## Safety Data Sheet

SOLUTIONS

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

# **SECTION 1: IDENTIFICATION**

#### **1.1. Product Identifier**

Product Form: Mixture Product Name: Cell Thawing Media 10% Dextran 40 (in 0.9% NaCl), Synonyms: CTM-NaCl

#### 1.2. Intended Use of the Product

Biological material storage during thawing.

## 1.3. Name, Address, and Telephone of the Responsible Party

Company BioLife Solutions, Inc. 3303 Monte Villa Parkway Suite 310 Bothell, WA 98021 425-402-1400 www.biolifesolutions.com

## 1.4. Emergency Telephone Number

Emergency Number: 425-402-1400

# **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the Substance or Mixture

**GHS-US/CA** Classification

Not classified

#### 2.2. Label Elements

**GHS-US/CA** Labeling

No labeling applicable

#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

# 2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture\*

Name	Product Identifier	% **	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	89	Not classified
Dextran	(CAS-No.) 9004-54-0	10	Comb. Dust
Sodium chloride	(CAS-No.) 7647-14-5	1	Not classified

Full text of H-phrases: see section 16

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

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# **SECTION 4: FIRST AID MEASURES**

#### 4.1. Description of First-aid Measures

**General**: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation**: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact**: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact**: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

## 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** Not expected to present a significant hazard under anticipated conditions of normal use. DMSO may enhance the rate of skin absorption of skin-permeable substances.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation. May cause an allergic reaction in sensitive individuals.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

## 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

# **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising from the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive. Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions

Reactivity: Hazardous reactions will not occur under normal conditions.

#### 5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Carbon oxides (CO, CO2). Sodium oxides. Hydrogen chloride. Chlorides

# 5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid breathing (vapor, mist, spray). Avoid all contact with skin, eyes, or clothing.

#### 6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for Safe Handling

Additional Hazards When Processed: Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions.

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray. Use appropriate personal protective equipment (PPE).

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

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water reactive materials.

Storage Temperature: 20 - 25 °C

#### 7.3. Specific End Use(s)

Biological material storage during thawing.



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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

#### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

**Skin and Body Protection:** In laboratory, medical or industrial settings, impervious disposable gloves and protective clothing are recommended if skin contact with the product is possible.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

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# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Appearance	Clear/colorless to slightly yellow
Odor	Odorless
Odor Threshold	Not available
рН	3 - 7
Evaporation Rate	Not available
Melting Point	Not available
Freezing Point	Not available
Boiling Point	Not available
Flash Point	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Flammability (solid, gas)	Not applicable
Lower Flammable Limit	Not Available
Upper Flammable Limit	Not Available
Vapor Pressure	Not Available
Relative Vapor Density at 20°C	Not Available
Relative Density	Available
Specific Gravity	Not Available
Solubility	Soluble in water
Partition Coefficient: N-Octanol/Water	Not Available
Viscosity	Not Available

#### **SECTION 10: STABILITY AND REACTIVITY**

- 10.1. Reactivity: Hazardous reactions will not occur under normal conditions
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water reactive materials.

**10.6.** Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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## **SECTION 11: TOXICOLOGICAL INFORMATION**

11.1. Information on Toxicological Effects - Product Acute Toxicity (Oral): Not classified Acute Toxicity (Dermal): Not classified Acute Toxicity (Inhalation): Not classified LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified. pH: 3 - 7 Eye Damage/Irritation: Not classified. pH: 3 - 7 Respiratory or Skin Sensitization: Not classified Germ Cell Mutagenicity: Not classified Carcinogenicity: Not classified Specific Target Organ Toxicity (Repeated Exposure): Not classified Reproductive Toxicity: Not classified Specific Target Organ Toxicity (Single Exposure): Not classified Aspiration Hazard: Not classified Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Symptoms/Injuries After Skin Contact: : Prolonged exposure may cause skin irritation. May cause an allergic reaction in sensitive individuals. Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. Chronic Symptoms: None known

## 11.2. Information on Toxicological Effects - Ingredient(s)

#### LD50 and LC50 Data:

Dextran (9004-54-0)		
LD50 Oral Rat	> 3 g/kg	
Sodium chloride (7647-14-5)		
LD50 Oral Rat	3 g/kg	
LD50 Dermal Rabbit	> 10000 mg/kg (Species: New Zealand White)	
LC50 Inhalation Rat	> 42 g/m <sup>3</sup> (Exposure time: 1 h)	

# **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

#### Ecology - General: Not classified.

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC Chronic Fish	252 mg/l (Species: Pimephales promelas)

#### 12.2. Persistence and Degradability

Cell Thawing Media 10% Dextran 40 (in 0.9% NaCl)	
Persistence and Degradability	Not established.

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#### 12.3. Bioaccumulative Potential

Cell Thawing Media 10% Dextran 40 (in 0.9% NaCl)		
Bioaccumulative Potential	Not established.	
Cell Thawing Media 10% Dextran 40 (in 0.9% NaCl)		
BCF Fish 1	(no bioaccumulation)	

#### 12.4. Mobility in Soil Not available

#### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

# SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

## **SECTION 14: TRANSPORT INFORMATION**

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1.	In Accordance with DOT	Not regulated for transport
14.2.	In Accordance with IMDG	Not regulated for transport
14.3.	In Accordance with IATA	Not regulated for transport
14.4.	In Accordance with TDG	Not regulated for transport

# **SECTION 15: REGULATORY INFORMATION**

#### 15.1. US Federal Regulations

#### Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### Dextran (9004-54-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### **EPA TSCA Regulatory Flag**

XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e., Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

Sodium chloride (7647-14-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. US State Regulations

Neither this product nor its chemical components appear on any US state lists.

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## 15.3. Canadian Regulations

Water (7732-18-5)		
Listed on the Canadian DSL (Domestic Substances List)		
Dextran (9004-54-0)		
Listed on the Canadian DSL (Domestic Substances List)		
Sodium chloride (7647-14-5)		
Listed on the Canadian DSL (Domestic Substances List)		
SECTION 16: OTHER INFC	RMATION	
Other Information	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.	
GHS Full Text Phrases:		

Comb. Dus	st	Combustible	Dust

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. NA GHS SDS 2015 (Can, US, Mex)