SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

Product Identifier
Cell Culture Media-Animal Derived Component Free

Product Use
Cell Culture

Manufacturer’s Name
Abeome Corporation

Supplier’s Name
Abeome Corporation

Street Address
111 Riverbend Road

Postal Code
30605

Date MSDS Prepared
03/26/15

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients (specific)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>%W/W</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino Acids</td>
<td>≤10</td>
<td>NA</td>
</tr>
<tr>
<td>Inorganic Salts</td>
<td>≤90</td>
<td>NA</td>
</tr>
<tr>
<td>Vitamins</td>
<td>≤15</td>
<td>NA</td>
</tr>
<tr>
<td>Standard Cell Culture Media</td>
<td>≤10</td>
<td>NA</td>
</tr>
<tr>
<td>Sodium Chloride</td>
<td>&lt;0.1</td>
<td>7647-14-5</td>
</tr>
<tr>
<td>Streptomycin sulfate</td>
<td>&lt;0.1</td>
<td>3810-74-0</td>
</tr>
<tr>
<td>Penicillin G potassium salt</td>
<td>&lt;0.1</td>
<td>113-98-4</td>
</tr>
<tr>
<td>Deoxycholic acid</td>
<td>&lt;0.01</td>
<td>302-95-4</td>
</tr>
</tbody>
</table>

SECTION 3 — HAZARDS IDENTIFICATION

Route of Entry
Absorbed through skin, eye contact, inhalation and ingestion.

Emergency Overview
This product is a potential irritant to eyes, respiratory system, and skin. This product may also be harmful if ingested. Complete toxicological properties have yet to be determined.

Potential Health Effects
Eye: May cause eye irritation. May result in corneal injury.
Skin: May cause skin irritation. May be fatal if absorbed through skin. May cause irritation with burning pain, itching, and redness.
Inhalation: May cause irritation of respiratory tract. Inhalation of high concentrations may cause central nervous system effects caused by nausea, headache, dizziness, unconsciousness and coma. May cause dyspnea (difficult or labored breathing). Exposure to high concentrations of mercaptans can produce unconsciousness with cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood), cold extremities and rapid pulse. Mercaptans may cause headache and nausea.
Ingestion: Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause muscle paralysis, respiratory failure and possible death.

Chronic Effects/Carcinogenicity
Prolonged or repeated exposure of mercaptans may cause defatting and dermatitis. Repeated or prolonged exposure may cause CNS stimulation.

OSHA Regulatory Status
Not Available
### SECTION 4 — FIRST AID MEASURES

<table>
<thead>
<tr>
<th></th>
<th>Skin Contact</th>
<th>Eye Contact</th>
<th>Inhalation</th>
<th>Ingestion</th>
<th>Note to Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin Contact</strong></td>
<td>In case of contact with skin, wash the affected area with soap and copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Should irritation occur, obtain medical attention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Eye Contact</strong></td>
<td>In case of contact with eyes, flush thoroughly with water also under eyelids, for at least 15 minutes. Obtain medical attention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>If inhaled, remove person to fresh air. If not breathing, give artificial respiration. If breathing becomes difficult, give oxygen. Obtain medical attention. Do NOT use mouth-to-mouth resuscitation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>If swallowed, wash out mouth with water provided person is conscious. Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Note to Physician</strong></td>
<td>Treat symptomatically and supportively.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 5 — FIRE FIGHTING MEASURES

<table>
<thead>
<tr>
<th>Flammable</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>If yes, under which conditions?</td>
<td>Not available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Means of Extinguishment</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashpoint (°C) and Method</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper Flammable Limit (% by volume)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower Flammable Limit (% by volume)</td>
<td>Not available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Autoignition Temperature (°C)</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosion Data — Sensitivity to Impact</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion Data — Sensitivity to Static Discharge</td>
<td>Not available</td>
</tr>
</tbody>
</table>

| Hazardous Combustion Products | Not available |
| Fire Fighting Procedures | Not available |

SECTION 6 — ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>Leak and Spill Procedures</th>
</tr>
</thead>
</table>

Wear chemical-resistant personal protective equipment. Absorb spill with inert material (e.g. vermiculite, sand or earth) and place in closed container for disposal. Scoop up with a nonsparking tool. Remove all sources of ignition. Provide adequate ventilation. Should not be released into the environment. Wash area thoroughly after clean-up is complete.

