

SAFETY DATA SHEET

(in accordance with COMMISSION REGULATION (EU) No 830/2015)

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: 293-ES Cells, Frozen in ESF SFM

Product Number: 94-007F

Chemical Name: Not Applicable

REACH registration number: No registration number is given yet for this substance/substances in this mixture as the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: For laboratory use. Not for human or animal therapeutic or clinical diagnostic use.

1.3 Details of the supplier of the safety data sheet

Company: Expression Systems, LLC
2537 Second Street
Davis, California, 95618
USA

Telephone: +1 877-877-7421
+1 530-747-2035

Fax: +1 530-747-2034

Emergency Phone: +1 530-747-2035 Hours of operation: 16:00-01:00 UTC/08:00-17:00 PST (UTC-8)

SECTION 2 – HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

WARNING- Irritant. Hazardous if absorbed.

2.2 GHS label elements

Hazard Pictograms:



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.

2.3 Other hazards- None

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance Name: Dimethyl Sulfoxide

3.2 Mixture name:

CAS Number: 67-68-5

ENEICS: 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

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5 – FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media: Dry Chemical powder

5.2 Special hazards arising from the substance or mixture: No data

5.3 Advice for Firefighters

Auto Ignition Temperature: Not Applicable

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

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

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

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Clean up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal, see section 13.

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling

No special handling advice required

7.2 Conditions for safe storage, including any incompatibilities

Store in properly labeled containers.

7.3 Specific end use(s)

No uses other than those specified in section 1.2.

SECTION 8 – PRECAUTIONS TO CONTROL EXPOSURE/PERSONAL PROTECTION

8.1 Exposure limits:

<u>Component</u>	<u>OSHA PEL (ppm)</u>	<u>AGCIH TWA (ppm)</u>
Dimethyl Sulfoxide	Not established	Not established

8.2 Exposure Controls

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

9.1 Information on basic physical and chemical properties

Appearance: Translucent, slightly viscous liquid

pH: Not established

Odor: No data available

Melting/Freezing Point: No data available

Boiling Point: No data available

Flash Point: No data available

Evaporation rate: No data available

Flammability (solid, gas): 0

**Upper/lower flammability
or explosive limits** N/A

Auto-ignition Temperature: No data available

Vapor pressure: No data available

Vapor density: No data available

Oxidizing Properties: No information available

Water Solubility: No data available

Decomposition temp: No information available

Viscosity: Not established

Explosive properties: No data available

9.2 Other safety information

SECTION 10 – STABILITY AND REACTIVITY

- 10.1 Chemical stability:** Stable under normal conditions
- 10.2 Possibility of hazardous reactions:** Hazardous reaction has not been reported
- 10.3 Conditions to avoid:** No information available
- 10.4 Incompatible materials:** Strong oxidizing agents
- 10.5 Hazardous decomposition products:** No information available

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

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 40gm/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

- 12.1 Toxicity:** No information available
- 12.2 Persistence and degradability:** Biodegrades slowly
- 12.3 Bioaccumulation:** Not expected to occur
- 12.4 Mobility in soil:** No information available
- 12.5 Results of PBT and vPvB assessment:** No information available
- 12.6 Other adverse effects:** No information available

SECTION 13 – WASTE DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal of this product, solutions and any by-products should comply with all applicable federal, state and local regulations.

SECTION 14 – TRANSPORT INFORMATION

14.1 UN/NA Number:	Not Applicable
14.2 UN/NA proper shipping name:	Not Applicable
14.3 Transport Hazard Class:	This substance is considered to be non-hazardous for transport.
IATA:	Not hazardous goods
DOT (US):	Not hazardous goods
IMDG:	Not hazardous goods

SECTION 15 – REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****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.
Clean Air Act, Sec. 112 Hazardous Air Pollutants (HAPs):	This product does not contain any HAPs
California Proposition 65 Components:	This product does not contain chemicals listed under Proposition 65
WHMIS Hazard Class:	D2B
Massachusetts Right to Know Components: None	CAS No.
New Jersey Right to Know Components: None	CAS No.
Pennsylvania Right to Components: None	CAS No.

SECTION 16 – OTHER INFORMATION**HMIS Rating**

Health hazard: 1
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating

Health: 1
Flammability: 0
Reactivity: 0

Issuing Date: Oct 2012

Reissue date/reason for reissue: Sep 2023/Update format for compliance to Regulation (EU) 830/2015 and Regulation (EU) 453/2010.

Intended use of product: Material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use.

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