

# **GHS SAFETY DATA SHEET**

Sf9 Cells, Frozen in ESF AF

Droduct Name	CT AND COMPA			Monufacture	Everagion Systems 11.0
Product Name:	Sf9 Cells, Frozen i	n ESF AF		Manufacturer:	Expression Systems, LLC 2537 Second Street
Product Use:	For laboratory use.				Davis, CA 95618
			or clinical diagnostic use.		Tel. 1-530-747-2035
					Fax 1-530-747-2034
Product Number:	94-006F				
SECTION 2 – HAZAR	DS IDENTIFICA	ΓΙΟΝ			
GHS Classification:					
Physical State:	Slightly viscous translucent liquid				
Classification:	WARNING- Irritant. Hazardous if absorbed.				
GHS Label:					
HMIS Rating:	Health: 1	Flammability: 0	Reactivity:	)	
Potential Health Effects:	Eyes: Can cause n	noderate irritation	, tearing and reddening, bu	it not likely to permanently	injure eye tissue.
	Skin: Can cause m	oderate skin irrita	ation, defatting and dermati	tis. Not likely to cause per	nanent 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 a	bdominal discomfort, naus	ea, vomiting and diarrhea.
SECTION 3 – COMPC	SITION/INFORM		NGREDIENTS		
Substance Name:	Dimethyl Sulfoxide				
CAS Number:	67-68-5	ENEICS:	200-664-3	Concentration b	y weight: 5%
	<b>-</b>	ente are compone	ents classified as hazardou	s based on physical prope	ties and health effects. Other
Ingredients:	ingredients are with	hheld as a trade s	secret, but are available to applicable provisions of 29		
-	ingredients are with representatives in a	hheld as a trade s	secret, but are available to		
-	ingredients are with representatives in a	hheld as a trade s accordance with a	secret, but are available to applicable provisions of 29	CFR 1910.1200(i)(1)(iv).	
SECTION 4 – FIRST A Skin Contact:	ingredients are with representatives in a AID MEASURES Remove contamina advice.	hheld as a trade s accordance with a ated clothing and	secret, but are available to applicable provisions of 29	CFR 1910.1200(i)(1)(iv).	nployees and designated
SECTION 4 – FIRST A Skin Contact: Inhalation:	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I	hheld as a trade s accordance with a ated clothing and f breathing is diffi	secret, but are available to applicable provisions of 29 shoes. Wash skin thorougi	CFR 1910.1200(i)(1)(iv).	nployees and designated
SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion:	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with v	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty c	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath anything by mouth to an u	CFR 1910.1200(i)(1)(iv). Inly with plenty of water. If in Ing is stopped, give artificia	nployees and designated
SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure:	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with w Immediately flush e	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty o ct lenses. Seek m	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath anything by mouth to an u	CFR 1910.1200(i)(1)(iv). Inly with plenty of water. If in Ing is stopped, give artificia	nployees and designated rritation develops, seek medical Il respiration.
SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure: Notes to physician:	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with v Immediately flush e and remove contac Treat symptomatic	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty c ct lenses. Seek m ally.	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath anything by mouth to an u	CFR 1910.1200(i)(1)(iv). Inly with plenty of water. If in Ing is stopped, give artificia	nployees and designated rritation develops, seek medical Il respiration.
SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure: Notes to physician: SECTION 5 – FIREFIC	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with w Immediately flush e and remove contact Treat symptomatic	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty c ct lenses. Seek m ally.	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath anything by mouth to an u	CFR 1910.1200(i)(1)(iv). Inly with plenty of water. If in Ing is stopped, give artificia	nployees and designated rritation develops, seek medical Il respiration.
	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with w Immediately flush e and remove contact Treat symptomatic CHTING MEASU dia: Dry cher	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty o ct lenses. Seek m ally. RES nical powder	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath anything by mouth to an u	CFR 1910.1200(i)(1)(iv). Inly with plenty of water. If in Ing is stopped, give artificia	nployees and designated rritation develops, seek medical Il respiration.
SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure: Notes to physician: SECTION 5 – FIREFIC Suitable Extinguishing Me Auto Ignition Temperature	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with w Immediately flush e and remove contact Treat symptomatic GHTING MEASU dia: Dry cher	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty o ct lenses. Seek m ally. <b>RES</b> nical powder licable	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath anything by mouth to an u	CFR 1910.1200(i)(1)(iv). hly with plenty of water. If i ng is stopped, give artificia inconscious person. ites, occasionally lifting the	nployees and designated rritation develops, seek medical Il respiration.
SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure: Notes to physician: SECTION 5 – FIREFIC Suitable Extinguishing Me	ingredients are with representatives in a AID MEASURES Remove contamina advice. Move to fresh air. I Rinse mouth with w Immediately flush e and remove contact Treat symptomatic GHTING MEASU dia: Dry cher	hheld as a trade s accordance with a ated clothing and f breathing is diffi water. Do not give eyes with plenty o ct lenses. Seek m ally. <b>RES</b> nical powder licable tained breathing a	secret, but are available to applicable provisions of 29 shoes. Wash skin thoroug cult, give oxygen. If breath e anything by mouth to an u of water for at least 20 minu edical advice.	CFR 1910.1200(i)(1)(iv). hly with plenty of water. If i ng is stopped, give artificia inconscious person. ites, occasionally lifting the	nployees and designated rritation develops, seek medical Il respiration.

Personal Precautions:	INTAL RELEASE MEASURES 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 - HANDLI	TION 7 – HANDLING AND STORAGE				
Handling:	No special handling advice required				
Storage:	Store in properly labeled containers				
SECTION 8 – PRECAU Exposure Limits:	JTIONS TO CONTROL EXPOSURE/PERSONAL PROTECTION				
<u>Component</u>	OSHA PEL (ppm) AGCIH TWA (ppm)				
Dimethyl Sulfoxide	Not established Not established				
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 – PHYSIC Appearance:	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				
	LITY AND REACTIVITY				
Stability: Hazardous decomposition	Stable under normal conditions         products:       No information available				
Incompatible Materials:	Strong oxidizing agents				
Hazardous polymerization:					
	OLOGICAL 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				
	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 inform	nation 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	
European Union Regulatory Information:				
Product Risk Phrases:	None assigned			
Product Safety Phrases:	None assigned			
Product Classification:	None			
Component:	Dimethyl sulfoxide	EINECS Number:	200-664-3	
SARA listed:	No			

SECTION 16 – OTHER INFORMATION		
Issuing Date:	Jan 2013	
Reissue date/reason for reissue:	Feb 2017/Updated company logo.	
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.	
Disclaimer:	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.	