IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis

1 IDENTIFICATION

<table>
<thead>
<tr>
<th>Product code:</th>
<th>Cat. No. 4617</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name:</td>
<td>IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis</td>
</tr>
<tr>
<td>Unit size:</td>
<td>1 mg</td>
</tr>
<tr>
<td>Manufacturer/supplier:</td>
<td>Essen BioScience, Ltd.</td>
</tr>
<tr>
<td></td>
<td>BioPark, Broadwater Road</td>
</tr>
<tr>
<td></td>
<td>Welwyn Garden City, Hertfordshire</td>
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<tr>
<td></td>
<td>AL7 3AX United Kingdom</td>
</tr>
<tr>
<td>Emergency contact:</td>
<td>+44 (0) 1707 358688</td>
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<tr>
<td>Fax contact:</td>
<td>+44 (0) 1707 358687</td>
</tr>
</tbody>
</table>

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2 HAZARD(S) IDENTIFICATION

In accordance with local and national regulations, the product is classified and labelled in accordance with Directive 1999/45/EC. REGULATION (EC) No 1272/2008 Classification according to EU Directives 67/548/EEC or 1999/45/EC.

GHS - Classification

<table>
<thead>
<tr>
<th>Signal word:</th>
<th>Not hazardous.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazard:</td>
<td>Not hazardous.</td>
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<tr>
<td>Physical hazards:</td>
<td>Not hazardous.</td>
</tr>
</tbody>
</table>

European Union (EU) Specific Hazard Statements

<table>
<thead>
<tr>
<th>R-phrase(s)</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-phrase(s)</td>
<td>S22 - Do not breathe dust.</td>
</tr>
</tbody>
</table>

Principal Routes of Exposure/ Potential Health Effects

- Eyes: May cause eye irritation with susceptible persons.
- Skin: May cause skin irritation in susceptible persons.
- Inhalation: May be harmful by inhalation.
- Ingestion: May be harmful if swallowed.

Specific effects

- Carcinogenic effects: None
- Mutagenic effects: Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.
- Reproductive toxicity: None
- Sensitisation: None
- Target organ effects: No known effects under normal use conditions.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Includes information on chemical ingredients; trade secret claims.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>EINECS-No</th>
<th>Weight percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis</td>
<td>None</td>
<td>-</td>
<td>60-100</td>
</tr>
</tbody>
</table>

The product contains no substance which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.
4 FIRST-AID MEASURES

Includes important symptoms/effects, acute, delayed; required treatment.

Skin contact: Rinse with plenty of water. If symptoms arise, call a physician.
Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion: Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation: Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Notes to physician: Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

6 ACCIDENTAL RELEASE MEASURES

Lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Personal precautions: Use personal protective equipment.
Methods for cleaning up: Take up mechanically and collect in suitable container for disposal.
Environmental precautions: Prevent further leakage or spillage if safe to do so. See section 12 for additional information.

7 HANDLING AND STORAGE

Lists precautions for safe handling and storage, including incompatibilities.

Handling: Avoid contact with skin, eyes and clothing. Always wear recommended personal protective equipment.
Storage: Keep in a dry, cool and well-ventilated place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

We are not aware of any national exposure limit.

Chemical name: IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis

European Union: None
EU OEL (STEL): None
EU OEL (TWA): None
EU Skin Notation: None
Austria: None
Belgium (TWA): None
Denmark: None
Engineering measures: Ensure adequate ventilation, especially in confined areas.
Personal protective equipment: Personal Protective Equipment requirements are dependent on the user institution’s risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Chemical name: IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis

Denmark (TWA): None
Finland OEL (TWA): None
France OEL (VME): None
Germany OEL (TWA): None
Ireland: None
Ireland (TWA): None
Italy OEL (TWA): None

Chemical name: IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis

Netherlands OEL (MAC): None
Norway: None
Poland: None
Portugal: None
Spain OEL (TWA): None
Switzerland: None
United Kingdom: None

Revision date: October 23, 2015
Product code: 4617
PHYSICAL AND CHEMICAL PROPERTIES
Lists the chemical’s characteristics.

General information
Form: Solid.
Appearance: No information available.
Odour: No information available.
Boiling point/range: °C No data available. °F No data available
Melting point/range: °C No data available. °F No data available
Flash point: °C No data available. °F No data available
Autoignition temperature: °C No data available. °F No data available
Oxidising properties: No information available.
Water solubility: No data available.

STABILITY AND REACTIVITY
Lists chemical stability and possibility of hazardous reactions.

Stability: Stable under normal conditions.
Materials to avoid: No dangerous reaction known under conditions of normal use.
Hazardous decomposition products: None under normal use.
Polymerisation: Hazardous polymerisation does not occur.

TOXICOLOGICAL INFORMATION
Includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity

Acute toxicity: Not hazardous.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>LD50 (oral, rat/mouse)</th>
<th>LD50 (dermal, rat/rabbit)</th>
<th>LD50 (inhalation, rat, mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IncuCyte™ pHrodo® Red Zymosan Bioparticles® for Phagocytosis</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
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Principle routes of exposure/potential health effects

- Eyes: May cause eye irritation with susceptible persons.
- Skin: May cause eye irritation with susceptible persons.
- Inhalation: May be harmful by inhalation.
- Ingestion: May be harmful by ingestion.
- Carcinogenic effects: None.
- Mutagenic effects: Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.
- Reproductive toxicity: None.
- Sensitisation: None.
- Target organ effects: No known effects under normal use conditions.
**ECOLOGICAL INFORMATION**

<table>
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<tr>
<th>Ecotoxicity effects:</th>
<th>No information available.</th>
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</thead>
<tbody>
<tr>
<td>Mobility:</td>
<td>No information available.</td>
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<tr>
<td>Biodegradation:</td>
<td>Inherently biodegradable.</td>
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<tr>
<td>Bioaccumulation:</td>
<td>Does not bioaccumulate.</td>
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</table>

**DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations.

**TRANSPORT INFORMATION**

IATA

<table>
<thead>
<tr>
<th>Proper shipping name:</th>
<th>Not classified as dangerous in the meaning of transport regulations.</th>
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</thead>
<tbody>
<tr>
<td>Hazard class:</td>
<td>None.</td>
</tr>
<tr>
<td>Subsidiary class:</td>
<td>None.</td>
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<tr>
<td>Packing group:</td>
<td>None.</td>
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<tr>
<td>UN-No:</td>
<td>None.</td>
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**REGULATORY INFORMATION**

International Inventories

<table>
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<tr>
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<th>Complies</th>
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**OTHER INFORMATION**

<table>
<thead>
<tr>
<th>Date of preparation:</th>
<th>October 23, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision date:</td>
<td></td>
</tr>
<tr>
<td>Reason for revision:</td>
<td></td>
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**END OF SAFETY DATA SHEET**