

Sf21 Cells, Frozen in ESF 921

	CT AND CO		ICATION				
Product Name:	Sf21 Cells, Fr	ozen in ESF 921		Manufacturer:	Expression Systems, LLC		
Product Use:	For laboratory	1100			2537 Second Street Davis, CA 95618		
1000001036.	•		c or clinical diagnostic us	e.	Tel. 1-530-747-2035		
			0		Fax 1-530-747-2034		
Product Number:	94-003F						
SECTION 2 – HAZAR	DS IDENTIFI	CATION					
GHS Classification:							
Physical State:	Slightly viscous translucent liquid						
Classification:	WARNING- Irritant. Hazardous if absorbed.						
GHS Label:							
HMIS Rating:	Health: 1	Flammability: 0	Reactivit	y: 0			
Potential Health Effects:	Eyes: Can cau	use moderate irritatior	n, tearing and reddening	but not likely to permanently	injure eye tissue.		
	Skin: Can cau	se moderate skin irrita	ation, defatting and derm	atitis. 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 abdominal discomfort, nausea, vomiting and diarrhea.						
SECTION 3 – COMPC	SITION/INFO	ORMATION ON I	NGREDIENTS				
Substance Name:	Dimethyl Sulfo	oxide					
CAS Number:	67-68-5	ENEICS:	200-664-3	Concentration b	y weight: 5%		
	The above ing ingredients are	redients are compone e withheld as a trade	ents classified as hazard secret, but are available		rties and health effects. Other		
Ingredients:	The above ing ingredients are representative	redients are compone e withheld as a trade as in accordance with	ents classified as hazard secret, but are available	ous based on physical prope to health professionals, ES e	rties and health effects. Other		
Ingredients: SECTION 4 - FIRST A	The above ing ingredients are representative	redients are compone e withheld as a trade as in accordance with	ents classified as hazard secret, but are available applicable provisions of	ous based on physical prope to health professionals, ES e 29 CFR 1910.1200(i)(1)(iv).	rties and health effects. Other		
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Ingredients: <u>SECTION 4 – FIRST A</u> Skin Contact: Inhalation:	The above ing ingredients are representative ND MEASUR Remove conta advice. Move to fresh	redients are compone e withheld as a trade as in accordance with ES aminated clothing and air. If breathing is diff	ents classified as hazard secret, but are available applicable provisions of	ous based on physical prope to health professionals, ES e 29 CFR 1910.1200(i)(1)(iv). ughly with plenty of water. If i athing is stopped, give artificia	rties and health effects. Other mployees and designated rritation develops, seek medical		
Ingredients: <u>SECTION 4 – FIRST A</u> Skin Contact: Inhalation: Ingestion:	The above ing ingredients are representative AID MEASUR Remove conta advice. Move to fresh Rinse mouth w Immediately fl	redients are compone e withheld as a trade as in accordance with ES aminated clothing and air. If breathing is diff with water. Do not give	ents classified as hazard secret, but are available applicable provisions of I shoes. Wash skin thoro icult, give oxygen. If brea e anything by mouth to a of water for at least 20 m	ous based on physical prope to health professionals, ES e 29 CFR 1910.1200(i)(1)(iv). ughly with plenty of water. If i athing is stopped, give artificia n unconscious person.	rties and health effects. Other mployees and designated rritation develops, seek medical		
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Ingredients: SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure: Notes to physician: SECTION 5 – FIREFIC Suitable Extinguishing Me Auto Ignition Temperature	The above ing ingredients are representative AID MEASUR Remove conta advice. Move to fresh Rinse mouth w Immediately fl and remove co Treat symptor CHTING MEA dia: Dry : Not	redients are compone e withheld as a trade es in accordance with ES aminated clothing and air. If breathing is diff with water. Do not give ush eyes with plenty of ontact lenses. Seek m natically. SURES chemical powder Applicable	ents classified as hazard secret, but are available applicable provisions of I shoes. Wash skin thoro icult, give oxygen. If brea e anything by mouth to a of water for at least 20 m	ous based on physical prope to health professionals, ES e 29 CFR 1910.1200(i)(1)(iv). ughly with plenty of water. If i athing is stopped, give artificia n unconscious person. inutes, occasionally lifting the	rties and health effects. Other mployees and designated rritation develops, seek medical al respiration.		
CAS Number: Ingredients: SECTION 4 – FIRST A Skin Contact: Inhalation: Ingestion: Eye Exposure: Notes to physician: SECTION 5 – FIREFIC Suitable Extinguishing Me Auto Ignition Temperature Protection for Firefighters NFPA Rating:	The above ing ingredients are representative AID MEASUR Remove conta advice. Move to fresh Rinse mouth v Immediately fl and remove co Treat symptor CHTING MEA dia: Dry : Not	redients are compone e withheld as a trade es in accordance with ES aminated clothing and air. If breathing is diff with water. Do not give ush eyes with plenty of ontact lenses. Seek m natically. SURES chemical powder Applicable -contained breathing	ents classified as hazard secret, but are available applicable provisions of shoes. Wash skin thoro icult, give oxygen. If brea e anything by mouth to a of water for at least 20 m hedical advice.	ous based on physical prope to health professionals, ES e 29 CFR 1910.1200(i)(1)(iv). ughly with plenty of water. If i athing is stopped, give artificia n unconscious person. inutes, occasionally lifting the	rties and health effects. Other mployees and designated rritation develops, seek medical al respiration.		

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:						
<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 Equip	ment (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						
Oxidizing Properties:	No information available					
Water Solubility:	No data available					
SECTION 10 – STABI Stability:	LITY AND REACTIVITY 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:						
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:

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. Targ	et organs: Blood, skin, eyes.				
Chronic (long-term) effects	:	No known effect based on info	ormation supplied				
SECTION 12 – ECOLOGICAL INFORMATION							
Eco-toxicity:		nation available					
Degradability:	Biodegrades slowly						
Bioaccumulation:	Not expected to occur						
SECTION 13 - WASTE		SAL CONSIDERATIONS	6				
Waste disposal method:			ny by-products should comply with all	federal, state and local regulations			
SECTION 14 - TRANS		NFORMATION					
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 subs	This substance is considered to be non-hazardous for transport.					
SECTION 15 – REGULATORY INFORMATION							
United States Regulatory In	formation	:					
TSCA:			arch and development purposes only a pose. It may only be handled by techn				
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 Informa	ation:						
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					

	Issue date: FEB 2017			
SECTION 16 – OTHER INFORMATION				
Issuing Date:	Feb 2017			
Reissue date/reason for reissue:	N/A			
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.			