

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name: ESF SFM Mammalian Cell Culture Medium, Serum-Free

Product Number: 98-001

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

Identified uses: For use in culturing mammalian cells. For research use only. 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
Fa	.4 500 747 0004
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

Not a hazardous substance or mixture

2.2 GHS label elements

Not a hazardous substance or mixture: No hazard pictograms, signal words, hazard statement or precautionary statements

2.3 Other hazards- None. No hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance Name: Not applicable

3.2 Mixture name:

CAS Number:	None
SARA 313:	No
ROHS 2/3:	No
Ingredients:	This product contains no substances which at their concentration present a health or environmental hazard within the meaning of Regulation (EC) 1272/2008.

This product contains no substances which at their given concentration are considered to be hazardous to health. Ingredients are withheld as a trade secret, but are available to health professionals, Expression Systems 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.
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 15 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 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
- **4.3** Indication of any immediate medical attention and special treatment needed No specific measures have been identified

SECTION 5 – FIREFIGHTING MEASURES

5.1 Extinguishing Media Suitable extinguishing media:

Dry chemical powder or extinguishing measures that are appropriate to local circumstances and the surrounding environment .

- 5.2 Special hazards arising from the substance or mixture Nature of decomposition products not known
- 5.3 Advice for firefighters

Auto Ignition Temperature:Not ApplicableProtection for Firefighters:Self-contained breathing apparatus and protective suitGeneral fire hazards:This product will not significantly contribute to the intensity of a fire

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

Do not let product enter drains

- **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

Keep container tightly closed. Store upright to prevent leakage. To maintain suitability for use, store at 2-8°C in a dark area. Store upright to prevent leakage.

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 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values

8.2 Exposure Controls

Eye Protection:

Engineering Controls: No special environmental controls are required

Personal Protective Equipment (PPE):

Avoid contact with eyes. Use eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU).

Skin Protection:	Prevent contact with the skin as much as possible. Wear protective rubber gloves and lab coat.
Respiratory Protection:	Respiratory protection not required
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:	Clear, yellow solution
pH:	7.15-7.25
Odor:	Slight yeasty odor
Melting/Freezing Point:	°C/°F – No data available
Boiling Point:	°C/°F – No data available
Flash Point:	°C/°F – No data available
Evaporation rate:	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Auto-ignition Temperature:	°C/°F – 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:	°C/°F – No data available
Viscosity:	No data available
Explosive properties:	No data available

9.2 Other safety information

No data available

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In event of fire, see section 5

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:	No information available
Ingestion:	No information available
Specific effects:	
Carcinogenic:	No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by the IARC, ACGIH, NTP or OSHA
Mutagenic:	No information available
Teratogenic/Reproductive:	No information available
Sensitization:	No information available
Target organ effects:	No information available
Chronic (long-term) effects:	No known effect based on information supplied

SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity:

No information available

12.1 Persistence and degradability:

Inherently biodegradable

12.3 Bioaccumulation:

Does not bio-accumulate

12.4 Mobility in soil:

No data available

12.5 Results of PBT and vPvB assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data 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 regional, country, federal, state and local regulations. If unsure of the applicable regulatory requirements, contact a licensed professional waste disposal service to dispose of this material.

SECTION 14 – TRANSPORT INFORMATION

14.1 UN/NA Number: None

IATA:

14.2 UN/NA proper shipping name: Not applicable

Not dangerous goods

- 14.3 Transport Hazard Class: This substance is considered to be non-hazardous for transport
 - **DOT (US):** Not dangerous goods
 - IMDG: Not dangerous goods

SECTION 15 – REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United States Regulatory Information:	
SARA 302:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA 311/312 hazards:	No SARA hazards
SARA 313:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Clean Air Act, Sec. 112 Hazardous Air Pollutants (HAPs):	This product does not contain HAPs.
California Proposition 65:	This product does not contain chemicals listed under Proposition 65.
WHMIS Hazard Class:	Non-controlled.
Massachusetts Right to Know Components:	This product does not contain chemicals on the Massachusetts Right to Know List
New Jersey Right to Know Components:	This product does not contain chemicals on the New Jersey Right to Know List
Pennsylvania Right to Components:	This product does not contain chemicals on the Pennsylvania Right to Know List

SECTION 16 – OTHER INFORMATION

HMIS Rating

	HMIS Rating	
	Health hazard:	0
	Chronic health hazard:	0
	Flammability:	0
	Physical hazard:	0
	NFPA Rating	
	Health:	0
	Flammability:	0
	Reactivity:	0
Issui	ing Date:	Oct 2012
Reis	sue date/reason for reissue:	Oct 2018/Update format for compliance to Regulation (EU) CLP 1272/2008 and Regulation (EU) 1907/2006 (last amended for SDS format by Regulation (EU) 2015/830)
Inter	nded 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.
Disc	laimer:	The information provided on this SDS is correct to the best of our knowledge, information, and belief at the date of its publication. It does not purport to be all inclusive and shall be used only as a guide for safe handling, use, processing, storage, transportation, disposal and release of the product. This is not considered as a warranty or quality specification. Expression Systems shall not be held liable for any damage resulting from the handling or from contact with the above product.