

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
**Revision date** 26-Jan-2023  
 Revision Number 2.02

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

|                     |   |
|---------------------|---|
| <b>Product Name</b> | (R)-(-)-Apomorphine Hydrochloride Hemihydrate |
| <b>Product Code</b> | 017-18321,013-18323                           |

|   |   |
|---|---|
| <b>Manufacturer</b>                             | FUJIFILM Wako Pure Chemical Corporation<br>1-2 Doshomachi 3-Chome<br>Chuo-ku, Osaka 540-8605, Japan<br>Phone: +81-6-6203-3741<br>Fax: +81-6-6203-5964 |
| <b>Supplier</b>                                 | FUJIFILM Wako Pure Chemical Corporation<br>1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan<br>Phone: +81-6-6203-3741<br>Fax: +81-6-6203-2029   |
| <b>Emergency telephone number</b>               | +81-6-6203-3741 / +81-3-3270-8571   |
| <b>Recommended uses and restrictions on use</b> | For research use only   |

## Section 2: HAZARDS IDENTIFICATION

**GHS classification****Classification of the substance or mixture**

Acute toxicity - Oral

Category 3

**Pictograms****Signal word**

Danger

**Hazard statements**

H301 - Toxic if swallowed

**Precautionary statements-(Prevention)**

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product

**Precautionary statements-(Response)**

- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth

**Precautionary statements-(Storage)**

- Store locked up

**Precautionary statements-(Disposal)**

- Dispose of contents/container to an approved waste disposal plant

**Others****Other hazards**

Not available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS



## 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 protect from light and tightly closed in well ventilated cool place under 25°C Packed with an inert gas.

**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, protective boots

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Form

**Color** White - pale brown

**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

**Upper:**

no data available

**Lower:**

no data available

### Flash point

no data available

### Auto-ignition temperature:

no data available

### Decomposition temperature:

no data available

### pH

4.0 - 5.0 ( 10 g/L, 25 °C )

### Viscosity (coefficient of viscosity)

no data available

### Dynamic viscosity

no data available

### Solubilities

water and Ethanol : soluble . acetone : practically insoluble,or

|   |                   |
|---|-------------------|
| n-Octanol/water partition coefficient:(log Pow) | insoluble .       |
| Vapour pressure                                 | no data available |
| Specific Gravity / Relative density             | no data available |
| Vapour density                                  | no data available |
| Particle characteristics                        | 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 (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride (HCl) gas

## Section 11: TOXICOLOGICAL INFORMATION

### Acute toxicity

| Chemical Name                                 | Oral LD50             | Dermal LD50 | Inhalation LC50 |
|---|-----------------------|-------------|-----------------|
| (R)-(-)-Apomorphine Hydrochloride Hemihydrate | 300mg/kg(oral,rabbit) | N/A         | N/A             |

|                                   |                   |
|-----------------------------------|-------------------|
| 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**

|                         |  |
|-------------------------|--|
| UN number               | UN2811   |
| Proper shipping name:   | Toxic solid, organic, n.o.s. ((R)-(-)-Apomorphine Hydrochloride Hemihydrate) |
| UN classification       | 6.1  |
| Subsidiary hazard class |  |
| Packing group           | III  |
| Marine pollutant        | Not applicable   |

**IMDG**

|  |  |
|--|--|
| UN number  | UN2811   |
| Proper shipping name:  | Toxic solid, organic, n.o.s. ((R)-(-)-Apomorphine Hydrochloride Hemihydrate) |
| UN classification  | 6.1  |
| Subsidiary hazard class  |  |
| Packing group  | III  |
| Marine pollutant (Sea)   | Not applicable   |
| Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | No information available   |

**IATA**

|                                     |  |
|-------------------------------------|--|
| UN number                           | UN2811   |
| Proper shipping name:               | Toxic solid, organic, n.o.s. ((R)-(-)-Apomorphine Hydrochloride Hemihydrate) |
| UN classification                   | 6.1  |
| Subsidiary hazard class             |  |
| Packing group                       | III  |
| 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 | Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1) |
| Civil Aeronautics Law   | Toxic and Infectious Substances (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)          |
| Pollutant Release and Transfer Register Law (~2023.3.31)            | Not applicable  |
| Pollutant Release and Transfer Register Law (2023/4/1~)             | 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  
Dictionary of Synthetic Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.  
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**