

Printing date 01/23/2019

Reviewed on 01/23/2019

1 Identification

- **Product identifier**
- **Trade name:** 1× RPMI 1640, without L-Glutamine and Leucine
- **Article number:** 1629149
- **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)**



- **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**
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/m ³ |
| 13477-34-4 | Calcium Nitrate Tetrahydrate | 12 mg/m ³ |
| 7487-88-9 | magnesium sulphate | 20 mg/m ³ |
| 34487-61-1 | Phenol Red Sodium Salt | 12 mg/m ³ |
| 98-92-0 | nicotinamide | 5.6 mg/m ³ |
| 150-13-0 | p-Aminobenzoic Acid | 15 mg/m ³ |

- **PAC-2:**

| | | |
|------------|------------------------------|-----------------------|
| 144-55-8 | Sodium Bicarbonate | 140 mg/m ³ |
| 13477-34-4 | Calcium Nitrate Tetrahydrate | 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 |
| 150-13-0 | p-Aminobenzoic Acid | 69 mg/m ³ |

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| · PAC-3: | | |
|-----------------|------------------------------|-------------------------|
| 144-55-8 | Sodium Bicarbonate | 840 mg/m ³ |
| 13477-34-4 | Calcium Nitrate Tetrahydrate | 770 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 |
| 150-13-0 | p-Aminobenzoic Acid | 410 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.
- **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.

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9 Physical and chemical properties

| | |
|---|--|
| · Information on basic physical and chemical properties | |
| · General Information | |
| · Appearance: | |
| Form: | Solution |
| 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 | |
| Water: | Not Determined Easily soluble. |
| · Partition coefficient (n-octanol/water): Not determined. | |
| · Viscosity: | |
| Dynamic: | Not applicable. |
| Kinematic: | Not applicable. |
| · Solvent content: | |
| Water: | 98.8 % |
| 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.

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· **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)**

| | | |
|----------|---------------------|---|
| 150-13-0 | p-Aminobenzoic Acid | 3 |
|----------|---------------------|---|

· **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:** Generally not hazardous for water

· **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.

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

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):**

13477-34-4 Calcium Nitrate Tetrahydrate

· **TSCA (Toxic Substances Control Act):**

| | |
|-----------|------------------------------------|
| 7647-14-5 | Sodium Chloride |
| 144-55-8 | Sodium Bicarbonate |
| 50-99-7 | D-(+)-Dextrose, Anhydrous |
| 7558-79-4 | Sodium Phosphate Dibasic Anhydrous |
| 7447-40-7 | Potassium Chloride |
| 1119-34-2 | L-Arginine Hydrochloride |
| 73-32-5 | L-Isoleucine |
| 7487-88-9 | magnesium sulphate |
| 657-27-2 | L-Lysine Monohydrochloride |
| 87-89-8 | D-myo-Inositol |
| 56-45-1 | L-serine |
| 72-18-4 | L-Valine |
| 72-19-5 | L-Threonine |

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| | |
|------------|---------------------------------|
| 51-35-4 | 4-Hydroxy-L-Proline |
| 56-84-8 | L-Aspartic Acid |
| 147-85-3 | L-Proline |
| 56-86-0 | L-Glutamic Acid, free acid |
| 63-91-2 | L-Phenylalanine |
| 63-68-3 | L-Methionine |
| 56-40-6 | Glycine |
| 34487-61-1 | Phenol Red Sodium Salt |
| 73-22-3 | L-Tryptophan |
| 67-48-1 | choline chloride |
| 58-85-5 | D-Biotin |
| 98-92-0 | nicotinamide |
| 58-56-0 | Pyridoxine Hydrochloride |
| 68-19-9 | Vitamin B12 |
| 137-08-6 | D-Pantothenic Acid Calcium Salt |
| 59-30-3 | Folic Acid |
| 150-13-0 | p-Aminobenzoic Acid |

· **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.

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.

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· Date of preparation / last revision 01/23/2019 / -**· 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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

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