# SAFETY DATA SHEET

## iCell® Products

### 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name</th>
<th>iCell® Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code(s)</td>
<td>C1001 - C1050, C1112 - C1113, C1136, C1162 - C1163, C1220 - C1231, C1232</td>
</tr>
<tr>
<td>Product Use</td>
<td>For research use only.</td>
</tr>
<tr>
<td>Manufactured by</td>
<td>FUJIFILM Cellular Dynamics, Inc.</td>
</tr>
<tr>
<td></td>
<td>525 Science Drive</td>
</tr>
<tr>
<td></td>
<td>Madison, WI 53711</td>
</tr>
</tbody>
</table>

SDSs are available at the following website(s): https://fujifilmcdi.com

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Telephone</td>
<td>Transport-CHEMTREC Inside NA: 800-424-9300</td>
</tr>
<tr>
<td></td>
<td>Transport-CHEMTREC Outside NA: 703-527-3887</td>
</tr>
<tr>
<td></td>
<td>Transport-CANUTEC Inside Canada: 613-996-6666</td>
</tr>
<tr>
<td></td>
<td>Medical Emergency (24 hour): 877-935-7387</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:fcdi-support@fujifilm.com">fcdi-support@fujifilm.com</a></td>
</tr>
</tbody>
</table>

### 2. HAZARDS IDENTIFICATION

**Classification**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

**GHS Label elements, including precautionary statements**

Not classified
Precautionary Statements

Prevention
Not applicable

Response
Not applicable

Storage
Not applicable

Disposal
Not applicable

Hazards not otherwise classified (HNOC)
Not classified

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>67-68-5</td>
<td>7-13%</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret*

### 4. FIRST AID MEASURES

First aid measures for different exposure routes

**General advice**
If symptoms persist, call a physician.

**Eye contact**
Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation persists.

**Skin contact**
Wash off immediately with plenty of water. Get medical attention if irritation develops and persists.

**Inhalation**
Move to fresh air. If symptoms persist, call a physician.

**Ingestion**
If swallowed, do not induce vomiting - seek medical advice.

**Most important symptoms/effects, acute and delayed**
None known.

**Indication of immediate medical attention and special treatment needed, if necessary**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Dry chemical, CO₂, alcohol-resistant foam or water spray.
Unsuitable Extinguishing Media

None known.

Specific hazards arising from the chemical

None known.

Hazardous Combustion Products

Carbon oxides. Sulfur oxides.

Explosion Data

Sensitivity to Mechanical Impact none
Sensitivity to Static Discharge none

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin, eyes or clothing.

Environmental precautions

Prevent product from entering drains.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.
Methods for cleaning up Use personal protective equipment. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td></td>
<td></td>
<td></td>
<td>250 ppm TWA</td>
</tr>
</tbody>
</table>
Exposure controls

Engineering Measures
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection
If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection
Wear protective gloves/clothing.

Respiratory protection
None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations
When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>clear</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point / melting range</td>
<td>32 °F / 0 °C</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC (lb/gal)</td>
<td>None</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight</td>
</tr>
<tr>
<td>Physical State @20°C</td>
<td>Liquid</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>24.8 °F / -4 °C</td>
</tr>
<tr>
<td>Flammability Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC (g/l)</td>
<td>None</td>
</tr>
<tr>
<td>Flash point</td>
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<td>VOC (lb/gal)</td>
<td>None</td>
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<tr>
<td>Dynamic viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Stable under recommended storage conditions.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal processing.

Conditions to Avoid
Excessive heat. Freezing.

Incompatible Materials
Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Acute toxicity

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Non-irritating during normal use.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Non-irritating during normal use.</td>
</tr>
<tr>
<td>Skin</td>
<td>Causes mild skin irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Ingestion may cause stomach discomfort.</td>
</tr>
</tbody>
</table>

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50 (mg/kg - Rat)</th>
<th>Dermal LD50 (mg/kg - Rat)</th>
<th>LC50 (lethal concentration) (mg/L - Rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfide</td>
<td>= 28300</td>
<td>= 40</td>
<td>&gt; 5.33</td>
</tr>
</tbody>
</table>

Information on toxicological effects

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation

Mild skin irritant.

Corrosivity

No information available.

Sensitization

No information available.

Mutagenic Effects

No information available.

Reproductive Toxicity

No information available.

Carcinogenicity

None known.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Target Organ Effects

Skin.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEmix (oral)</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td>ATEmix (dermal)</td>
<td>&gt;5000 mg/kg</td>
</tr>
</tbody>
</table>

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae toxicity</th>
<th>Toxicity to fish</th>
<th>Toxicity to</th>
<th>Toxicity to daphnia and</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>Octanol Water Partition Coefficient (log pow)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>-2.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

#### Waste Disposal Methods

Dispose of in accordance with local regulations.

#### Contaminated packaging

Do not re-use empty containers.

### 14. TRANSPORT INFORMATION

#### DOT

Not regulated

#### TDG

Not regulated.

#### MEX

Not regulated

#### ICAO

Not regulated

#### IATA

Not regulated

#### IMDG

Not regulated

#### ADR/RID

Not regulated

#### ADN

Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories
TSCA Yes
DSL/NDSL Yes
PICCS Yes
EINECS/ELINCS Yes
ENCS Yes
IECSC Yes
KECL Yes
AICS Yes

*Yes - All component(s) of this product are included or are exempt from listing on the inventory.

*No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)
This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b)

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
Classification is shown in section 2 of this SDS

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### International Regulations

**Canada - NDSL**
This product does not contain any NDSL chemicals.

**Mexico - Grade**
No information available

**Mexico - Carcinogen Status and Exposure Limits**
No information available

**Other Regulations**
No information available

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### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health Hazard</td>
<td>Flammability</td>
<td>Physical Hazard</td>
<td>Personal protection</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

**Prepared By**
FUJIFILM Environment, Health and Safety, phone: (01) (800) 473-3854

**Revision Date**
10-Jul-2020

**Revision Note**
No information available

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

end