Safety Data Sheet

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Catalog Number: CBA-224-T
Product Name: CytoSelect™ 96-well Phagocytosis Assay (Zymosan)
Recommended Use: Laboratory Research Reagents

MANUFACTURER: Cell Biolabs, Inc.
7758 Arjons Drive
San Diego, CA 92126

EMERGENCY CONTACT: +1 858 271 6500
info@cellbiolabs.com

SECTION 2. HAZARDS IDENTIFICATION

Fixation Solution (Part No. 122402-T): One 2 mL tube of 3.2% Buffered Formaldehyde Solution

Classification:
- Flammable solids, Category 2 (H228)
- Acute toxicity, Oral, Category 4 (H302)
- Acute toxicity, Inhalation, Category 4 (H332)
- Skin irritation, Category 2 (H315)
- Serious eye damage, Category 1 (H318)
- Skin sensitization, Category 1 (H317)
- Carcinogenicity, Category 2, (H351)
- Specific target organ toxicity - single exposure, Category 3, Respiratory system (H335)
- Acute aquatic toxicity, Category 3, (H402)
- Chronic aquatic toxicity, Category 3 (H412)

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<tr>
<th>Pictogram</th>
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<tr>
<th>Signal Word</th>
<th>Danger</th>
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**Hazard Statements:** Flammable solid (H228), Harmful if swallowed or inhaled (H302 + H332), Causes skin irritation (H315), May cause an allergic skin reaction (H317), Causes serious eye damage
Precautionary Statements: Obtain special instructions before use (P201), Do not handle until all safety precautions have been read and understood (P202), Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Ground/bond container and receiving equipment (P240), Use explosion-proof electrical/ventilating/lighting equipment (P241), Avoid breathing dust/fume/gas/mist/vapors/spray (P261), Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke when using this product (P270), Use only outdoors or in a well-ventilated area (P271), Contaminated work clothing should not be allowed out of the workplace (P272), Avoid release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell (P301 + P312), IF ON SKIN: wash with plenty of soap and water (P302 + P352), IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304 + P340), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338), Immediately call a POISON CENTER or doctor/physician (P310), Rinse mouth (P330), If skin irritation or rash occurs: Get medical advice/attention (P333 + P313), Take off contaminated clothing and wash before reuse (P362), In case of fire: use dry sand, dry chemical or alcohol-resistant foam to extinguish (P370 + P378), Store in a well-ventilated place. Keep container tightly closed (P403 + P233), Store locked up (P405), Dispose of contents/container to an approved waste disposal plant (P501).

10X Permeabilization Solution (Part No. 122404-T): One 0.5 mL tube of PBS/1% Triton X-100
Detection Buffer (Part No. 122406-T): One 2 mL tube

Classification:
Acute toxicity, Oral, Category 4 (H302)
Eye irritation, Category 2A (H319)
Acute aquatic toxicity, Category 2 (H401)
Chronic aquatic toxicity, Category 2 (H411)

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<tr>
<th>Pictogram</th>
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<tr>
<td>![Warning Symbol]</td>
<td>Hazard Statements: Harmful if swallowed (H302), Causes serious eye irritation (H319), Toxic to aquatic life with long lasting effects (H411).</td>
</tr>
<tr>
<td>Precautionary Statements: Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke</td>
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when using this product (P270), Avoid release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED: call a POISON CENTER if you feel unwell. Rinse mouth (P301 + P312 + P330), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305 + P351 + P338), If eye irritation persists: get medical advice/attention (P337 + P313), Collect spillage (P391), Dispose of contents/container to an approved waste disposal plant (P501).

Stop Solution (Part No. 122408-T): Two 1.5 mL tubes

Classification:
Corrosive to metals, Category 1 (H290)
Skin corrosion, Category 1A (H314)
Serious eye damage, Category 1 (H318)
Acute aquatic toxicity, Category 3 (H402)

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| Signal Word | Danger |

**Hazard Statements:** May be corrosive to metals (H290), Causes severe skin burns and eye damage (H314), Causes serious eye damage, (H318), Harmful to aquatic life (H402).

