SAFETY DATA SHEET

According to JIS Z 7253:2019
Revision Date 03-Aug-2020
Version 5.02

Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>Dimethyl Terephthalate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>136-03135</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>FUJIFILM Wako Pure Chemical Corporation</td>
</tr>
<tr>
<td></td>
<td>1-2 Doshomachi 3-Chome</td>
</tr>
<tr>
<td></td>
<td>Chuo-ku, Osaka 540-8605, Japan</td>
</tr>
<tr>
<td></td>
<td>Phone: +81-6-6203-3741</td>
</tr>
<tr>
<td></td>
<td>Fax: +81-6-6203-5964</td>
</tr>
<tr>
<td>Supplier</td>
<td>FUJIFILM Wako Pure Chemical Corporation</td>
</tr>
<tr>
<td></td>
<td>1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan</td>
</tr>
<tr>
<td></td>
<td>Phone: +81-6-6203-3741</td>
</tr>
<tr>
<td></td>
<td>Fax: +81-6-6203-2029</td>
</tr>
<tr>
<td>Emergency telephone number</td>
<td>+81-6-6203-3741 / +81-3-3270-8571</td>
</tr>
<tr>
<td>Recommended uses and restrictions on use</td>
<td>For research purposes</td>
</tr>
</tbody>
</table>

Section 2: HAZARDS IDENTIFICATION

GHS classification

<table>
<thead>
<tr>
<th>Classification of the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
</tr>
<tr>
<td>Category 3 Respiratory tract irritation</td>
</tr>
<tr>
<td>Short-term (acute) hazardous to the aquatic environment</td>
</tr>
</tbody>
</table>

Pictograms

![Warning Symbol]

Signal word

Warning

Hazard statements

H320 - Causes eye irritation
H335 - May cause respiratory irritation
H401 - Toxic to aquatic life

Precautionary statements-(Prevention)

• Wash face, hands and any exposed skin thoroughly after handling
• Avoid breathing dust/fume/gas/mist/vapors/spray
• Use only outdoors or in a well-ventilated area
• Avoid release to the environment

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.
• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
• Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary statements-(Storage)
• Store in a well-ventilated place. Keep container tightly closed
• 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

Single Substance or Mixture Substance

Formula C6H4(COOCH3)2

<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>Dimethyl terephthalate</td>
<td>98.0</td>
<td>194.18</td>
<td>(3)-1328</td>
<td>公表</td>
<td>120-61-6</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 dischargeto 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**: Store away from sunlight in well-ventilated place at room temperature (preferably cool).
- **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**: crystals - crystalline powder or flakes
- **Color**: white
- **Odor**: No data available
- **Melting point/freezing point**: 140 - 143 °C
- **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**: 11.8 vol%  
  - **Lower**: 0.8 vol%
- **Flash point**: 153 °C
- **Auto-ignition temperature**: No data available
Decomposition temperature: No data available
pH: No data available
Viscosity (coefficient of viscosity): No data available
Dynamic viscosity: No data available

n-Octanol/water partition coefficient (log Pow): 2.25
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**: Has sublimation.

**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)

**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>Dimethyl terephthalate</td>
<td>4390 mg/kg (Rat)</td>
<td>&gt;5000 mg/kg (guinea pig)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Acute toxicity -oral- source information</th>
<th>Acute toxicity -dermal- source information</th>
<th>Acute toxicity -inhalation gas-source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
<td>Based on the NITE GHS classification results.</td>
<td>Based on the NITE GHS classification results.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Acute toxicity -inhalation vapor-source information</th>
<th>Acute toxicity -inhalation dust-source information</th>
<th>Acute toxicity -inhalation mist-source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
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</tbody>
</table>

**Skin irritation/corrosion**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Skin corrosion/irritation source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

**Serious eye damage/irritation**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Serious eye damage/irritation source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

**Respiratory or skin sensitization**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Respiratory or Skin sensitization source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
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</tbody>
</table>

**Reproductive cell mutagenicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Germ cell mutagenicity source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
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</tbody>
</table>

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Carcinogenicity source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

**Reproductive toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Reproductive toxicity source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>
Dimethyl terephthalate Based on the NITE GHS classification results.

### STOT-single exposure

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>STOT -single exposure- source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

### STOT-repeated exposure

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>STOT -repeated exposure- source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

### Aspiration hazard

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Aspiration Hazard source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

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## Section 12: ECOLOGICAL INFORMATION

### Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>EC50:Desmodesmus subspicatus 27.6 mg/L 72 h</td>
<td>LC50 : Pimephales promelas 9.6 mg/L 96 h</td>
<td>LC50:Daphnia magna 30.4 mg/L 48 h</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EC50:Daphnia magna 26.5 mg/L 24 h</td>
</tr>
</tbody>
</table>

### Other data

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Short-term (acute) hazardous to the aquatic environment source information</th>
<th>Long-term (chronic) hazardous to the aquatic environment source information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>Based on the NITE GHS classification results.</td>
<td>Based on the NITE GHS classification results.</td>
</tr>
</tbody>
</table>

### Persistence and degradability

- Readily biodegradable

### Bioaccumulative potential

- No information available

### Mobility in soil

- No information available

### Hazard to the ozone layer

- No information available

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## 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
Section 15: REGULATORY INFORMATION

International Inventories
- EINECS/ELINCS: Listed
- TSCA: Listed

Japanese regulations
- Fire Service Act: Not applicable
- Poisonous and Deleterious Substances Control Law: Not applicable
- Industrial Safety and Health Act: Not applicable
  - Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc
  - Regulations for the carriage and storage of dangerous goods in ship: Not applicable
- Civil Aeronautics Law: Not applicable
- Marine Pollution Prevention Law: Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y
- Pollutant Release and Transfer Register Law: Class 1, Hazardous Air Pollutants, No. 271

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Poisonous and Deleterious Substances Control Law</th>
<th>Industrial Safety and Health Act Substances (Law Art.57-2)</th>
<th>Pollutant Release and Transfer Register Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl terephthalate</td>
<td>120-61-6 (98.0)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Section 16: OTHER INFORMATION

Key literature references and sources for data etc.
- 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
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