**SAFETY DATA SHEET**

According to JIS Z 7253:2019

Revision Date 22-Apr-2021

Version 5.01

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### Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>Ribostamycin Sulfate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>187-02901, 183-02903</td>
</tr>
</tbody>
</table>

**Manufacturer**
FUJIFILM Wako Pure Chemical Corporation  
1-2 Doshomachi 3-Chome  
Chuo-ku, Osaka 540-8605, Japan  
Phone: +81-6-6203-3741  
Fax: +81-6-6203-5964

**Supplier**
FUJIFILM Wako Pure Chemical Corporation  
1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan  
Phone: +81-6-6203-3741  
Fax: +81-6-6203-2029

**Emergency telephone number**
+81-6-6203-3741 / +81-3-3270-8571

**Recommended uses and restrictions on use**  
For research use only

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### Section 2: HAZARDS IDENTIFICATION

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

**Pictograms**
none

**Hazard statements**
Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

**Precautionary statements-(Prevention)**
- Not applicable

**Precautionary statements-(Response)**
- Not applicable

**Precautionary statements-(Storage)**
- Not applicable

**Precautionary statements-(Disposal)**
- Not applicable

**Others**
**Other hazards**  
Not available

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### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture**  
Substance

**Formula**
C17H34N4O10·nH2SO4

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>Molecular weight</th>
<th>ENCS</th>
<th>ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ribostamycin Sulfate</td>
<td>=&lt;100</td>
<td>552.55</td>
<td>(8)-450</td>
<td>(8)-450</td>
<td>53797-35-6</td>
</tr>
</tbody>
</table>

**Impurities and/or Additives**  
Not applicable
Section 4: FIRST AID MEASURES

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

Skin contact
Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion
Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders
Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media
Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media
No information available

Specific hazards arising from the chemical product
Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method
No information available

Special protective actions 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, protective equipment and emergency procedures
For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions
To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up
Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recovery, neutralization
No information available

Secondary disaster prevention measures
Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling
Technical measures
Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions
Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.
Safety handling precautions
Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage
Safe storage conditions
Storage conditions: Keep container protected from light tightly closed. Store in a cool (2-10 °C) place.
Safe packaging material: Glass
Incompatible substances: Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls
In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment
Respiratory protection: Dust mask
Hand protection: Protection gloves
Eye protection: Protective eyeglasses or chemical safety goggles
Skin and body protection: Long-sleeved work clothes

General hygiene considerations
Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form
Color: White - slightly yellow
Appearance: Crystalline powder - powder
Odor: No data available
Melting point/freezing point: No data available
Boiling point, initial boiling point and boiling range: No data available
Flammability: No data available
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits: No data available

Section 10: STABILITY AND REACTIVITY

Stability
Reactivity: No data available
Chemical stability: May be altered by light.

Hazardous reactions
None under normal processing

**Conditions to avoid**
Extremes of temperature and direct sunlight

**Incompatible materials**
Strong oxidizing agents

**Hazardous decomposition products**
Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides (SOx)

### Section 11: TOXICOLOGICAL INFORMATION

**Acute toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ribostamycin Sulfate</td>
<td>&gt; 7 g/kg (Rat)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Skin irritation/corrosion**
No data available

**Serious eye damage/ irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Reproductive cell mutagenicity**
No data available

**Carcinogenicity**
No data available

**Reproductive toxicity**
No data available

**STOT-single exposure**
No data available

**STOT-repeated exposure**
No data available

**Aspiration hazard**
No data available

### Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity**
No information available

**Other data**
No data available

**Persistence and degradability**
No information available

**Bioaccumulative potential**
No information available

**Mobility in soil**
No information available

**Hazard to the ozone layer**
No information available

### Section 13: DISPOSAL CONSIDERATIONS

**Waste from residues**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated container and contaminated packaging**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

### Section 14: TRANSPORT INFORMATION

**ADR/RID**
Not regulated

**UN number**
-

**Proper shipping name:**

**UN classification**
-

**Subsidiary hazard class**
-

**Packing group**
-

**Marine pollutant**
Not applicable

**IMDG**
Not regulated

**UN number**
-

**Proper shipping name:**
UN classification
Subsidiary hazard class
Packing group
Marine pollutant (Sea) Not applicable
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available
IATA Not regulated
UN number -
Proper shipping name: UN classification Subsidiary hazard class Packing group Environmentally Hazardous Substance Not applicable

Section 15: REGULATORY INFORMATION

International Inventories
EINECS/ELINCS -
TSCA -
Japanese regulations
Fire Service Act Not applicable
Poisonous and Deleterious Substances Control Law Not applicable
Industrial Safety and Health Act Not applicable
Regulations for the carriage and storage of dangerous goods in ship Not applicable
Civil Aeronautics Law Not applicable
Pollutant Release and Transfer Register Law Not applicable
Export Trade Control Order Not applicable

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.
NITE: National Institute of Technology and Evaluation (JAPAN)
http://www.safe.nite.go.jp/japan/db.html
IATA dangerous Goods Regulations
RTECS: Registry of Toxic Effects of Chemical Substances
Japan Industrial Safety and Health Association GHS Model SDS
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
etc

Disclaimer
This SDS is according to JIS Z 7253: 2019. 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, 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.
GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet