

**Trade name:** Dimethyl terephthalate, liquid**Current version :** 1.0.0, issued: 30.04.2021**Replaced version:** -, issued: -**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****Dimethyl terephthalate, liquid**

Substance name 1,4-Benzenedicarboxylic acid, dimethyl ester  
REACH registration no. 01-2119472299-26

**Identification numbers**

CAS no. 120-61-6  
EC no. 204-411-8

**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Raw material

**Uses advised against**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**

Oxxynova GmbH  
Borsteler Weg 50  
31595 Steyerburg

Telephone no. 05764 291 122  
Fax no. 05764 291 260  
e-mail info@oxxynova.com

**1.4 Emergency telephone number**

For medical advice (in German and English):  
+49 (0)551 192 40 (Giftinformationszentrum Nord)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification information**

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

**2.2 Label elements**

Not relevant

**2.3 Other hazards****PBT assessment**

The product is not considered to be a PBT.

**vPvB assessment**

The product is not considered to be a vPvB.

**SECTION 3: Composition/information on ingredients****3.1 Substances****Chemical characterization**

Substance name 1,4-Benzenedicarboxylic acid, dimethyl ester

**Identification numbers**

CAS no. 120-61-6  
EC no. 204-411-8

**3.2 Mixtures**

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Not applicable. The product is not a mixture.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

#### After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

#### After skin contact

In case of contact with skin wash off with water.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

#### After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Alcohol resistant foam, CO<sub>2</sub>, powders, water spray

#### Unsuitable extinguishing media

High power water jet

### 5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO)

### 5.3 Advice for firefighters

In event of a fire immediately cordon off the area and evacuate all persons from the danger zone. Use self-contained breathing apparatus. Wear protective clothing.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8.

#### For emergency responders

Personal protective equipment (PPE) - see section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### 6.3 Methods and material for containment and cleaning up

Stop leak if safe to do so. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). When collected, handle material as described under the section heading "Disposal considerations".

### 6.4 Reference to other sections

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Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

#### Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original.

#### Incompatible products

Substances to be avoided, see section 10.

### 7.3 Specific end use(s)

No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### DNEL, DMEL and PNEC values

##### DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	1,4-Benzenedicarboxylic acid, dimethyl ester			120-61-6 204-411-8	
	dermal	Long term (chronic)	systemic	38	mg/kg bw/day
	dermal	Short term (acute)	systemic	77	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	35	mg/m <sup>3</sup>
	inhalative	Short term (acute)	systemic	70	mg/m <sup>3</sup>

##### DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	1,4-Benzenedicarboxylic acid, dimethyl ester			120-61-6 204-411-8	
	oral	Long term (chronic)	systemic	2.5	mg/kg bw/day
	oral	Short term (acute)	systemic	5	mg/kg bw/day
	dermal	Long term (chronic)	systemic	19	mg/kg bw/day
	dermal	Short term (acute)	systemic	38	mg/kg bw/day

##### PNEC values

No	Substance name		CAS / EC no
	ecological compartment	Type	Value
1	1,4-Benzenedicarboxylic acid, dimethyl ester		120-61-6 204-411-8

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water	fresh water	0.017	mg/L
water	marine water	0.002	mg/L
water	fresh water sediment	0.25	mg/kg dry weight
water	marine water sediment	0.025	mg/kg dry weight
soil	-	0.04	mg/kg dry weight
sewage treatment plant	-	50	mg/L

**8.2 Exposure controls****Appropriate engineering controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

**Personal protective equipment****Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

**Eye / face protection**

Safety glasses with side protection shield (EN 166)

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. When handling hot melts, use suitable heat resistant gloves (EN 407).

**Other**

Chemical-resistant work clothes.

**Environmental exposure controls**

No data available.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>State of aggregation</b>	
liquid	
<b>Form/Colour</b>	
Molten	
colourless	
<b>Odour</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
Value	284 °C
Source	Literature value
<b>Melting point/freezing point</b>	
Value	141 °C
Source	Literature value

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<b>Decomposition temperature</b>	
Value	> 400 °C
Source	Literature value

<b>Flash point</b>	
Value	151 °C
Method	ASTM D3278
Source	Literature value
Value	°C

<b>Ignition temperature</b>	
Value	520 °C
Source	Literature value

<b>Flammability</b>	
No data available	

<b>Lower explosion limit</b>	
Value	0.8 % vol
Source	Literature value

<b>Upper explosion limit</b>	
Value	11.8 % vol
Source	Literature value

<b>Vapour pressure</b>	
No data available	

<b>Relative vapour density</b>	
No data available	

<b>Relative density</b>	
No data available	

<b>Density</b>	
Value	1.36 g/cm <sup>3</sup>
Reference temperature	20 °C
Source	Literature value

<b>Solubility in water</b>	
Value	0.031 g/l
Source	Literature value

<b>Solubility</b>	
No data available	

<b>Partition coefficient n-octanol/water (log value)</b>			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
log Pow		2.21	
Reference temperature		23 °C	
Method		OECD 107	
Source		ECHA	

<b>Viscosity</b>	
No data available	

<b>Particle characteristics</b>	
No data available	

**9.2 Other information**

<b>Other information</b>	
No data available.	

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

### 10.4 Conditions to avoid

Keep away sources of ignition.

### 10.5 Incompatible materials

strong oxidizing agents; strong acids; strong bases

### 10.6 Hazardous decomposition products

No data available.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity	
No data available	

Acute dermal toxicity	
No data available	

Acute inhalational toxicity	
No data available	

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
Species	rabbit		
Method	CFR 191.12 Ch Title 21		
Source	ECHA		
Evaluation	non-irritant		

Respiratory or skin sensitisation	
No data available	

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
Type of examination	in vitro gene mutation study in bacteria		
Species	S. typhimurium TA 1535, TA 1537, TA 98 and TA 100		
Method	EU Method B.13/14		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity	
No data available	

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<b>Carcinogenicity</b>			
No data available			
<b>STOT - single exposure</b>			
No data available			
<b>STOT - repeated exposure</b>			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
Route of exposure		inhalational	
NOAEL		86.4	mg/m <sup>3</sup>
Species		rat	
Method		OECD 413	
Source		ECHA	
<b>Aspiration hazard</b>			
No data available			

## 11.2 Information on other hazards

### Endocrine disrupting properties

No data available.

### Other information

No data available.

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
LC50		13	mg/l
Duration of exposure		96	h
Species		Danio rerio	
Method		OECD 203	
Source		ECHA	
<b>Toxicity to fish (chronic)</b>			
No data available			
<b>Toxicity to Daphnia (acute)</b>			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
EC50		>	23.5 mg/l
Duration of exposure		48	h
Species		Daphnia magna	
Method		OECD 202	
Source		ECHA	
<b>Toxicity to Daphnia (chronic)</b>			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
NOEC		1.72	mg/l
Species		Daphnia magna	
Method		OECD 211	
Source		ECHA	
<b>Toxicity to algae (acute)</b>			
No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8

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ErC50	>	29	mg/l
Duration of exposure		72	h
Species	Desmodemus subspicatus		
Method	OECD 201		
Source	ECHA		

**Toxicity to algae (chronic)**

No data available

**Bacteria toxicity**

No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
EC50	>	1000	mg/l
Species	activated sludge		
Method	OECD 209		
Source	ECHA		

**12.2 Persistence and degradability****Biodegradability**

No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
Value		94	%
Duration		28	day(s)
Method	ISO 10708		
Source	ECHA		
Evaluation	readily biodegradable		

**12.3 Bioaccumulative potential****Partition coefficient n-octanol/water (log value)**

No	Substance name	CAS no.	EC no.
1	1,4-Benzenedicarboxylic acid, dimethyl ester	120-61-6	204-411-8
log Pow		2.21	
Reference temperature		23	°C
Method	OECD 107		
Source	ECHA		

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment****Results of PBT and vPvB assessment**

PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

**12.6 Endocrine disrupting properties**

No data available.

**12.7 Other adverse effects**

No data available.

**12.8 Other information****Other information**

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.



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Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

**SECTION 14: Transport information**
**14.1 Transport ADR/RID/ADN**

Class	3
Classification code	F2
Packing group	III
Hazard identification no.	30
UN number	UN3256
Proper shipping name	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.
Technical name	1,4-Benzenedicarboxylic acid, dimethyl ester
Tunnel restriction code	D/E
Label	3

**14.2 Transport IMDG**

Class	3
Packing group	III
UN number	UN3256
Proper shipping name	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.
Technical name	1,4-Benzenedicarboxylic acid, dimethyl ester
EmS	F-E, S-D
Label	3

**14.3 Transport ICAO-TI / IATA**

Class	3
UN number	UN3256
Proper shipping name	keine Angabe - Beförderung verboten
Technical name	1,4-Benzenedicarboxylic acid, dimethyl ester
Label	3
Comments	Transport forbidden.

**14.4 Other information**

No data available.

**14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

**14.6 Special precautions for user**

No data available.

**14.7 Maritime transport in bulk according to IMO instruments**

Not relevant

**SECTION 15: Regulatory information**
**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
**EU regulations**
**Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

**REACH candidate list of substances of very high concern (SVHC) for authorisation**

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered

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as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").
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<b>Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES</b>
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The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.
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<b>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</b>
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This substance is not subject to Part 1 or 2 of Annex I
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<b>Other regulations</b>
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Adhere to the national sanitary and occupational safety regulations when using this product.
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## 15.2 Chemical safety assessment

A chemical safety assessment has been carried out for this substance.

## SECTION 16: Other information

### Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

### Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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