Section 1 - Product and Company Information

Product Name: Cell Freezing Medium-DMSO (1-x), Sterile-filtered, endotoxin tested
Product Number: C6164
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAIN TOULS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 636 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Substance Name: CELL FREEZING MEDIUM-DMSO CELL CULTURE
CAS #: None
SARA 313: No
EC No: No
Annex I Index Number: No

Formula
Synonyms

Section 3 - Hazards Identification

Emergency Overview
Readily absorbed through skin. Target organ(s): Eyes. Skin.

HMS Rating
Health: 0
Flammability: 0
Reactivity: 0

NFPA Rating
Health: 0
Flammability: 0
Reactivity: 0

*additional chronic hazards present.
For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure
If inhaled, move to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Combustible liquid. Limits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Evacuate area.

Methods for Cleaning Up
Cover with dry-lime, sand, or soda ash. Place in covered containers using non-spanning tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

Environmental Precaution(s)
Avoid contaminating sewers and waterways with this material.

Section 7 - Handling and Storage

Handling
User Exposure
Do not breathe vapor. Avoid contact with DMSO solutions containing toxic materials or materials with unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed. Store in a cool dry place. Store at -20°C.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Government approved respirator.
Hand
Compatible chemical-resistant gloves.
Eye
Chemical safety goggles.
Skin-Specific
Chemical resistant apron.
### Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<tr>
<td>BP/VP Range</td>
<td>N/A</td>
</tr>
<tr>
<td>MP/MP Range</td>
<td>N/A</td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Saturated Vapor Conc.</td>
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<tr>
<td>SG/Density</td>
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<tr>
<td>Bulk Density</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>Volatile%</td>
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<tr>
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<tr>
<td>Water Content</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Viscosity</td>
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<tr>
<td>Partition Coefficient</td>
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<tr>
<td>Decomposition Temp.</td>
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<tr>
<td>Flash Point °F</td>
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<tr>
<td>Flash Point °C</td>
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<tr>
<td>Explosion Limits</td>
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<tr>
<td>Flammability</td>
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<tr>
<td>Autoignition Temp</td>
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<tr>
<td>Solubility</td>
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</tbody>
</table>

### Section 10 - Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable</td>
</tr>
<tr>
<td>Materials to Avoid</td>
<td>Strong oxidizing agents.</td>
</tr>
</tbody>
</table>

### Hazardous Decomposition Products

| Hazardous Decomposition Products | Nature of decomposition products not known. |

### Section 11 - Toxicological Information

- **Route of Exposure**
  - Skin Contact: May cause skin irritation.
  - Skin Absorption: May be harmful if absorbed through the skin. Readily absorbed through skin.
  - Eye Contact: May cause eye irritation.
  - Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
  - Ingestion: May be harmful if swallowed.

### Target Organ(s) or System(s)
- Eyes, Skin

### RTECS Number: N/A

### Section 13 - Disposal Considerations

- Appropriate Method of Disposal of Substance or Preparation
  - Contact a licensed professional waste disposal service to dispose of this material.
  - This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.
  - Observe all federal, state, and local environmental regulations.

### Section 14 - Transport Information

- **DOT**
  - Proper Shipping Name: None
  - Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

- **IATA**
  - Non-Hazardous for Air Transport: Non-hazardous for air transport.

### Section 15 - Regulatory Information

- **US Classification and Label Text**
  - US Statements: Readily absorbed through skin. Target organ(s): Eyes, Skin.

- **United States Regulatory Information**
  - SARA Listed: No

- **Canada Regulatory Information**
  - WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.