1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: FAM + HEX Calibrator Set
Catalog Number: S0141
Manufacturer/Supplier: Chai Biotechnologies
3206 Scott Blvd
Santa Clara, CA 95054
Phone: 1- (650) 779-5577

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

2. HAZARD IDENTIFICATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Safety Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAM Calibrator</td>
<td>5-FAM modified oligodeoxyribonucleic Acid (lyophilized)</td>
<td>Not a hazardous substance or mixture.</td>
</tr>
<tr>
<td>HEX Calibrator</td>
<td>6-HEX modified oligodeoxyribonucleic Acid (lyophilized)</td>
<td>Not a hazardous substance or mixture.</td>
</tr>
<tr>
<td>Reconstitution Buffer</td>
<td>Liquid mixture containing Tris (hydroxymethyl) aminomethane and Glycerol</td>
<td>Not a hazardous substance or mixture. May cause mild irritation to the skin.</td>
</tr>
</tbody>
</table>

3. COMPOSITION/INFORMATION ON INGREDIENTS RECONSTITUTION BUFFER

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>Formula</th>
<th>Molecular Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tris (hydroxymethyl) aminomethane</td>
<td>77-86-1</td>
<td>&lt;2%</td>
<td>NH₂C(CH₂OH)₃</td>
<td>121.14</td>
</tr>
<tr>
<td>Glycerol</td>
<td>56-81-5</td>
<td>5%</td>
<td>C₃H₈O₃</td>
<td>92.09</td>
</tr>
</tbody>
</table>
## 4. First Aid Measures

<table>
<thead>
<tr>
<th></th>
<th>Skin Contact</th>
<th>Eye Contact</th>
<th>Ingestion</th>
<th>Inhalation</th>
<th>Notes to Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Wash off immediately with plenty of water. If symptoms occur, obtain medical advice.</td>
<td>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if necessary.</td>
<td>Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist, call a physician. Do not induce vomiting without medical advice.</td>
<td>Move person to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.</td>
<td>Treat symptomatically.</td>
</tr>
</tbody>
</table>

## 5. Fire Fighting Measures

<table>
<thead>
<tr>
<th></th>
<th>Extinguishing method</th>
<th>Extinguishing agent</th>
<th>Unusual fire and explosion hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ordinary extinguishing procedures can be used in case of fire.</td>
<td>Water, powder, CO\textsubscript{2}, or bubble foam can be used.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

## 6. Accidental Release Measures

<table>
<thead>
<tr>
<th></th>
<th>Personal precautions</th>
<th>Environmental precautions</th>
<th>Methods for cleaning up</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Avoid breathing vapors, mist or gas. Use personal protection equipment.</td>
<td>Prevent product from entering drains.</td>
<td>Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.</td>
</tr>
</tbody>
</table>

## 7. Handling and Storage

<table>
<thead>
<tr>
<th></th>
<th>Handling</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Avoid contact with skin and eyes. Always wear recommended Personal Protective Equipment.</td>
<td>Store protected from light and in properly labeled containers. Store away from oxidizing agents.</td>
</tr>
</tbody>
</table>

## 8. Exposure Controls/Personal Protection

Components with workplace control parameters

<table>
<thead>
<tr>
<th></th>
<th>Substance</th>
<th>Control parameter</th>
<th>Personal protective equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>FAM and HEX Calibrator; Reconstitution Buffer</td>
<td>Prevent product from entering drains.</td>
<td>Hand Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Respiratory protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH [US] or CEN [EU]. Eye protection: Safety glasses with side-shields conforming to EN166 Use</td>
</tr>
</tbody>
</table>
equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Reconstitution Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance (physical state, color etc.)</td>
<td>Colorless liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>8.6</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No information available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>No information available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Reconstitution Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under recommended storage conditions</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Generates CO₂ when burned</td>
</tr>
<tr>
<td>Conditions to avoid (e.g. static discharge, shock or vibration)</td>
<td>Strong Oxidizing agents</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>No Information available</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>No Information available</td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION OF COMPONENTS

FAM and HEX Calibrator; Reconstitution Buffer

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact) No Information available

Symptoms related to the physical, chemical and toxicological characteristics No Information available

Delayed and immediate effects and chronic effects from short and long term exposure No Information available

Numerical measures of toxicity (such as acute toxicity estimates) No Information available

Acute Toxicity for Component Information

<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tris (hydroxymethyl) aminomethane</td>
<td>5900 mg/kg (Rat)</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Glycerol</td>
<td>LD50 = 12600 mg/kg (Rat)</td>
<td>LD50 &gt; 10 g/kg (Rabbit)</td>
<td>LC50 &gt; 570 mg/m3 (Rat) 1 h</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

FAM and HEX Calibrator; Reconstitution Buffer

Ecotoxicity (aquatic and terrestrial, where available) No Information available

Persistence and degradability No Information available

Bioaccumulative potential No Information available

Mobility in the soil No Information available

Other adverse effects No Information available

13. DISPOSAL INFORMATION

Dispose of contents/containers in accordance with local regulations.

14. TRANSPORT INFORMATION

A UN number None
B UN proper shipping name No dangerous good in sense of these transport regulations
C Transport hazard class None
D Packing group None
E Environmental hazards [e.g.: None
Marine pollutant)

F Special precautions for user None

15. REGULATORY INFORMATION

No chemicals in this material are subject to the reporting requirements.

16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

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

“The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all-inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.”