Safety Data Sheet

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

Catalog Number: CBA-307 and CBA-308
Product Name: StemTAG™ Alkaline Phosphatase Assay Kit
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

Fixing Solution (Part No. C30001): One 50 mL bottle

Classification:
Flammable liquids, Category 2 (H225)
Acute toxicity, Oral, Category 3 (H301)
Acute toxicity, Dermal, Category 3 (H311)
Skin Corrosion/irritation, Category 2 (H315)
Serious eye damage/eye irritation, Category 1 (H318)
Skin sensitization, Category 1 (H317)
Acute toxicity, Inhalation, Category 3 (H331)
Germ cell mutagenicity, Category 2 (H341)
Carcinogenicity, Category 1A, (H350)
Specific target organ toxicity - single exposure, Category 1, Respiratory system (H335)
Specific target organ toxicity - single exposure, Category 1, Central nervous system
Specific target organ toxicity - single exposure, Category 1, Eyes (H370)
Specific target organ toxicity - repeated exposure, Category 2, Kidney, Liver, Blood

Pictogram

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Pictogram" /></td>
<td></td>
</tr>
</tbody>
</table>

Signal Word: Danger
**Hazard Statements:** Highly flammable liquid and vapor (H225), Toxic if swallowed, in contact with skin or if inhaled (H301 + H311 + H331), Causes serious eye damage (H318), May cause an allergic skin reaction (H317), Suspected of causing genetic defects (H341), May cause cancer (H350), May cause respiratory irritation (H335), May cause drowsiness or dizziness (H336), Causes damage to organs (H370), May cause damage to organs through prolonged or repeated exposure (H372).

**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), Keep container tightly closed (P233), Use only non-sparking tools (P242), Take precautionary measures against static discharge (P243), Use personal protective equipment as required (P281), Wash face, hands and any exposed skin thoroughly after handling (P264), Contaminated work clothing should not be allowed out of the workplace (P272), Wear protective gloves (P280), Do not breathe dust/fume/gas/mist/vapors/spray (P260), Do not eat, drink, or smoke when using this product (P270), Use only outdoors or in a well-ventilated area (P271), Keep away from heat/sparks/open flames/hot surfaces. No smoking (P210), Keep cool (P235), IF exposed: Call a POISON CENTER or doctor/physician (P307 + P311), IF SWALLOWED: Immediately call a POISON CENTER / doctor. Rinse mouth (P301 + P310 + P330), IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician (P304 + P340 + P311), IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower (P303 + P353 + P361), If skin irritation or rash occurs: Get medical advice/attention (P333 + P313), IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338), In case of fire: use CO2, dry chemical or alcohol-resistant foam for extinction (P370 + P378), Store locked up (P405), Store in a well-ventilated place. Keep container tightly closed (P403 + P233), Dispose of contents/container to an approved waste disposal plant (P501).

**StemTAG™ AP Fluorometric Substrate** (Part No. 130701): One 50 mL bottle.

**Classification:**
Flammable liquids, Category 4 (H227)

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Word</td>
<td>Warning</td>
</tr>
</tbody>
</table>

**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 + P233), Dispose of contents/container to an approved waste disposal plant (P501).

**Cell Lysis Buffer** (Part No. C30005): One bottle – 20 mL
Classification:
Acute toxicity, Oral, Category 4 (H302)
Eye irritation, Category 2A (H319)
Acute aquatic toxicity, Category 2 (H401)
Chronic aquatic toxicity, Category 2 (H411)

<table>
<thead>
<tr>
<th>Pictogram</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="" /></td>
</tr>
<tr>
<td><img src="image" alt="" /></td>
</tr>
</tbody>
</table>

Signal Word | Warning
---|---

**Hazard Statements:** Harmful if swallowed (H302), Causes serious eye irritation (H319), Toxic to aquatic life with long lasting effects (H411).

**Precautionary Statements:** Wash skin thoroughly after handling (P264), Do not eat, drink, or smoke 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).

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

Fixing Solution (Part No. C30001): One 50 mL bottle

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CONCENTRATION</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formalin</td>
<td>10 %</td>
<td></td>
</tr>
<tr>
<td>Methanol</td>
<td>1-2 %</td>
<td>67-56-1</td>
</tr>
</tbody>
</table>

StemTAG™ AP Fluorometric Substrate (Part No. 130701): One 50 mL bottle.

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CONCENTRATION</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>100 %</td>
<td>67-68-5</td>
</tr>
</tbody>
</table>

Cell Lysis Buffer (Part No. C30005): One bottle – 20 mL
CHEMICAL NAME | CONCENTRATION | CAS #
---|---|---
Triton X-100 | 0.5% | 9002-93-1

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
  - Formalin: no data available
  - Dimethyl Sulfoxide: LD50 Oral - rat - 14.500 mg/kg, LC50 Inhalation - rat - 4 h - 40250 ppm, LD50
    - Triton X-100: LD50 oral 1.800 mg/kg (rat), LD50 dermal 8.000 mg/kg (rabbit)
- Skin corrosion/irritation: no data available
- Serious eye damage/irritation
  - Triton X-100: Moderate eye irritation-24 h (rabbit)
  - All other hazardous components: no data available
- Respiratory or skin sensitization: no data available
- Germ cell mutagenicity: no data available
- Carcinogenicity: no data available
- Reproductive toxicity: no data available

SECTION 12. ECOLOGICAL INFORMATION

- Ecotoxicity
- Formalin: no data available
- Dimethyl Sulfoxide: Toxicity to fish: LC50 34.000 mg/l - 96 h (Pimephales promelas), LC50 35.000 mg/l - 96 h (Oncorhynchus 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)
- Triton X-100: Toxicity to Daphnia and other aquatic invertebrates- EC50 26 mg/L-48h (Daphnia)
  - 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: Not Hazardous

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 12/13/2019