Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: Stellar™ Competent Cells (96-well plate)

Other means of identification

Product Code: ST0319
Registration number: No information available

Recommended use of the chemical and restrictions on use

Identified uses: For research use only. Not for use in diagnostic procedures
Uses advised against: No information available

Details of the supplier of the safety data sheet

Supplier:
Japan:
Takara Bio Inc.
Nojihigashi 7-4-38
Kusatsu, Shiga 525-0058, Japan
Phone: +81.77.565.6920
Web: www.takara-bio.com

China:
Takara Biotechnology (Dalian) Co., Ltd.
19-No.2 Dongbei Street
Dalian Economic and Technical Development Zone
Dalian, 116600
Phone: +86.411.8761.9944
Web: www.takara.com.cn

Korea:
Takara Korea Biomedical Inc.
601, New T Castle, 429-1, Gasan-dong, Geumcheon-gu
Seoul, 153-803
Phone: +82.(0)2.2081.2525
Web: www.takara.co.kr

Emergency telephone number

Emergency telephone: In case of emergency, call PERS (Professional Emergency Resource Services)
1-800-633-8253 (US) or 801-629-0667 (international).

Section 2: HAZARDS IDENTIFICATION

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

Label elements

Signal Word
None
Hazard Statements

Precautionary Statements - Prevention
• Not applicable

Precautionary Statements - Response
• Not applicable

Precautionary Statements - Storage
• Not applicable

Precautionary Statements - Disposal
• Not applicable

Other information
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)
Hazard not otherwise classified (HNOC) Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Pollutant Release and Transfer Register (Class I):</th>
<th>Pollutant Release and Transfer Register (Class II):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>412</td>
<td>-</td>
</tr>
</tbody>
</table>

Section 4: FIRST AID MEASURES

General advice
In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation
Move to fresh air.

Skin contact
Wash off immediately with plenty of water for at least 15 minutes.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Ingestion
Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Not an expected route of exposure.

Notes to physician
Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Flammable Properties
May cause fire.

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available.
Specific hazards arising from the chemical  
Keep product and empty container away from heat and sources of ignition.

Special Extinguishing Media  
Cool drums with water spray.

Special protective equipment for fire-fighters  
Wear self-contained breathing apparatus and protective suit.

### Section 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions**  
For personal protection see section 8.

**Environmental precautions**  
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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

**Methods for cleaning up**  
Soak up with inert absorbent material.

**Prevention of secondary hazards**  
Clean contaminated objects and areas thoroughly observing environmental regulations.

### Section 7: HANDLING AND STORAGE

**Handling**

**Advice on safe handling**  
Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

**Storage**

**Technical measures/Storage conditions**  
Keep container tightly closed in a dry and well-ventilated place.

### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

**Other information**  
These recommendations apply to the product as supplied.

**Engineering Measures**  
Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

**Respiratory protection**  
None under normal use conditions.

**Hand Protection**  
Latex gloves.

**Eye/Face Protection**  
Tightly fitting safety goggles.

**Skin and body protection**  
Wear suitable protective equipment. Boots.

**Hygiene measures**  
When using, do not eat, drink or smoke, Handle in accordance with good industrial hygiene and safety practice.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical State**  
Liquid
<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Slurry</td>
<td></td>
</tr>
<tr>
<td>Color</td>
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<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Unpleasant</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
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<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
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<td></td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH VALUE</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
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<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
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<td></td>
</tr>
<tr>
<td>Flash point</td>
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<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
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<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
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</tr>
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<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
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<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
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<td>Water Solubility</td>
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<td></td>
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<tr>
<td>Autoignition temperature</td>
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<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
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</tr>
<tr>
<td>Viscosity, kinematic</td>
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<td></td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
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<td></td>
</tr>
<tr>
<td>Explosive properties</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
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<td></td>
</tr>
<tr>
<td>Other information</td>
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</tr>
<tr>
<td>Appearance</td>
<td>Slurry</td>
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<tr>
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<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

**Section 10: STABILITY AND REACTIVITY**

**Reactivity**
No dangerous reaction known under conditions of normal use

**Stability**
Stable under normal conditions.

**Explosion Data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**Hazardous Reactions**
None under normal processing

**Conditions to Avoid**
None known based on information supplied

**Hazardous Decomposition Products**
None under normal use conditions

**Section 11: TOXICOLOGICAL INFORMATION**

**Acute toxicity**

**Numerical measures of toxicity - Product Information**

**Unknown acute toxicity**
- 3.47 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 3.47 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 15.47 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 15.47 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 15.47 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
Numerical measures of toxicity - Component Information

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

Skin corrosion/irritation  No information available.
Serious Eye Damage/Eye Irritation  No information available.
Sensitization  No information available.
mutagenic effects  No information available.

Reproductive toxicity  No information available.
STOT - Single Exposure  No information available.
STOT - Repeated Exposure  No information available.
Neurological effects  No information available.
Target Organ Effects  No information available.
Aspiration Hazard  No information available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity
4.46 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability  No information available.
Bioaccumulation  No information available.
Mobility  No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products  Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging  Dispose of in accordance with local regulations.

Section 14: TRANSPORT INFORMATION
ST0319 - Stellar™ Competent Cells (96-well plate)

IMDG/IMO
Not regulated

ICAO
Not regulated

ADR/RID
Not regulated

ICAO/IATA
Not regulated

Japan

Section 15: REGULATORY INFORMATION

International Inventories
For research use only

TSCA
-

DSL/NDSL
-

EINECS/ELINCS
-

ENCS
-

IECSC
-

KECL
-

PICCS
-

AICS
-

Legend:
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

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>
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</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>&gt;=0.1 %</td>
<td>Not Applicable</td>
<td>X</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Pollutant Release and Transfer Register (Class II):</th>
<th>Pollutant Release and Transfer Register (Class I):</th>
<th>Poisonous and Deleterious Substances Control Law</th>
<th>Restrictions on use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
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<td>Not Applicable</td>
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<td>Group</td>
</tr>
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<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Group</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Not Applicable</td>
<td>412</td>
<td>Not Applicable</td>
<td>-</td>
</tr>
</tbody>
</table>

Section 16: OTHER INFORMATION

Issuing Date 2016-07-21
Revision Date 2016-07-21
Revision Note No information available.
Key or legend to abbreviations and acronyms used in the safety data sheet

• No information available

Disclaimer
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End of Safety Data Sheet