1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
  - **Trade name:** Bio-Pure Human Serum Albumin, 10% solution optimized for hPSC
  - **Article number:** 05-720-1
- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.
- **Application of the substance / the mixture**
  Bio-Pure Human Serum Albumin is a xeno-free supplement, specially qualified for the growth and expansion of undifferentiated pluripotent human embryonic stem (hES) cells and induced pluripotent stem (hiPS) cells, in both feeder-dependent and feeder-free conditions. Human Serum Albumin (HSA) is a medium supplement that is a highly soluble osmolytic protein with a high molecular weight.

Details of the supplier of the safety data sheet

- **Manufacturer/Supplier:** Biological Industries Israel Beit Haemek Ltd.
  BEIT HAEMEK 25115
  ISRAEL
  michalb@bioind.com
- **Further information obtainable from:** Product safety department.
- **Emergency telephone number:** During normal opening times: +972/4/9962467

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    The product is not classified according to the CLP regulation.
- **Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008** Void
  - **Hazard pictograms** Void
  - **Signal word** Void
  - **Hazard statements** Void
  - **Other hazards**
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation:** Mixtures
  - **Description:** Mixture of substances listed below with nonhazardous additions.
  - **Dangerous components:** Void
  - **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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:** Rinse opened eye for several minutes under running water.

(Contd. on page 2)
Trade name: Bio-Pure Human Serum Albumin, 10% solution optimized for hPSC

5 Firefighting measures
- Extinguishing media
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
  - 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.

7 Handling and storage
- Handling:
  - Precautions for safe handling No special measures required.
  - Information about fire - and explosion protection: 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 facilities: No further data; see item 7.
- Control parameters
  - Ingredients 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 valid during the making were used as basis.

(Contd. on page 3)
**Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
  The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:**
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
  The glove material has to be impermeable and resistante to the product/substance/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.

**Physical and chemical properties**

**Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:** Liquid
  - **Colour:** Yellowish
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**
  - **Melting point/freezing point:** Undetermined.
  - **Initial boiling point and boiling range:** 100 °C
- **Flash point:** Not applicable.
- **Flammability (solid, gas):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.
- **Vapour pressure at 20 °C:** 23 hPa
46. **Density:** Not determined.
   - **Relative density:** Not determined.
   - **Vapour density:** Not determined.
   - **Evaporation rate:** Not determined.

47. **Solubility in / Miscibility with water:** Fully miscible.

48. **Partition coefficient: n-octanol/water:** Not determined.

49. **Viscosity:**
   - **Dynamic:** Not determined.
   - **Kinematic:** Not determined.

51. **Solvent content:**
   - **Water:** >48.0 %
   - **VOC (EC):** 0.00 %

52. **Solids content:** <2.0 %

53. **Other information:** No further relevant information available.

### 10 Stability and reactivity

54. **Reactivity:** No further relevant information available.

55. **Chemical stability:**

56. **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

57. **Possibility of hazardous reactions:** No dangerous reactions known.

58. **Conditions to avoid:** No further relevant information available.

59. **Incompatible materials:** No further relevant information available.

60. **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

61. **Information on toxicological effects**

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

63. **Primary irritant effect:**

64. **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

65. **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.

66. **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

67. **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**

68. **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

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

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

71. **STOT-single exposure:** Based on available data, the classification criteria are not met.

72. **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

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

### 12 Ecological information

74. **Toxicity**

75. **Aquatic toxicity:** 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
  - ADR, ADN, IMDG, IATA: not regulated

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

- Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: not regulated
  - Class: not regulated

- Packing group
  - ADR, IMDG, IATA: not regulated

- Environmental hazards:
  - Not applicable.

- Special precautions for user
  - Not applicable.

- Transport in bulk according to Annex II of Marpol 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
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX 1 None of the ingredients is listed.
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
- 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
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - 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)
  - VOC: Volatile Organic Compounds (USA, EU)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative