SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sf21 Cells, Frozen in ESF 921
Manufacturer: Expression Systems, LLC
2537 Second Street
Davis, CA 95618
Tel. 1-530-747-2035
Fax 1-530-747-2034

Product Use: For laboratory use.
Not for human or animal therapeutic or clinical diagnostic use.

Product Number: 94-003F

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification:

Physical State: Slightly viscous translucent liquid
Classification: WARNING- Irritant. Hazardous if absorbed.

GHS Label:

HMIS Rating: Health: 1 Flammability: 0 Reactivity: 0

Potential Health Effects:
- Eyes: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.
- Skin: Can cause moderate skin irritation, defatting and dermatitis. Not likely to cause permanent damage.
- Inhalation: Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache. No toxicity expected from inhalation.
- Ingestion: Irritating to mouth, throat and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name: Dimethyl Sulfoxide

CAS Number: 67-68-5 EINECS: 200-664-3 Concentration by weight: 5%

Ingredients: The above ingredients are components classified as hazardous based on physical properties and health effects. Other ingredients are withheld as a trade secret, but are available to health professionals, ES employees and designated representatives in accordance with applicable provisions of 29 CFR 1910.1200(i)(1)(iv).

SECTION 4 – FIRST AID MEASURES

Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with plenty of water. If irritation develops, seek medical advice.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If breathing is stopped, give artificial respiration.

Ingestion: Rinse mouth with water. Do not give anything by mouth to an unconscious person.

Eye Exposure: Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Check and remove contact lenses. Seek medical advice.

Notes to physician: Treat symptomatically.

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder

Auto Ignition Temperature: Not Applicable

Protection for Firefighters: Self-contained breathing apparatus and protective suit

NFPA Rating: Health: 1 Flammability: 0 Reactivity: 0
SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protective equipment. Prevent contact with skin or eyes (see section 8).

Methods for cleaning up: Clean up with inert absorbent material

SECTION 7 – HANDLING AND STORAGE

Handling: No special handling advice required

Storage: Store in properly labeled containers

SECTION 8 – PRECAUTIONS TO CONTROL EXPOSURE/PERSONAL PROTECTION

Exposure Limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL (ppm)</th>
<th>AGCIH TWA (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>Not established</td>
<td>Not established</td>
</tr>
</tbody>
</table>

Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment (PPE):

**Eye Protection:** Avoid contact with eyes. Wear safety glasses with side shields.

**Skin Protection:** Prevent contact with the skin as much as possible. Wear protective rubber gloves and lab coat.

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practices.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White slightly viscous liquid

**pH:** Not established

**Melting/Freezing Point:** °C/°F – No data available

**Boiling Point:** °C/°F – No data available

**Flash Point:** °C/°F – No data available

**Auto-ignition Temperature:** °C/°F – No data available

**Oxidizing Properties:** No information available

**Water Solubility:** No data available

SECTION 10 – STABILITY AND REACTIVITY

**Stability:** Stable under normal conditions

**Hazardous decomposition products:** No information available

**Incompatible Materials:** Strong oxidizing agents

**Hazardous polymerization:** Will not occur

SECTION 11 – TOXICOLOGICAL INFORMATION

**Likely routes of exposure:** Inhalation, eye and skin contact, ingestion

**Acute toxicity and effects:**

- **Inhalation:** No information available
- **Eye contact:** No information available
- **Skin contact:** Dimethyl sulfoxide 40 gm/kg
- **Ingestion:** Dimethyl sulfoxide 14,500 mg/kg
Specific effects:

- **Carcinogenic:** No information available
- **Mutagenic:** No information available
- **Teratogenic/Reproductive:** No information available
- **Sensitization:** No information available

**Target organ effects:** No information available. Target organs: Blood, skin, eyes.

**Chronic (long-term) effects:** No known effect based on information supplied

### SECTION 12 – ECOLOGICAL INFORMATION

- **Eco-toxicity:** No information available
- **Degradability:** Biodegrades slowly
- **Bioaccumulation:** Not expected to occur

### SECTION 13 – WASTE DISPOSAL CONSIDERATIONS

- **Waste disposal method:** Disposal of this product, solutions and any by-products should comply with all federal, state and local regulations

### SECTION 14 – TRANSPORT INFORMATION

- **DOT:**
  - **Proper shipping name:** None
  - **Hazard Class:** This substance is considered to be non-hazardous for transport.

- **IATA:**
  - **Proper shipping name:** None
  - **Hazard Class:** This substance is considered to be non-hazardous for transport.

### SECTION 15 – REGULATORY INFORMATION

#### United States Regulatory Information:

- **TSCA:** This product is solely for research and development purposes only and may not be used, processed or distributed for commercial purpose. It may only be handled by technically qualified individuals.
- **SARA 313:** This product does not contain any 313 chemicals regulated by SARA.
- **California Proposition 65:** This product does not contain chemicals listed under Proposition 65.

#### Canada Regulatory Information:

- **DSL/NDSL:** Not determined

#### Component:

- **Dimethyl sulfoxide**
  - **WHMIS Hazard Class:** D2B
  - **EINECS Number:** 200-664-3
<table>
<thead>
<tr>
<th><strong>SECTION 16 – OTHER INFORMATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issuing Date:</strong></td>
</tr>
<tr>
<td><strong>Reissue date/reason for reissue:</strong></td>
</tr>
<tr>
<td><strong>Intended use of product:</strong></td>
</tr>
<tr>
<td><strong>Disclaimer:</strong></td>
</tr>
</tbody>
</table>