1 Identification

- Product identifier
  - Trade name: Bio-Pure Human Serum Albumin, 10% solution optimized for hPSC
  - Article number: 05-720-1

- 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 Health = 0
  - FIRE Fire = 0
  - REACTIVITY 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.
Trade name: Bio-Pure Human Serum Albumin, 10% solution optimized for hPSC

- **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 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:** No personal precautions required.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **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**
  - **PAC-1:** None of the ingredients is listed.
  - **PAC-2:** None of the ingredients is listed.
  - **PAC-3:** None of the ingredients is listed.

### 7 Handling and storage

- **Handling:** No special measures required.
- **Precautions for safe handling:** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - Requirements to be met by storerooms and receptacles: 2-8 °C
  - Information about storage in one common storage facility: Not required
  - Further information about storage conditions: Not required
- **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 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 breakthrough 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: Yellowish
  - Odor: Characteristic
  - Odor threshold: Not determined.

- **pH-value:** Not applicable.

- **Change in condition**
  - Melting point/Melting range: Undetermined.
  - Boiling point/Boiling range: 100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.
46.0.19

· 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 Not determined.
· Vapor density Not determined.
· Evaporation rate Not determined.
· Solubility in / Miscibility with Water: Fully miscible.
· Partition coefficient (n-octanol/water): Not determined.
· Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.
· Solvent content:
  Water: >48.0 %
  VOC content: 0.00 %
    0.0 g/l / 0.00 lb/gl
· Solids content: <2.0 %
· 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.
### 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:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging**
  - **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
# Safety Data Sheet

**acc. to OSHA HCS**

**Version 1**

**Printing date 05/10/2018**

**Reviewed on 05/10/2018**

**Trade name: Bio-Pure Human Serum Albumin, 10% solution optimized for hPSC**

<table>
<thead>
<tr>
<th>46.0.19</th>
<th>· Transport hazard class(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>· DOT, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>· Class</td>
<td>not regulated</td>
</tr>
</tbody>
</table>

| · Packing group |
| · DOT, IMDG, IATA | not regulated |

| · 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): |
| All ingredients are 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 |
Trade name: Bio-Pure Human Serum Albumin, 10% solution optimized for hPSC

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

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: 05/10/2018 / -

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