



# SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 18-Jan-2024

Revision Number 5.05

# Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Dimethyl Terephthalate
Product Code	136-03135

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** For research use only

**Restrictions on use**Seek expert judgment when using for purposes other than those recommended.

# **Section 2: HAZARDS IDENTIFICATION**

GHS classification
Classification of the substance or mixture
Specific target organ toxicity (single exposure)
Category 3 Respiratory irritation

Category 3

Category 2

**Pictograms** 



Acute aquatic toxicity

Signal word

Warning

### **Hazard statements**

H335 - May cause respiratory irritation

H401 - Toxic to aquatic life

# **Precautionary statements-(Prevention)**

- 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 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

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Dimethyl terephthalate	98.0	194.18	(3)-1328	*	120-61-6
			(3)-1328,(7)-705		

Note on ISHL No.:

# **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.

<sup>\*</sup> in the table means announced chemical substances.

## 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).

Keep container tightly closed.

Safe packaging material Polypropylene

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 handand 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.

no data available

Personal protective equipment

Respiratory protection Dust mask ( JIS T 8151 )

**Hand protection** chemical protective gloves (JIS T 8116) **Eye protection** protective eyeglasses or chemical safety goggles

Skin and body protection Long-sleeved work clothes

**General hygiene considerations** 

Flammability (solid, gas):

Handle in accordance with good industrial hygiene and safety practice.

### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

**Form** 

**Color** white

Appearance crystals - crystalline powder or flakes or mass

Odor

Melting point/freezing point

Boiling point, initial boiling point and boiling range
Flammability

No data available
no data available
no data available
no data available

Upper/lower flammability or explosive limits

 Upper:
 11.8 vol%

 Lower:
 0.8 vol%

Flash pointno data availableAuto-ignition temperature:no data availableDecomposition temperature:no data available

pHno data availableViscosity (coefficient of viscosity)no data availableDynamic viscosityno data available

Solubilities acetone : soluble . Ethanol : slightly soluble . water : very

slightly soluble.

n-Octanol/water partition coefficient:(log Pow) 2.25

Vapour pressureno data availableSpecific Gravity / Relative densityno data availableVapour densityno data availableParticle characteristicsno 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 monooxide (CO), Carbon dioxide (CO2)

# **Section 11: TOXICOLOGICAL INFORMATION**

**Acute toxicity** 

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl terephthalate	3500 - 4700 mg/kg( Rat )	15400 mg/kg ( Rabbit )	27.5 mg/L (Rat) 4 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Dimethyl terephthalate	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
, ,	classification results.	classification results.	classification results.

	Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Ī	Dimethyl terephthalate	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	
Dimethyl terephthalate	Based on the NITE GHS classification results.	
Serious eye damage/ irritation		
Chemical Name	Serious eye damage/irritation source information	
Dimethyl terephthalate	Based on the NITE GHS classification results.	
Respiratory or skin sensitization		
Chemical Name	Respiratory or Skin sensitization source information	
Dimethyl terephthalate	Based on the NITE GHS classification results.	
Reproductive cell mutagenicity	·	

Chemical Name	germ cell mutagencity source information
Dimethyl terephthalate	Based on the NITE GHS classification results.
Carcinogenicity	

Carcinogenicity				
Chemical Name	Carcinogenicity source information			
Dimethyl terephthalate	Based on the NITE GHS classification results.			

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Dimethyl terephthalate	Based on the NITE GHS classification results.
STOT-single exposure	
Chemical Name	STOT -single exposure- source information
Dimethyl terephthalate	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name		STOT -repeated exposure- source information	
	Dimethyl terephthalate	Based on the NITE GHS classification results.	

**Aspiration hazard** 

Chemical Name	Aspiration Hazard source information
Dimethyl terephthalate	Based on the NITE GHS classification results.

# **Section 12: ECOLOGICAL INFORMATION**

### **Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Dimethyl terephthalate	EC50:Desmodesmus	LC50 : Pimephales promelas	LC50:Daphnia magna
	subspicatus	9.6 mg/L 96 h	30.4 mg/L 48 h
	27.6 mg/L 72 h		EC50:Daphnia magna
			26.5 mg/L 24 h

Other data

otilo: data		
Chemical Name	Short-term (acute) hazardous to the Long-term (chronic) hazardous to t	
a	aquatic environment source information	aquatic environment source information
Dimethyl terephthalate E	Based on the NITE GHS classification	Based on the NITE GHS classification
r	esults.	results.

Persistence and degradability
Bioaccumulative potential
No
Mobility in soil
No
Hazard to the ozone layer
No

Readily biodegradable 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 Not regulated

UN number Proper shipping name:

UN classfication

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated

**UN** number

Proper shipping name: UN classfication

Subsidiary hazard class

Packing group

Page 5/7
W01W0113-0313 JGHEEN Dimethyl Terephthalate

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number -

Proper shipping name: UN classfication Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

# **Section 15: REGULATORY INFORMATION**

Japanese regulations

Fire Service Act Not applicable
Poisonous and Deleterious Not applicable
Substances Control Law
Industrial Safety and Health Act Not applicable

Act on the Evaluation of Priority Assessment Chemical Substances (Law Article 2, Para.5)

Chemical Substances and Regulation of Their Manufacture, etc

Regulations for the carriage Not applicable

and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable

Marine Pollution Prevention Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y

Law

Pollutant Release and Transfer Class 1

Register Law (2023.4.1-)

**Class 1 - No.** 271

**Export Trade Control Order** Not applicable

Air Pollution Control Law Hazardous Air Pollutants

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
Dimethyl terephthalate 120-61-6 ( 98.0 )	-	-	Applicable

# **Section 16: OTHER INFORMATION**

Key literature references and

NITE: National Institute of Technology and Evaluation (JAPAN)

sources for data etc. 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 Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Record of SDS revisions

The following contents were revised. Prodauct and company Identification. Exposure controls/personal protection. Physical and chemical properties. Regulatory information.

**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 Z 7252:2019. \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**