1 Identification

- Product identifier
- Trade name: IWP-4
- Article number: SM-0004-0005
- CAS Number: 686772-17-8
- Application of the substance / the mixture: Research use

- 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
  GHS07
  Acute Tox. 4 H302 Harmful if swallowed.

- Label elements
- GHS label elements
  The substance is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms

  GHS07

- Signal word: Warning
- Hazard statements
  Harmful if swallowed.
- Precautionary statements
  Wash thoroughly after handling.
  Do not eat, drink or smoke when using this product.
  If swallowed: Call a poison center/doctor if you feel unwell.
  Rinse mouth.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- Classification system:
- NFPA ratings (scale 0 - 4)
  Health = 2
  Fire = 0
  Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

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<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
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<tbody>
<tr>
<td>Health = 2</td>
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· 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
    686772-17-8 IWP-4

4 First-aid measures

· Description of first aid measures
  · General information:
    Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
  · 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: Immediately call a doctor.
    Wash out mouth with water; Do NOT induce vomiting; call a physician.
  · 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 Treat symptomatically.

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 During combustion, may emit irritant fumes.
  · Advice for firefighters Wear self-contained breathing apparatus and protective clothing.
  · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Use full personal protective equipment. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.
· Environmental precautions: Do not allow to enter sewers/ surface or ground water.
· Methods and material for containment and cleaning up:
  No special measures required.
Dispose contaminated material as waste according to item 13.

- **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**
  Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation. Use only in areas with appropriate exhaust ventilation.
- **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:** -20°C
  - **Information about storage in one common storage facility:**
    Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition.
  - **Further information about storage conditions:** Shipping at room temperature if less than 2 weeks.
- **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:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
  - **General protective and hygienic measures:**
    Keep away from foodstuffs, beverages and feed.
    Avoid contact with the eyes and skin.
  - **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.
  - **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:** Safety goggles with side-shields.

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9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Powder
      - Color: White to off-white
    - Odor:
      - Characteristic
    - Odor threshold:
      - Not determined.
  - pH-value:
    - Not applicable.
- Change in condition
  - Melting point/Melting range:
    - Undetermined.
  - Boiling point/Boiling range:
    - Undetermined.
- Flash point:
  - Not applicable.
- Flammability (solid, gaseous):
  - Not applicable.
- Decomposition temperature:
  - Not determined.
- Auto igniting:
  - Not determined.
- Danger of explosion:
  - Product does not present an explosion hazard.
- Explosion limits:
  - Lower:
    - Not determined.
  - Upper:
    - Not determined.
- Vapor pressure:
  - Not determined.
- Density:
  - Not determined.
  - Relative density:
    - Not determined.
  - Vapor density:
    - Not determined.
  - Evaporation rate:
    - Not determined.
- Solubility in / Miscibility with
  - Water:
    - Not determined.
- Partition coefficient (n-octanol/water):
  - Not determined.
- Viscosity:
  - Dynamic:
    - Not determined.
  - Kinematic:
    - Not determined.
- 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:
  - Strong acids/alkalis, strong oxidising/reducing agents.
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- Hazardous decomposition products:
  Under fire conditions, may decompose and emit toxic fumes.
  Other decomposition products - no data available.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
  - Primary irritant effect:
    - on the skin: Classified based on available data. For more details, see section 2
    - on the eye: Classified based on available data. For more details, see section 2
  - Sensitization: Classified based on available data. For more details, see section 2
  - Additional toxicological information:
    - Carcinogenic categories
      - IARC (International Agency for Research on Cancer) Substance is not listed.
      - NTP (National Toxicology Program) Substance is not listed.
      - OSHA-Ca (Occupational Safety & Health Administration) Substance is not 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:
      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:
    Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.
14 Transport information

- UN-Number
  - DOT, IMDG, IATA not regulated

- UN proper shipping name
  - DOT, 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): Substance is not listed.
  - Section 313 (Specific toxic chemical listings): Substance is not listed.
  - TSCA (Toxic Substances Control Act): Substance is not listed.
  - Hazardous Air Pollutants Substance is not listed.
  - Proposition 65
  - Chemicals known to cause cancer: Substance is not listed.
  - Chemicals known to cause reproductive toxicity for females: Substance is not listed.
  - Chemicals known to cause reproductive toxicity for males: Substance is not listed.
  - Chemicals known to cause developmental toxicity: Substance is not listed.

- Carcinogenic categories
  - EPA (Environmental Protection Agency) Substance is not listed.
  - TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

- GHS label elements
  - The substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms

  GHS07

- Signal word Warning
- Hazard statements
  Harmful if swallowed.
Precautionary statements

Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Call a poison center/doctor if you feel unwell.
Rinse mouth.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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 07/02/2019

Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
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
Acute Tox. 4: Acute toxicity – Category 4