



SAFETY DATA SHEET

Version 1

Issuing Date: 12-Oct-2022

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Code(s) C1000-C2000

Product Name iCell® Products

Other means of identification

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

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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

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

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed

Chemical name	Weight-%	ENCS	ISHL No	KECL	CAS No
Dimethyl Sulfoxide	10 - 20%	(2)-1553	(2)-1553	KE-32367	67-68-5

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 immediately if symptoms occur.
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

Chemical name	Japan	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	Korea	China	ACGIH TLV
Dimethyl Sulfoxide 67-68-5				TWA: 160 mg/m ³ Skin	

Chemical name	Vietnam	Thailand	Malaysia
Dimethyl Sulfoxide	20 mg/m ³ TWA 50 mg/m ³ STEL		

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

Appearance	Clear	Odor	Slight
Odor Threshold	No information available	Physical state	Liquid
pH	No information available	Flash point	No information available
Boiling point / boiling range	No information available	Decomposition temperature	No information available
Autoignition temperature	No information available	Freezing Point	24.8 °F / -4 °C
Melting point / melting range	32 °F / 0 °C		
Flammability Limit in Air	No information available		
Oxidizing Properties	No information available	Explosive Properties	No information available
Specific Gravity	No information available	Solubility	Soluble in water
Evaporation rate	No information available		
Vapor density	No information available	Density	No information available
Dynamic viscosity	No information available	Partition coefficient	No information available
Other information			
Molecular Weight	No information available		
VOC (lb/gal)	None		
VOC (g/l)	None		

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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl Sulfoxide	= 28300 mg/kg (Rat)	= 40000 mg/kg (Rat)	> 5.33 mg/L (Rat) 4 h

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.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Dimethyl Sulfoxide		LC50: 33 - 37g/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =34000mg/L (96h, <i>Pimephales promelas</i>) LC50: =41.7g/L (96h, <i>Cyprinus carpio</i>) LC50: >40g/L (96h, <i>Lepomis macrochirus</i>)	

Bioaccumulation

Chemical name	Partition coefficient n-octanol /water (log KOW)
Dimethyl Sulfoxide	-2.03

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 (air) Not regulated

ADR Not regulated

IATA Not regulated

Section 15: REGULATORY INFORMATION

International Inventories

ENCS Yes

IECSC Yes

KECL Yes

PICCS Yes

TCSI Yes

TECI Yes

NCI Yes

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

Japan

Industrial Safety and Health Law

Chemical name	Dangerous Substances	organic solvents	Harmful Substances Whose Names Are to be Indicated on the Label	ISHL - Prevention of Hazards Due to Specified Chemical Substances (Class 2)	Prevention of Lead Poisoning
Dimethyl Sulfoxide 67-68-5	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Chemical name	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poisonous and Deleterious Substances Control Law	Fire Service Law:
Dimethyl Sulfoxide 67-68-5	Not applicable	Not applicable	Not applicable	Group 4

China

Chemical name	List of Dangerous Goods	China Inventory of Hazardous Chemicals	Law of the People's Republic of China on Prevention and Control of Occupational Diseases
Dimethyl Sulfoxide 67-68-5	Present	Not applicable	X

Korea

Chemical name	Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals	Korea. Harmful Substances Requiring Permission	Korea - MOE - Wastes Control Act - Hazardous Substances in Controlled Wastes
Dimethyl Sulfoxide 67-68-5	Not applicable	Not applicable	Not applicable

Chemical name	ISHA - Substances to be controlled - Organic Substances	Chemicals Control Act
Dimethyl Sulfoxide	Not applicable	Not applicable

Taiwan

Chemical name	List of hazardous chemicals under priority management	Toxic and Concerned Chemical Substances Control Act
Dimethyl Sulfoxide 67-68-5	Not applicable	Not applicable

Singapore

Chemical name	Hazardous Substances
Dimethyl Sulfoxide 67-68-5	Not applicable

Indonesia

Chemical name	Indonesia - Hazardous and Poisonous Substances (B3)	Highly toxic chemical
Dimethyl Sulfoxide 67-68-5	Not applicable	Not applicable

Thailand

Chemical name	Hazardous chemical
Dimethyl Sulfoxide	Not applicable

Chemical name	Hazardous chemical
67-68-5	

Vietnam

Chemical name	Law on Chemicals (No. 06/2007/QH12)
Dimethyl Sulfoxide 67-68-5	Not applicable

Section 16: OTHER INFORMATION

Revision Date 12-Oct-2022

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.

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