

Safety Data Sheet acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

1 Identification

- **Product identifier**
- **Trade name:** Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate
- **Article number:** 1010124
- **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)**



- **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**
None
- **Identification number(s)** None

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 1)

- **Chemical characterization: Mixtures**
- **Description:**
Mixture of substances listed below with nonhazardous additions.
Mixture: consisting of the following components.

- **Dangerous components:**

CAS: 10043-52-4	Calcium Chloride	≥2.5-<10%
EINECS: 233-140-8		
RTECS: EV 9800000		

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:**

10043-52-4	Calcium Chloride	12 mg/m ³
7487-88-9	magnesium sulphate	20 mg/m ³
34487-61-1	Phenol Red Sodium Salt	12 mg/m ³

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 2)

98-92-0	nicotinamide	5.6 mg/m ³
· PAC-2:		
10043-52-4	Calcium Chloride	130 mg/m ³
7487-88-9	magnesium sulphate	220 mg/m ³
34487-61-1	Phenol Red Sodium Salt	130 mg/m ³
98-92-0	nicotinamide	62 mg/m ³
· PAC-3:		
10043-52-4	Calcium Chloride	790 mg/m ³
7487-88-9	magnesium sulphate	1,300 mg/m ³
34487-61-1	Phenol Red Sodium Salt	790 mg/m ³
98-92-0	nicotinamide	690 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:**
- **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.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 3)

- **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:	Powder
Color:	Orange
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:** Not determined.
 Insoluble.

· **Partition coefficient (n-octanol/water):** 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.

US

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 4)

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:** Based on available data, the classification criteria are not met.

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

ATE (Acute Toxicity Estimate)

Oral	LD50	196,406 mg/kg (rat)
Inhalative	LC50/4 h	196,406 mg/L (rabbit)

- **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.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 5)

- **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	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 II of 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**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 6)

· TSCA (Toxic Substances Control Act):		
7647-14-5	Sodium Chloride	ACTIVE
50-99-7	D-(+)-Dextrose, Anhydrous	ACTIVE
7447-40-7	Potassium Chloride	ACTIVE
56-85-9	L-Glutamine	ACTIVE
10043-52-4	Calcium Chloride	ACTIVE
1119-34-2	L-Arginine Hydrochloride	ACTIVE
7487-88-9	magnesium sulphate	ACTIVE
657-27-2	L-Lysine Monohydrochloride	ACTIVE
73-32-5	L-Isoleucine	ACTIVE
61-90-5	L-Leucine	ACTIVE
69847-45-6	L-TYROSINE, DISODIUM SALT HYDRATE	ACTIVE
72-19-5	L-Threonine	ACTIVE
72-18-4	L-Valine	ACTIVE
63-91-2	L-Phenylalanine	ACTIVE
63-68-3	L-Methionine	ACTIVE
73-22-3	L-Tryptophan	ACTIVE
34487-61-1	Phenol Red Sodium Salt	ACTIVE
87-89-8	D-myo-Inositol	ACTIVE
67-48-1	choline chloride	ACTIVE
98-92-0	nicotinamide	ACTIVE
137-08-6	D-Pantothenic Acid Calcium Salt	ACTIVE
59-30-3	Folic Acid	ACTIVE
58-56-0	Pyridoxine Hydrochloride	ACTIVE
67-03-8	Thiamine Hydrochloride	ACTIVE
83-88-5	riboflavin	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 established by ACGIH)

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 10/04/2019

Reviewed on 10/04/2019

Trade name: Minimum Essential Medium Eagle (Modified), with Earle's Salts and L-Glutamine, without Sodium Bicarbonate

(Contd. of page 7)

· **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** 10/04/2019 / -

· **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)

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

US