



# SAFETY DATA SHEET

According to JIS Z 7253:2019 **Revision date** 02-Feb-2023 Revision Number 3.04

# Section 1: PRODUCT AND COMPANY IDENTIFICATION

| Product Name   | 2-(2,4  | 2-(2,4-Dihydroxy-3,5-diiodobenzoyl)benzoic Acid Standard   |                   |          |           |
|--|---|--|-------------------|----------|-----------|
| Product Code   | 043-3   | 32981  |                   |          |           |
| Manufacturer<br>Supplier   | 1-2 Dos<br>Chuo-k<br>Phone:<br>Fax: +8<br>FUJIFII | 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<br>FUJIFILM Wako Pure Chemical Corporation |                   |          |           |
| Emergency telephone nu<br>Recommended uses and<br>restrictions on use                        | Phone:<br>Fax: +8<br>mber +81-6-6                 | 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan<br>Phone: +81-6-6203-3741<br>Fax: +81-6-6203-2029<br>+81-6-6203-3741 / +81-3-3270-8571<br>For research use only                           |                   |          |           |
|  | Sectio  | n 2: HAZARDS   | IDENTIFICAT       | ION      |           |
|  |   |  |                   |          |           |
| GHS classification<br>Classification of the subs<br>Not a hazardous substance                |   |  | armonized System  | (GHS)    |           |
| Pictograms<br>Signal word  | None  |  |                   |          |           |
| Hazard statements<br>Not a hazardous subst   | ance or mixture ac                                | cording to the Globall   | y Harmonized Syst | em (GHS) |           |
| Precautionary statements<br>• Not applicable<br>Precautionary statements                     |   |  |                   |          |           |
| <ul> <li>Not applicable</li> <li>Precautionary statements</li> <li>Not applicable</li> </ul> |   |  |                   |          |           |
| Precautionary statements     • Not applicable  | s-(Disposal)                                      |  |                   |          |           |
| Others<br>Other hazards  |   |  |                   |          |           |
| Section 3: COMPOSITION/INFORMATION ON INGREDIENTS  |   |  |                   |          |           |
| Single Substance or Mixture Substance  |   |  |                   |          |           |
| Formula  | C14H8   |  |                   |          |           |
| Chemical Name  | Weight-%  | Molecular weight   | ENCS              | ISHL No. | CAS RN    |
| 2-(2,4-Dihydroxy-3,5-diio<br>dobenzoyl)benzoic Acid  | 95.0  | 510.02   | N/A               | N/A      | 3480-21-5 |

| Ethanol           | <0.5   | 46.07 | (2)-202 | * | 64-17-5 |
|-------------------|--|-------|---------|---|---------|
| Note on ISHL No.: | on ISHL No.: * in the table means announced chemical substances. |       |         |   |         |

Impurities and/or Additives:

残留溶媒:エタノール <0.5

# 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 contaminent and methods and materials for cleaning up

#### Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, 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

Keep container protect from light tightly closed. Store in a cool (2-10 °C) place.

## Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

#### **Storage**

Safe storage conditions

Storage conditions

Safe packaging material Incompatible substances

Glass 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 handand eye-wash facility. And display their position clearly.

#### Exposure limits

| Chemical Name | JSOH (Japan) | ISHL (Japan) | ACGIH          |
|---------------|--------------|--------------|----------------|
| Ethanol       | N/A          | N/A          | STEL: 1000 ppm |
| 64-17-5       |              |              |                |

#### Personal protective equipment

Respiratory protection Hand protection

Eye protection Skin and body protection Dust mask Protection gloves protective eyeglasses or chemical safety goggles 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  | slightly yellow - yellow brown                            |
| Appearance   | crystalline powder - powder                               |
| Odor   | no data available   |
| Melting point/freezing point                           | 234 °C (dec.)   |
| 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   |
| рН   | no data available   |
| Viscosity (coefficient of viscosity)                   | no data available   |
| Dynamic viscosity                                      | no data available   |
| Solubilities   | Ethanol, acetone: soluble.water: practically insoluble,or |
|  | insoluble .   |
| n-Octanol/water partition coefficient:(log Pow)        | no data available   |
| 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

# Reactivityno data availableChemical stabilityMay be altered by light.Hazardous reactionsMay be altered by light.None under normal processingConditions to avoidConditions to avoidExtremes of temperature and direct sunlightIncompatible materialsStrong oxidizing agentsHazardous decomposition productsCarbon monooxide (CO), Carbon dioxide (CO2), Halides

# Section 11: TOXICOLOGICAL INFORMATION

| Acute toxicity |                 |                        |                        |
|----------------|-----------------|------------------------|------------------------|
| Chemical Name  | Oral LD50       | Dermal LD50            | Inhalation LC50        |
| Ethanol        | 6200 mg/kg(Rat) | 20000 mg/kg ( Rabbit ) | 63000 ppmV ( Rat ) 4 h |
|                |                 |                        |                        |

| Chemical Name | Acute toxicity -oral- source<br>information | Acute toxicity -dermal- source information | Acute toxicity -inhalation gas-<br>source information |
|---------------|---|--|---|
| Editario      |   |  | Based on the NITE GHS                                 |
|               | classification results.                     | classification results.                    | classification results.                               |

| Chemical Name | Acute toxicity -inhalation<br>vapor- source information | Acute toxicity -inhalation dust-<br>source information | Acute toxicity -inhalation mist-<br>source information |
|---------------|---|--|--|
| Ethanol       | Based on the NITE GHS                                   | Based on the NITE GHS                                  | Based on the NITE GHS                                  |
|               | classification results.                                 | classification results.                                | classification results.                                |

