Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Code(s) C1001 - C1050, C1112 - C1113, C1136, C1162 - C1163, C1220 - C1231, C1232

Product Name iCell® Products

Recommended use of the chemical and restrictions on use

Recommended use For research use only

Uses advised against No information available

Supplier
FUJIFILM Wako Pure Chemical Corporation
1-2 Doshomachi 3-Chome
Chuo-ku Osaka 540-8605, Japan

Manufactured by
FUJIFILM Cellular Dynamics, Inc.
525 Science Drive
Madison, WI 53711

Company Phone Number
U.S.A: 877-320-6688
U.S.A: 608-310-5100
Japan: +81-6-6203-3741

Emergency Telephone
CHEMTREC Japan: +(81)-345209637
CHEMTREC China: 4001-204937
CHEMTREC Singapore: 800-101-2201
Transport-CHEMTREC Inside North America: 800-424-9300

E-mail Address fcdi-support@fujifilm.com

Section 2: HAZARDS IDENTIFICATION

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

GHS Label elements, including precautionary statements

None

Hazard Statements
None
Precautionary Statements

Prevention
Not applicable

Response
Not applicable

Storage
Not applicable

Disposal
Not applicable

Other hazards
None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>ENCS</th>
<th>ISHL No</th>
<th>CAS No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>10 - 20%</td>
<td>(2)-1553</td>
<td>(2)-1553</td>
<td>67-68-5</td>
</tr>
</tbody>
</table>

Section 4: FIRST AID MEASURES

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.

Ingestion
If swallowed, call a poison control center or physician immediately.

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

Self-Protection of the First Aider
Use personal protection equipment.

Signs and Symptoms of Exposure
No information available.

Notes to physician
Treat symptomatically.

Section 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.

Special protective equipment for fire-fighters
Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.
Section 6: ACCIDENTAL RELEASE MEASURES

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

Environmental precautions
Prevent product from entering drains.

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Use personal protective equipment as required. 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.

Section 7: HANDLING AND STORAGE

Handling

Technical measures
Use personal protective equipment as required. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists.

General ventilation
Ensure adequate ventilation.

Precautions for safe handling
See section 8 for more information. See section 10 for more information.

Storage

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Packaging materials
Keep only in original packaging.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Vietnam</th>
<th>Thailand</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>20 mg/m³ TWA</td>
<td>50 mg/m³ STEL</td>
<td></td>
</tr>
</tbody>
</table>

Engineering Measures
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

Hand Protection
Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves.

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

Skin and body protection
Suitable protective clothing.

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>clear</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor</td>
<td>Physical State @20°C</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
</tbody>
</table>
**Section 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**
Strong oxidizing agents, Strong acids, Strong bases, Acid chlorides.

**Hazardous Decomposition Products**
None known.

**Section 11: TOXICOLOGICAL INFORMATION**

**Product Information**

**Acute toxicity**

| Inhalation | No known effects under normal use conditions. |
| Eyes       | No known effects under normal use conditions. |
| Skin       | Causes mild skin irritation. |
| Ingestion  | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

**Numerical measures of toxicity - Product Information**

| ATEmix (oral) | >5000 mg/kg |

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50 (Rat) = 14500 mg/kg</th>
<th>Dermal LD50 (Rat) = 40 g/kg</th>
<th>LC50 (lethal concentration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>28300 mg/kg</td>
<td></td>
<td>&gt; 5.33 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>
Carcinogenicity

None known.

**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.

**Aspiration hazard** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organ Effects** Skin.

---

### Section 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 daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td></td>
<td><em>Pimephales promelas</em>: 34000 mg/L at 96 h</td>
<td></td>
</tr>
</tbody>
</table>

**Bioaccumulation**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient n-octanol /water (log KOW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>-2.03</td>
</tr>
</tbody>
</table>

**Mobility in soil**

No information available.

---

### Section 13: DISPOSAL CONSIDERATIONS

**Waste from residues/unused products**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

---

### Section 14: TRANSPORT INFORMATION

**IMDG** Not regulated

**ICAO** Not regulated

**ADR/RID** Not regulated

**IATA** Not regulated
## Section 15: REGULATORY INFORMATION

### International Inventories

<table>
<thead>
<tr>
<th></th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>TCSI</th>
<th>TECI</th>
<th>NCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Legend:**
- **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
- **TCSI** - Taiwan Chemical Substance Inventory
- **TECI** - Thailand Existing Chemical Inventory
- **NCI** - Vietnam National Chemicals Inventory

### Industrial Safety and Health Law

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Dangerous Substances</th>
<th>organic solvents</th>
<th>Harmful Substances Whose Names Are to be Indicated on the Label</th>
<th>ISHL - Prevention of Hazards Due to Specified Chemical Substances (Class 2)</th>
<th>Prevention of Lead Poisoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### China

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>List of Dangerous Goods</th>
<th>China Inventory of Hazardous Chemicals</th>
<th>List of Dangerous Goods</th>
<th>China Inventory of Hazardous Chemicals</th>
<th>List of Dangerous Goods</th>
<th>China Inventory of Hazardous Chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>X</td>
<td>Not applicable</td>
<td>X</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Korea

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals</th>
<th>Korea. Harmful Substances Requiring Permission</th>
<th>Korea - MOE - Wastes Control Act - Hazardous Substances in Controlled Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
### Chemical Name

<table>
<thead>
<tr>
<th>ISHA - Substances to be controlled - Organic Substances</th>
<th>Chemicals Control Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Taiwan

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>List of hazardous chemicals under priority management</th>
<th>Toxic and Concerned Chemical Substances Control Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Singapore

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Indonesia

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Indonesia - Hazardous and Poisonous Substances (B3)</th>
<th>Highly toxic chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Thailand

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Vietnam

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Law on Chemicals (No. 06/2007/QH12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl Sulfoxide 67-68-5</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### Section 16: OTHER INFORMATION

**Revision Date**: 10-Jul-2020

**Revision Note**: No information available.
Disclaimer

This SDS complies with the requirements of JIS Z 7253:2019 and JIS Z 7252:2019 (Japan). The information provided in this Material 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