

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product Name:** CELLBANKER 1  
**Company:** ZENOGEN PHARMA CO., LTD.  
1-1 Tairanoue, Sasagawa, Asaka-machi, Koriyama City,  
Fukushima 963-0196, Japan  
**Telephone:** +81-24-947-8503  
**Fax:** +81-24-947-8507  
**Product Code:** 11910 (100 ml) / 11911 (20 ml)

### SECTION 2: Hazards identification      GHS classification and label elements, including precautionary statements:

#### GHS classification:

**Health hazards**      Specific target organ toxicity (single exposure): Category 2

#### GHS label elements:

##### Pictograms



##### Signal word

Warning

##### Toxicological information

May cause damage to organs

##### Precautionary statements

###### Prevention:

Do not breathe dust/fume/mist.

Wash contaminated area thoroughly after handling.

Do not eat, drink or smoke when using this product.

###### Response:

IF exposed or concerned: Get medical advice or attention.

###### Disposal:

Dispose of contents/container in accordance with local and national regulations.

### SECTION 3: Composition/information on ingredients

**Uniform product or mixture:** Mixture

**Intended Use:** Cell cryopreservation solution

**Product composition:**

Ingredients	CAS №	EINECS №	RTECS #	Amount (%)
Dimethyl sulfoxide	67-68-5	200-664-3	PV6210000	10%
Medium component	-	-	-	≤ 10%
Bovine serum	-	-	-	≤ 80%

**Hazardous ingredients:** Applicable ingredient corresponding to the GHS classification and the health hazards symbol: Dimethyl sulfoxide

**SECTION 4: First aid measures**

**If inhaled:** If breathed in, move person into fresh air. Keep calm and warm. Consult a physician immediately.

**In case of skin contact:** Wash off with soap and plenty of water. Remove contaminated clothes. Consult a physician if area becomes inflamed.

**In case of eye contact:** Immediately flush eyes with running water for several minutes (remove contact lenses if easily possible). Consult a physician immediately.

**If swallowed:** Rinse mouth thoroughly with water and have person drink one to two glasses of water or milk. Consult a physician immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

**SECTION 5: Firefighting measures**

**Extinguishing media:** Fire-extinguishing powder, carbon dioxide, foam (alcohol foam), water

**Special hazards arising from the substance or mixture:** May give off irritating or toxic fumes (or gasses) in fires. During firefighting, wear proper protective equipment to avoid smoke inhalation.

**Advice for firefighters:** Extinguish with extinguishing media, cutting off the source of the fire. Promptly move all movable containers to a safe location. Cool non-movable containers by spraying mist around the area.

**Protection for firefighters:** Perform firefighting activities upwind, avoiding the inhalation of hazardous gasses.  
Wear self-contained breathing apparatus for firefighting if necessary.

**SECTION 6: Accidental release measures**

**Personal precautions:** If indoors, ventilate adequately until disposal is complete. Rope off location around area of release to prevent access by unauthorized personnel.

**Environmental precautions:** Do not let product enter drains. Ensure that contaminated waste water is not released into the environment before being properly treated.

**Methods for cleaning up:** Keep away from fire. Mop up spilled liquid with rags, towels, or earth, collect in an empty container, and wash away with plenty of water.  
Be sure to wear protective equipment when working. Work upwind.

## SECTION 7: Handling and storage

**Precautions for safe handling:** Wear proper protective equipment to avoid inhalation and prevent contact with eyes, skin, and clothing.

**Conditions for safe storage:** Store at 2 to 8 or below -20 °C.

**Safety handling precautions:** Obtain instruction before use.

## SECTION 8: Exposure controls/personal protection

### Control parameters

**Control concentration:** No data available

### Permissible concentration

**Japan Society for Occupational Health:** Not established

**ACGIH TLV(S):** Not established

**OSHA PEL:** Not established

### Exposure Prevention

**Facility control:** Install local ventilation.

### Protective equipment

**Respiratory protection:** Respiratory protective mask

**Hand protection:** Protective gloves

**Eye protection:** Protective eyewear

**Skin and Body protection:** Protective clothing

## SECTION 9: Physical and chemical properties

**Form:** Liquid  
**Color:** Light tan or brown clear liquid  
**Odor:** Slight characteristic odor  
**Odor Threshold:** No data available  
**Melting/Freezing point:** No data available  
**Boiling/Initial boiling point:** Not applicable  
**Boiling range:** No data available  
**Flammability:** No data available