#### Skin irritation/corrosion

| Chemical Name                     | Skin corrosion/irritation source information         |  |
|-----------------------------------|--|--|
| Ethanol                           | Based on the NITE GHS classification results.        |  |
| Serious eye damage/ irritation    |  |  |
| Chemical Name                     | Serious eye damage/irritation source information     |  |
| Ethanol                           | Based on the NITE GHS classification results.        |  |
| Respiratory or skin sensitization |  |  |
| Chemical Name                     | Respiratory or Skin sensitization source information |  |
| Ethanol                           | Based on the NITE GHS classification results.        |  |
| Reproductive cell mutagenicity    |  |  |
| Chemical Name                     | germ cell mutagencity source information             |  |
| Ethanol                           | Based on the NITE GHS classification results.        |  |
| Carcinogenicity                   |  |  |
| Chemical Name                     | Carcinogenicity source information                   |  |
| Ethanol                           | Based on the NITE GHS classification results.        |  |

| Chemical Name         | NTP   | IARC  | ACGIH | JSOH (Japan) |
|-----------------------|-------|---|-------|--------------|
| Ethanol               | Known | Group 1                                       | A3    | -            |
| 64-17-5               |       |   |       |              |
| Reproductive toxicity |       |   |       |              |
| Chemical Name         |       | Reproductive toxicity source information      |       |              |
| Ethanol               |       | Based on the NITE GHS classification results. |       |              |
| STOT-single exposure  |       |   |       |              |
| Chemical Name         |       | STOT -single exposure- source information     |       | information  |
| Ethanol               |       | Based on the NITE GHS classification results. |       |              |

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#### STOT-repeated exposure

| Chemical Name   | STOT -repeated exposure- source information    |
|---|--|
| Ethanol Based on the NITE GHS classification results. |  |
| Aspiration hazard                                     |  |
| Chemical Name   | Aspiration Hazard source information           |
| Ethenel   | Decod on the NITE CLIS elegatification regults |

Ethanol

Based on the NITE GHS classification results.

# Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available

| Chemical Name | Algae/aquatic plants  | Fish                      | Crustacea            |
|---------------|-----------------------|---------------------------|----------------------|
| Ethanol       | EC50 : Chlorella alga | LC50 : Oncorhychus mykiss | EC50 : Daphnia magna |
|               | 1000 mg/L 96 h        | 11200 ppm 96 h            | 5463 mg/L 48 h       |

#### Other data

| Chemical Name | Short-term (acute) hazardous to the<br>aquatic environment source<br>information | Long-term (chronic) hazardous to the<br>aquatic environment source<br>information |
|---------------|--|---|
| Ethanol       |  | Based on the NITE GHS classification results.                                     |

| Persistence and degradability |
|-------------------------------|
| Bioaccumulative potential     |
| Mobility in soil              |
| Hazard to the ozone layer     |

No information available No information available No information available 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<br>UN number<br>Proper shipping name:<br>UN classfication<br>Subsidiary hazard class<br>Packing group | Not regulated<br>-                         |
|---|--|
| Marine pollutant  | Not applicable                             |
| IMDG<br>UN number<br>Proper shipping name:<br>UN classfication<br>Subsidiary hazard class<br>Packing group    | Not regulated<br>-                         |
| Marine pollutant (Sea)<br>Transport in bulk according to<br>Annex II of MARPOL 73/78 and<br>the IBC Code      | Not applicable<br>No information available |
| IATA<br>UN number<br>Proper shipping name:<br>UN classfication<br>Subsidiary hazard class<br>Packing group    | Not regulated<br>-                         |

Environmentally Hazardous Not applicable Substance

# Section 15: REGULATORY INFORMATION

| International Inventories<br>EINECS/ELINCS<br>TSCA   | Listed<br>-   |
|--|---|
| <u>Japanese regulations</u><br>Fire Service Act<br>Poisonous and Deleterious<br>Substances Control Law | Not applicable<br>Not applicable  |
| Industrial Safety and Health Ac  | tNotifiable Substances (Law Art.57-2, Enforcement Oder Art.18-2 Attached Table<br>No.9)No.61,606<br>Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57,<br>Para.1, Enforcement Order Art.18) |
| Regulations for the carriage<br>and storage of dangerous<br>goods in ship                              | Not applicable  |
| Civil Aeronautics Law<br>Pollutant Release and Transfer<br>Register Law                                | Not applicable<br>Not applicable  |
| (~2023.3.31)<br><u>Pollutant Release and Transfer</u><br><u>Register Law</u><br>(2023/4/1~)            | Not applicable  |
| Export Trade Control Order   | Not applicable  |

| Chemical Name   | Poisonous and Deleterious<br>Substances Control Law | Industrial Safety and Health Act<br>Substances<br>(Law Art.57-2)<br>(~2024.3.31) | Pollutant Release and Transfer<br>Register Law<br>(~2023.3.31) |
|---|---|--|--|
| 2-(2,4-Dihydroxy-3,5-diiodobenzoyl)benz<br>oic Acid<br>3480-21-5 ( 95.0 ) | -   | (~2024.3.31)<br>Applicable   | -  |
| Ethanol<br>64-17-5(<0.5)  | -   | Applicable   | -  |

# Section 16: OTHER INFORMATION

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