1 Identification

- Product identifier
- Trade name: DPBS, with calcium and magnesium
- Article number: 02-020-1
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Biological Industries Israel Beit Haemek Ltd.
    BEIT HAEMEK 25115
    ISRAEL
    michalb@bioind.com
  - Information department: Product safety department.
  - Emergency telephone number: During normal opening times: +972/4/9962467

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 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: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
- Dangerous components: Void

4 First-aid measures

- Description of first aid measures
- General information: No special measures required.

(Contd. on page 2)
Trade name: DPBS, with calcium and magnesium

(Contd. of page 1)

46.0.19

· 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.
· After swallowing: If symptoms persist consult doctor.
· Information for doctors:
  · 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: No personal precautions required.
· Environmental precautions: No special measures required.
· Methods and material for containment and cleaning up: No special measures required.
· 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

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10035-04-8</td>
<td>CALCIUM CHLORIDE DIHYDRATE</td>
<td>16 mg/m³</td>
</tr>
<tr>
<td>7778-77-0</td>
<td>potassium dihydrogenorthophosphate</td>
<td>9.6 mg/m³</td>
</tr>
<tr>
<td>7791-18-6</td>
<td>Magnesium chloride hexahydrate</td>
<td>34 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10035-04-8</td>
<td>CALCIUM CHLORIDE DIHYDRATE</td>
<td>170 mg/m³</td>
</tr>
<tr>
<td>7778-77-0</td>
<td>potassium dihydrogenorthophosphate</td>
<td>110 mg/m³</td>
</tr>
<tr>
<td>7791-18-6</td>
<td>Magnesium chloride hexahydrate</td>
<td>370 mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10035-04-8</td>
<td>CALCIUM CHLORIDE DIHYDRATE</td>
<td>1,100 mg/m³</td>
</tr>
<tr>
<td>7778-77-0</td>
<td>potassium dihydrogenorthophosphate</td>
<td>630 mg/m³</td>
</tr>
<tr>
<td>7791-18-6</td>
<td>Magnesium chloride hexahydrate</td>
<td>1,600 mg/m³</td>
</tr>
</tbody>
</table>

7 Handling and storage

· Handling:
  · Precautions for safe handling: No special measures required.
  · Information about protection against explosions and fires: No special measures required.

(Contd. on page 3)
8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 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:**
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
  - **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.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Liquid
    - **Color:** Colorless
    - **Odor:** Odorless
    - **Odor threshold:** Not determined.

(Contd. of page 2)
Trade name: DPBS, with calcium and magnesium

### 46.0.19:
- **pH-value:** Not applicable.
- **Change in condition**
  - Melting point/Melting range: 0 °C (32 °F)
  - Boiling point/Boiling range: 100 °C (212 °F)
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not determined.
  - Upper: Not determined.
- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)
- **Density:** Not determined.
- **Relative density**
- **Vapor density**
- **Evaporation rate**
- **Solubility in / Miscibility with Water:** Fully miscible.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic at 20 °C (68 °F): 0.952 mPas
  - Kinematic: Not determined.
- **Solvent content:**
  - Water: >98.0 %
  - VOC content: 0.00 %
  - 0.0 g/l / 0.00 lb/gl
- **Solids content: <0.9 %**
- **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:
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritating effect.
  - 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: 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: Smaller quantities can be disposed of with household waste.
- Uncleaned packagings
  - Recommendation: Disposal must be made according to official regulations.
## 14 Transport information

- **UN-Number**
  - **DOT, ADN, IMDG, IATA**: not regulated

- **UN proper shipping name**
  - **DOT, ADN, IMDG, IATA**: not regulated

- **Transport hazard class(es)**
  - **DOT, ADN, IMDG, IATA**: not regulated

- **Packing group**
  - **DOT, 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.

- **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.

  - **TSCA (Toxic Substances Control Act):**
    - 7647-14-5 sodium chloride
    - 7447-40-7 potassium chloride
    - 7778-77-0 potassium dihydrogenorthophosphate
    - 7732-18-5 water, distilled, conductivity or of similar purity

  - **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.
Trade name: DPBS, with calcium and magnesium

- **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:** Product safety department.
- **Contact:** Ms. BADICHI GITLIN
- **Date of preparation / last revision** 05/13/2018 / -

**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)
- 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