Section 1: PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>Dimethyl 3,3’-Dithiodipropionate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>327-25042,321-25045</td>
</tr>
<tr>
<td>CAS No</td>
<td>15441-06-2</td>
</tr>
<tr>
<td>Formula</td>
<td>C8H14O4S2</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: Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Pictograms: none

Signal word: 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

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS
Single Substance or Mixture

Substance

Formula

C8H14O4S2

<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>Dimethyl 3,3'-Bisthiobispropionate</td>
<td>97.0</td>
<td>238.32</td>
<td>(2)-3699</td>
<td>公表</td>
<td>15441-06-2</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**
Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

**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
Highly flammable. Avoid contact with high temperature objects, spark, and 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
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Storage
Safe storage conditions
Store away from sunlight in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.

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
Protective 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
Colorless - slightly yellow
Appearance
liquid
Odor
No data available
pH
No data available
Melting point/freezing point
No data available
Boiling point, initial boiling point and boiling range
No data available
Flash point
168 °C
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: 1.122
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: Stable under recommended storage conditions.

Reactivity: No data available

**Hazardous reactions**

None under normal processing

**Conditions to avoid**

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Carbon monoxide (CO), Carbon dioxide (CO2), Sulfur oxides (SOx)

**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)
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
Listed

TSCA
Listed

Japanese regulations

Fire Service Act
Category IV, Class III petroleums, dangerous grade 3

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, 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