**Precautionary Statements:** Keep only in original container (P234), Do not breathe dust/fume/gas/mist/vapors/spray (P260), Wash skin thoroughly after handling (P264), Avoid release to the environment (P273), Wear protective gloves/protective clothing/eye protection/face protection (P280), IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting (P301 + P330 + P331), IF ON SKIN (or hair): take off immediately all contaminated clothing Rinse skin with water/shower (P303 + P361 + P353), IF INHALED: remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER / doctor (P304 + P340 + P310), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER / doctor (P305 + P351 + P338 + P310), Wash contaminated clothing before reuse (P363), Absorb spillage to prevent material damage (P390), Store locked up (P405), Store in corrosive resistant stainless steel container with a resistant inner liner (P406), Dispose of contents/container to an approved waste disposal plant (P501).
Phagocytosis Inhibitor (Part No. 122006): One amber tube – 20 µL of 2 mM Cytochalasin D in DMSO

Classification:
Flammable liquids, Category 4 (H227)

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<th>Pictogram</th>
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<tr>
<td>Signal Word</td>
<td>Warning</td>
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**Hazard Statements:** Combustible liquid (H227)

**Precautionary Statements:** Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Wear protective gloves/protective clothing/eye protection/face protection (P280), In case of fire: use dry sand, dry chemical or alcohol-resistant foam for extinction (P370 + P378), Store in a well-ventilated place and keep cool (P403 + P235), Dispose of contents/container to an approved waste disposal plant (P501).

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Fixation Solution (Part No. 122402-T): One 2 mL tube of 3.2% Buffered Formaldehyde Solution

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<tr>
<th>CHEMICAL NAME</th>
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<tbody>
<tr>
<td>Paraformaldehyde</td>
<td>3.2 %</td>
<td>30525-89-4</td>
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10X Permeabilization Solution (Part No. 122404-T): One 0.5 mL tube of PBS/1% Triton X-100

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<th>CAS #</th>
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<tbody>
<tr>
<td>Triton X-100</td>
<td>1%</td>
<td>9002-93-1</td>
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Detection Buffer (Part No. 122406-T): One 2 mL tube

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<tr>
<td>Triton X-100</td>
<td>0.5%</td>
<td>9002-93-1</td>
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Stop Solution (Part No. 122408-T): Two 1.5 mL tubes
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<tr>
<th>CHEMICAL NAME</th>
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<th>CAS #</th>
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<tbody>
<tr>
<td>NaOH</td>
<td>2 N</td>
<td>1310-73-2</td>
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Phagocytosis Inhibitor (Part No. 122006): One amber tube – 20 µL of 2 mM Cytochalasin D in DMSO

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<tr>
<td>DMSO</td>
<td>100 %</td>
<td>67-68-5</td>
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SECTION 4. FIRST-AID MEASURES
- IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
- IN CASE OF SKIN CONTACT, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. CALL A PHYSICIAN.
- IN CASE OF CONTACT WITH EYES, FLUSH WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING BY SEPARATING THE EYELIDS WITH FINGERS. CALL A PHYSICIAN.

SECTION 5. FIRE-FIGHTING MEASURES
- Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or CO2
- Special protective equipment: Self-contained breathing apparatus

SECTION 6. ACCIDENTAL RELEASE MEASURES
- Evacuate area
- Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves.
- Absorb with sand or vermiculite, sweep up, place in a bag and hold for waste disposal.
- Avoid raising dust.
- Ventilate area and wash spill site after material pickup is complete.

