Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>(2S,3S)-(+)−O,O′-Dibenzoyltartaric Acid Monohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>042-22321,040-22322</td>
</tr>
<tr>
<td>CAS No</td>
<td>80822-15-7</td>
</tr>
<tr>
<td>Formula</td>
<td>C18H14O8·H2O</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 purposes

Announcement of company name change: Company name has changed since April 1, 2018. Former name was "Wako Pure Chemical Industries, Ltd."

Section 2: HAZARDS IDENTIFICATION

GHS classification
Classification of the substance or mixture  
Serious eye damage/eye irritation Category 2A

Pictograms

Signal word  
Warning

Hazard statements
H319 - Causes serious eye irritation

Precautionary statements-(Prevention)
- Wash face, hands and any exposed skin thoroughly after handling  
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements-(Response)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
- If eye irritation persists: Get medical advice/attention.
Precautionary statements-(Storage)
• Not applicable
Precautionary statements-(Disposal)
• Not applicable

Others
Other hazards
Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture
Substance

Formula
C18H14O8·H2O

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight-%</th>
<th>Molecular weight</th>
<th>ENCS</th>
<th>ISHL No.</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2S,3S)-(++)-O,O''''-Dibenzoyltartaric Acid Monohydrate</td>
<td>98.0</td>
<td>376.31</td>
<td>(3)-1290</td>
<td>公表</td>
<td>80822-15-7</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

Special extinguishing method
No information available

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

Protection of 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**

<table>
<thead>
<tr>
<th>Storage conditions</th>
<th>Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safe packaging material</strong></td>
<td>Glass</td>
</tr>
<tr>
<td><strong>Incompatible substances</strong></td>
<td>Strong oxidizing agents</td>
</tr>
</tbody>
</table>

### 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**

<table>
<thead>
<tr>
<th>Respiratory protection</th>
<th>Dust mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection</td>
<td>Protection gloves</td>
</tr>
<tr>
<td>Eye protection</td>
<td>protective eyeglasses or chemical safety goggles</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Long-sleeved work clothes</td>
</tr>
</tbody>
</table>

**General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Form</th>
<th>White - nearly white</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>crystals - powder</td>
</tr>
<tr>
<td>Appearance</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Melting point/freezing point 88 °C
Boiling point, initial boiling point and boiling range No data available
Flash point No data available
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits
  Upper : No data available
  Lower : No data available
Vapour pressure No data available
Vapour density No data available
Specific Gravity / Relative density No data available
Solubilities
  Ethanol and acetone : soluble. Water : practically insoluble, or insoluble.
n-Octanol/water partition coefficient:(log Pow) No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity (coefficient of viscosity) No data available
Dynamic viscosity No data available

Section 10: STABILITY AND REACTIVITY

Stability
  Stability May be altered by light.
  Reactivity No data available
Hazardous reactions
  None under normal processing
Conditions to avoid
  Extremes of temperature and direct sunlight
Incompatible materials
  Strong oxidizing agents
Hazardous decomposition products
  Carbon monooxide (CO), Carbon dioxide (CO2)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity No data available

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)
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable
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
### Section 16: OTHER INFORMATION

**Key literature references and sources for data etc.**

- NITE: National Institute of Technology and Evaluation (JAPAN)
- IATA dangerous Goods Regulations
- RTECS: Registry of Toxic Effects of Chemical Substances
- Japan Industrial Safety and Health Association GHS Model SDS
- Chemical Dictionary, Kyoritsu Publishing Co., Ltd.
- etc

**Disclaimer**

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(2014). *JIS: Japanese Industrial Standards

**Product information**

You might get a product which indicates a former company name, during the period of transition.

End of Safety Data Sheet