019

1 Identification

- · Product identifier
- · Trade name: 1× Minimum Essential Medium Eagle (Modified) with Hanks' Salts 0.35 g/L, without L-Glutamine
- · Article number: 1213254
- · 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 = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



0 Fire = 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 of substances listed below with nonhazardous additions.

Mixture: consisting of the following components.

· Dangerous components: Void

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4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Flush eyes with running water as a precaution.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

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

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

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

For personal protection see section 8.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · Reference to other sections

No dangerous substances are released.

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:		
144-55-8	Sodium Bicarbonate	13 mg/m³
10035-04-8	Calcium Chloride Dihydrate	16 mg/m^3
<i>7487-88-9</i>	magnesium sulphate	20 mg/m³
7778-77-0	Potassium Phosphate Monobasic Anhydrous	9.6 mg/m
34487-61-1	Phenol Red Sodium Salt	12 mg/m³
98-92-0	nicotinamide	5.6 mg/m
· PAC-2:		
144-55-8	Sodium Bicarbonate	140 mg/m
10035-04-8	Calcium Chloride Dihydrate	170 mg/m
7487-88-9	magnesium sulphate	220 mg/m
7778-77-0	Potassium Phosphate Monobasic Anhydrous	110 mg/m ⁻
34487-61-1	Phenol Red Sodium Salt	130 mg/m
		(Contd. on page

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98-92-0	nicotinamide	(Contd. of page 2) 62 mg/m ³
· PAC-3:		
144-55-8	Sodium Bicarbonate	840 mg/m^3
10035-04-8	Calcium Chloride Dihydrate	$1,100 \text{ mg/m}^3$
7487-88-9	magnesium sulphate	$1,300 \text{ mg/m}^3$
7778-77-0	Potassium Phosphate Monobasic Anhydrous	630 mg/m³
34487-61-1	Phenol Red Sodium Salt	790 mg/m³
98-92-0	nicotinamide	690 mg/m³

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.

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· Eye protection: Not required.

9 Physical and chemical properties

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Information on basic physical and General Information	
Appearance:	
Form:	Powder
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.
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:	Easily soluble.

Not applicable.

Not applicable.

 $0.0~g/l \,/\, 0.00~lb/gl$

No further relevant information available.

98.9 %

0.00 %

100.0 %

10 Stability and reactivity

· Viscosity: Dynamic:

Kinematic:

· Solvent content:

Solids content:
Other information

Water: VOC content:

· Reactivity No further relevant information available.

· Partition coefficient (n-octanol/water): Not determined.

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- · 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.
- · 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.

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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.

Transport information		
UN-Number DOT, ADR, ADN, IMDG, IATA	Not regulated	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not regulated	
Transport hazard class(es)		
DOT, ADR, ADN, IMDG, IATA Class	Not regulated	
Packing group DOT, ADR, IMDG, IATA	Not regulated	
Environmental hazards: Marine pollutant:	No	
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
- · Sara

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

50-99-7 D-(+)-Dextrose, Anhydrous

7447-40-7 Potassium Chloride

60-18-4 L-Tyrosine

144-55-8 Sodium Bicarbonate

52-90-4 L-cysteine

1119-34-2 L-Arginine Hydrochloride

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7487-88-9	magnesium sulphate
657-27-2	L-Lysine Monohydrochloride
7778-77-0	Potassium Phosphate Monobasic Anhydrous
73-32-5	L-Isoleucine
61-90-5	L-Leucine
7558-79-4	Sodium Phosphate Dibasic Anhydrous
72-19-5	L-Threonine
72-18-4	L-Valine
63-91-2	L-Phenylalanine
34487-61-1	Phenol Red Sodium Salt
63-68-3	L-Methionine
73-22-3	L-Tryptophan
87-89-8	D-myo-Inositol
83-88-5	riboflavin
59-30-3	Folic Acid
58-56-0	Pyridoxine Hydrochloride
67-03-8	Thiamine Hydrochloride
137-08-6	D-Pantothenic Acid Calcium Salt
67-48-1	choline chloride
98-92-0	nicotinamide
7732-18-5	Water
· Proposition	65

- · 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 element**s Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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 02/26/2019 / -
- · 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) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

 ${\it NIOSH: National\ Institute\ for\ Occupational\ Safety}$

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

US