SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: Cell Thawing Media 10% Dextran 40 (in 5% Dextrose)
Synonyms: CTM-Dextrose

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS Ingredient Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>85</td>
<td>Not classified</td>
</tr>
<tr>
<td>Dextran</td>
<td>(CAS-No.) 9004-54-0</td>
<td>10</td>
<td>Comb. Dust</td>
</tr>
<tr>
<td>Glucose</td>
<td>(CAS-No.) 50-99-7</td>
<td>5</td>
<td>Comb. Dust</td>
</tr>
</tbody>
</table>

*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%).
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.
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).

5.4. Reference to Other Sections
Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protective equipment (PPE).
Cell Thawing Media 10% Dextran 40 (in 5% Dextrose)

Safety Data Sheet

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).

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.


Storage Temperature: 20 - 25 °C

7.3. Specific End Use(s)

Biological material storage during thawing.

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.


Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.
Cell Thawing Media 10% Dextran 40 (in 5% Dextrose)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules
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**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.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on Basic Physical and Chemical Properties

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

### 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.


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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD50 Oral Rat</th>
<th>LC50 Oral Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextran (9004-54-0)</td>
<td>&gt; 3 g/kg</td>
<td></td>
</tr>
<tr>
<td>Glucose (50-99-7)</td>
<td></td>
<td>25800 mg/kg</td>
</tr>
</tbody>
</table>

12.1. Toxicity

Ecology - General: Not classified

12.2. Persistence and Degradability

Cell Thawing Media 10% Dextran 40 (in 5% Dextrose)
Persistence and Degradability: Not established.

12.3. Bioaccumulative Potential

Cell Thawing Media 10% Dextran 40 (in 5% Dextrose)
Bioaccumulative Potential: Not established.

12.4 Mobility in Soil: Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.
Cell Thawing Media 10% Dextran 40 (in 5% Dextrose)

Safety Data Sheet

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And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

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

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
<th>Listed on the United States TSCA (Toxic Substances Control Act) inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextran (9004-54-0)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

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)).

Glucose (50-99-7)

| 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.

15.3. Canadian Regulations

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
<th>Listed on the Canadian DSL (Domestic Substances List)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dextran (9004-54-0)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Glucose (50-99-7)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION

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:

<table>
<thead>
<tr>
<th>Comb. Dust</th>
<th>Combustible Dust</th>
</tr>
</thead>
</table>

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)