<b>Explosive limits (Lower/Upper):</b>	No data available
<b>Flash point:</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Self-accelerating decomposition temperature:</b>	No data available
<b>pH:</b>	7.0 to 8.5 (20°C)
<b>Dynamic viscosity:</b>	No data available
<b>Viscosity (coefficient of viscosity):</b>	No data available
<b>Solubility:</b>	
<b>[water]</b>	Dissolves in water
<b>[other solvent]</b>	No data available
<b>Octanol/water partition coefficient:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Vapor density:</b>	No data available
<b>Volatile organic compounds:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Density/Relative density:</b>	No data available
<b>Relative gas density (air=1):</b>	No data available
<b>Relative density of the vapor/air-mixture at 20°C (air = 1):</b>	No data available
<b>Critical temperature:</b>	No data available
<b>Particle characteristics:</b>	No data available
<b>Other data:</b>	No data available

#### SECTION 10: Stability and reactivity

<b>Reactivity:</b>	No data available
<b>Chemical stability:</b>	Stable under recommended storage and usage conditions.

#### SECTION 11: Toxicological information

##### Information on toxicological effects

##### Acute toxicity (Dimethyl sulfoxide):

<b>Oral LD50:</b>	LD50 Oral-Rat-14,500 mg/kg
<b>Dermal LD50:</b>	LD50 Dermal-Rat-40,000 mg/kg
<b>Inhalation LD50:</b>	LD50 Inhalation-Rat->5,330 mg/m <sup>3</sup> (5.33 mg/L)

(Risk Assessment vol. 13, Ministry of the Environment, Government of Japan, 2015)

<b>Local effects:</b>	No data available
<b>Sensitization:</b>	No data available

**Germ cell mutagenicity:** No data available  
**Carcinogenicity:** No data available  
**Teratogenicity:** No data available  
**Reproductive toxicity:** No data available  
**Specific target organ toxicity (single exposure):** Category 2, Respiratory (SIDS, 2008)  
**Specific target organ toxicity (repeat exposure):** No data available  
**Aspiration hazard:** No data available

## SECTION 12: Ecological information

### Ecotoxicity

#### Aquatic toxicity (Dimethyl sulfoxide):

**Crustacean EC50:** EC50=6830 mg/L/24hr  
(Risk Assessment vol. 13, Ministry of the Environment, Government of Japan, 2015)

#### Solubility in water:

(Dimethyl sulfoxide)

Mixing (ICSC, 2000)

**Persistence/Degradability:** No data available

#### Bioaccumulation:

(Dimethyl sulfoxide)

log Pow=-1.35 (calculated) (ICSC, 2000)

**Mobility in soil:** No data available

**Ozone depleting substances:** No data available

## SECTION 13: Disposal considerations

### Waste treatment

**Avoid release to the environment.**

Dispose according to local public and other applicable regulations.

## SECTION 14: Transport information

**UN number:** Not applicable

**UN classification:** Not applicable

## SECTION 15: Regulatory information

**Safety, health and environmental regulations or laws specific to the product**

**Poisonous and Deleterious Substances Control Law:** Not applicable

**Industrial Safety and Health Law:** Products not applicable as organic solvents

**Law for promotion of Chemical Management (Pollutant Release and Transfer Register Law):**

Not applicable

**Fire Service Law:** Not applicable

**Ship Safety Law (Regulations for the Carriage and Storage of Dangerous Goods in Ship):**

Not applicable

**Civil Aeronautics Law:** Not applicable

## **SECTION 16: Other information**

### **References**

Globally Harmonized System of classification and labeling of chemicals, (7th revised edition, 2017), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN

Classification, labeling and packaging of substances and mixtures (Table3 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2020 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

JIS Z 7252 (2019)

JIS Z 7253 (2019)

2019 Recommendation for allowable concentrations (Japan Society for Occupational Health)

Supplier's data/information

### **Responsibilities**

This data sheet was prepared based on the present state of our knowledge, and the information may be supplemented or revised if newer information becomes available.

This data sheet was prepared for the purpose of providing information and does not guarantee with regarding to the descriptions.