SECTION 7. SAFETY HANDLING AND STORAGE
- Should be handled by trained personnel observing good laboratory practices.
- Avoid breathing vapor.
- Avoid skin contact or swallowing.
- May cause allergic reaction in sensitized individuals.
- Store in properly labeled containers at temperature on label
SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION
- Engineering measures: Handle in accordance with good industrial hygiene and safety practices. Wash hands immediately after handling the product.
- Personal protective equipment: Face shield or safety glasses, gloves, protective clothing, suitable respiratory equipment in cases of inadequate ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
- Form: liquid
- Odor: no data available
- pH: no data available
- Boiling point / range: no data available
- Melting point / range: no data available
- Flash point: no data available
- Evaporation rate: no data available
- Vapor pressure: no data available
- Vapor density: no data available
- Relative density: no data available
- Water solubility: no data available
- Autoignition temperature: no data available
- Decomposition temperature: no data available
- Viscosity: no data available
- Explosive properties: no data available
- Oxidizing properties: no data available

SECTION 10. STABILITY AND REACTIVITY
- Stability: no data available
- Reactivity: no data available
- Conditions to avoid: no data available
- Incompatible materials: no data available
- Decomposition products: no data available

SECTION 11. TOXICOLOGICAL INFORMATION
- Acute toxicity
  - Formaldehyde: LD₅₀ Oral 592 mg/kg (rat), LC₅₀ Inhalation 1.070 mg/m³ 4h (rat), LD₅₀ Dermal 10.000 mg/kg (rat)
  - Triton X-100: LD₅₀ oral 1.800 mg/kg (rat), LD₅₀ dermal 8.000 mg/kg (rabbit)
  - NaOH: no data available
  - DMSO: LD₅₀ Oral - rat - 14.500 mg/kg, LC₅₀ Inhalation - rat - 4 h - 40250 ppm, LD₅₀
- Skin corrosion/irritation
  - Formaldehyde: severe eye irritation (rabbit)
  - All other hazardous components: no data available
- Serious eye damage/irritation
  - Formaldehyde: severe eye irritation (rabbit)
o Triton X-100: Moderate eye irritation-24 h (rabbit)
o All other hazardous components: no data available

- Respiratory or skin sensitization
  - Formaldehyde: may cause allergic skin reaction
  - All other hazardous components: no data available
- Germ cell mutagenicity: no data available
- Carcinogenicity: no data available
- Reproductive toxicity: no data available

SECTION 12. ECOLOGICAL INFORMATION
- Ecotoxicity
  - Formaldehyde: Toxicity to daphnia and other aquatic invertebrates: EC5- 42 mg/l 24h (Daphnia magna)
  - Triton X-100: Toxicity to Daphnia and other aquatic invertebrates- EC50 26 mg/L-48h (Daphnia)
  - NaOH: no data available
  - DMSO: Toxicity to fish: LC50 34.000 mg/l - 96 h (Pimephales promelas), LC50 35.000 mg/l - 96 h (Onchorhynchus mykiss); Toxicity to daphnia and other aquatic invertebrates: EC50 27.500 mg/l (Daphnia pulex); Toxicity to algae: EC50 > 400.000 mg/l - 96h (Lepomis macrochirus)
- Mobility: no data available
- Biodegradation: no data available
- Bioaccumulation: no data available

SECTION 13. DISPOSAL CONSIDERATIONS
For small quantities: Cautiously add to a large stirred excess of water. Adjust the pH to neutral. Flush the aqueous solutions down the drain with plenty of water.

SECTION 14. TRANSPORT INFORMATION - IATA
- Hazard Class: 8
- Subsidiary Class: none
- Packing Group: II
- UN-No: UN1824
NOTE: THIS PRODUCT IS SHIPPED AS "DANGEROUS GOODS IN EXCEPTED QUANTITIES" UNDER IATA REGULATION 2.6.2.2.

SECTION 15. REGULATORY INFORMATION
- Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available
- Chemical safety assessment: no data available
SECTION 16. OTHER INFORMATION
The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide for experienced personnel. Cell Biolabs, Inc. shall not be held liable for any damage resulting from the handling or from contact with the above product(s).

Revised 03/28/2018