SECTION 7—HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>Handling Procedures and Equipment</th>
</tr>
</thead>
</table>

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Should be handled by trained personnel observing good laboratory practices. Empty containers can be dangerous. Keep container tightly closed. Do not ingest or inhale. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Avoid breathing vapor or spray mist. Avoid skin and eye contact or swallowing.

<table>
<thead>
<tr>
<th>Storage Requirements</th>
</tr>
</thead>
</table>

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store at -20°C.

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION
Exposure Limits
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

ACGIH TLV: Not Available  OSHA PEL: Not Available  NIOSH IDLH: Immediately dangerous to life or health.

Specific Engineering Controls
Use with adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

General Hygiene Considerations
Wash hands after use.

Personal Protective Equipment
Eye: Wear appropriate protective eyeglasses or chemical safety goggles
Skin Protection: Lab coat, latex gloves

Respiratory Protection
This is a laboratory-use product for which no industrial protective equipment has been designated. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European standard EN 149. Wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent).

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Odour and Appearance</th>
<th>Odour Threshold (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Transparent, red fluid</td>
<td>None</td>
</tr>
</tbody>
</table>

Specific Gravity
Not Available

Evaporation Rate
Not Available

pH
Approximately 7.2

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability
Stable under normal conditions. Avoid excess heat, ignition sources and high temperature.

Incompatibility with Other Substances
Strong oxidizers, calcium hypochlorite, metals, strong acids, caustic, aliphatic amines, isocyanates.
Reactivity, and under what conditions?
Decomposition can lead to irritating gases and vapors.

Hazardous Decomposition Products
Carbon monoxide. Oxides of sulfur, irritating and toxic fumes and cases, carbon monoxide.

SECTION 11 — TOXICOLOGICAL INFORMATION

Effects of Acute Exposure
Not Available

Effects of chronic exposure
Not Available

Irritancy of Product
Not Available

Skin sensitization
Not Available

Respiratory sensitization
Not Available

Carcinogenicity - IARC
Not Available

Carcinogenicity - ACGIH
Not Available

Reproductive toxicity
Not Available

Teratogenicity
Not Available

Embryotoxicity
Not Available

Mutagenicity
Not Available

Name of synergistic products/effects
Not Available

LD50 (specify species and route)
Sodium Azide  27 mg/kg (oral-rat)

LC50 (specify species and route)
Not Available

Other adverse effects
The toxicological properties have not been fully investigated.
SECTION 12 — ECOLOGICAL INFORMATION

Aquatic Toxicity
Not Available

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste Disposal
Disposal should be in accordance with all existing practices at your institution. Observe all Federal, Provincial/State and Local Laws.

SECTION 14 — TRANSPORT INFORMATION

Special Shipping information
This substance is not known to be hazardous for transport.

PIN
Not Available

TDG
Not Regulated

[DOT] Not Regulated

[IMO] Not Regulated

[CAO] Not Available

SECTION 15 — REGULATORY INFORMATION

[WHMIS Classification] Not Available

[OSHA] Not Available

[SERA] Not Available

[TSCA] Not Available

This product has been classified in accordance with the hazard criteria of the OSHA’s Hazard Communication Standard (HCS) and the MSDS contains all of the information required by HCS

SECTION 16 — OTHER INFORMATION

Disclaimer
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Abeome Corporation shall not be held liable for any damage resulting from handling or from contact with the product. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. The information contained in this Material Safety Data Sheet (MSDS) is current as of the date Prepared shown in Section 1 of this document and may be subject to amendment by Abeome Corporation.

Notice
THIS PRODUCT IS FOR RESEARCH ONLY. NOT USED FOR DIAGNOSTIC OR THERAPEUTIC APPLICATIONS.

Prepared By: Regulatory Affairs
Abeome Corporation
111 Riverbend Rd
Ste 146
Athens, GA 30605

Creation Date: 26 March 2015

Revision Summary: