Trade name: Dimethyl terephthalate, flakes / briquettes

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, flakes / briquettes

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

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, CO2, 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 (CO2); Carbon monoxide (CO)

5.3 Advice for firefighters
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.

6.3 Methods and material for containment and cleaning up
Take up mechanically. When collected, handle material as described under the section heading "Disposal considerations". Avoid raising dust.

6.4 Reference to other sections
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 dust. 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 closed 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 (acut)	systemic	77	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	35	mg/m³
	inhalative	Short term (acut)	systemic	70	mg/m³

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 (acut)	systemic	5	mg/kg bw/day
	dermal	Long term (chronic)	systemic	19	mg/kg bw/day
	dermal	Short term (acut)	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**	
	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 work-station 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.

Appropriate Material	Chloroprene/nitrile gloves (e.g. Nitropren 717, Kächele-Cama Latex GmbH (KCL), Germany)		
Material thickness		0.65	mm
Breakthrough time	>	8	h
Appropriate Material	Nitrile gloves (e.g. Dermatril 740, Kächele-Cama Latex GmbH (KCL), Germany)		
Material thickness		0.11	mm
Breakthrough time	>	8	h

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

State of aggregation
solid

Form/Colour
white

Odour
No data available

pH value
No data available

Boiling point / boiling range	
Value	284 °C
Source	Literature value

Melting point/freezing point			
Value		141	°C
Source	Literature value		

Decomposition temperature			
Value	>	400	°C
Source	Literature value		

Flash point			
Value		151	°C
Method	ASTM D3278		
Source	Literature value		
Value			°C

Ignition temperature			
Value		520	°C
Source	Literature value		

Flammability
No data available

Lower explosion limit			
Value		0.8	% vol
Source	Literature value		

Upper explosion limit			
Value		11.8	% vol
Source	Literature value		

Vapour pressure
No data available

Relative vapour density
No data available

Relative density
No data available

Density			
Value		1.36	g/cm³
Reference temperature		20	°C
Source	Literature value		

Solubility in water			
Value		0.031	g/l
Source	Literature value		

Solubility
No data available

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			

Viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

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
No data available.

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

Carcinogenicity
No data available

STOT - single exposure
No data available

STOT - repeated exposure				
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/m³
Species	rat			
Method	OECD 413			
Source	ECHA			

Aspiration hazard
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

Toxicity to fish (acute)				
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			

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)				
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			

Toxicity to Daphnia (chronic)				
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

Toxicity to algae (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**1,4-Benzenedicarboxylic acid, dimethyl ester**	**120-61-6**	**204-411-8**

ErC50	>	29	mg/l
Duration of exposure		72	h
Species	Desmodesmus 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.
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
The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG
The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA
The product is not subject to ICAO-TI / IATA regulations.

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 as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

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
The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances
This substance is not subject to Part 1 or 2 of Annex I

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

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
UMCO GmbH - D-21107 Hamburg, Georg-Wilhelm-Strasse 187, Tel.: +49(40)555 546 300, Fax: +49(40)555 546 357, e-mail: umco@umco.de

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.

Prod-ID 776264