

**Section 1: Identification of the substance/mixture and of the company/undertaking****Product identifier****Trade name or designation of the mixture** DIMETHYL TEREPHTHALATE (DMT)**Registration number** 01-2119472299-26-0006**Synonyms** DIMETHYL 1,4-BENZENEDICARBOXYLATE; TEREPHTHALIC ACID, DIMETHYL ESTER DMT Pellets; DMT Flake; DMT Molten**Date of first issue** 29-November-2005**Version number** 2.1**Revision date** 23-August-2012**Supersedes date** 22-June-2012**Relevant identified uses of the substance or mixture and uses advised against****Identified uses** Chemical intermediate.**Uses advised against**

None known.

**Details of the supplier of the safety data sheet****Company name** INVISTA Resins & Fibers GmbH**Address** Ludwig Hermann Strasse 100

D-86368

Gersthofen, Germany

**General Information** +49-821-479-3000**Email** sds@invista.com**Emergency** +44-1235-239-670**Section 2: Hazards identification****Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC as amended****Classification according to Regulation (EC) No 1272/2008 as amended**

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

**Label elements****Label according to Regulation (EC) No. 1272/2008 as amended****Hazard statements** The substance does not meet the criteria for classification.**Precautionary statements****Prevention** Not assigned.**Response** Not assigned.**Storage** Not assigned.**Disposal** Not assigned.**Supplemental label information**

Not applicable.

**Other hazards**

Product may form explosive dust/air mixture if high concentration of product dust is suspended in air.

If heated:

Causes severe burns.

**Section 3: Composition/information on ingredients****Mixture**

## General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
DIMETHYL TEREPHTHALATE	>99%	120-61-6 204-411-8	01-2119472299-26-0006	-	#
<b>Classification:</b>					
<b>DSD:</b>	-				
<b>CLP:</b>	-				

## Composition comments

Not classified as a hazardous substance.

## Section 4: First aid measures

### General information

If you feel unwell, seek medical advice (show the label where possible).

### Description of first aid measures

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get medical attention immediately. If symptoms persist, get medical attention.

#### Skin contact

Wash off with soap and water. Get medical attention if irritation develops or persists.

In case of contact with molten product, cool rapidly with water and seek immediate medical attention. Do not attempt to remove molten product from skin because skin will tear easily.

#### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

In case of contact with molten product, cool rapidly with water and seek immediate medical attention.

#### Ingestion

If ingested, do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth thoroughly with water. Never give anything by mouth to a victim who is unconscious or is having convulsions. If material is ingested, immediately contact a physician or poison control centre.

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

Exposure to powder or dusts may be irritating to eyes, nose and throat.  
May cause irritation to the respiratory system.

Contact with molten material may cause thermal burns.

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

Not available.

## Section 5: Firefighting measures

### General fire hazards

Combustion products include fumes, smoke, carbon monoxide and carbon dioxide.

### Extinguishing media

#### Suitable extinguishing media

Small Fires: Dry chemical, CO<sub>2</sub>, water spray or regular foam.

Large Fires: Water spray, fog or regular foam.

#### Unsuitable extinguishing media

Do not use water jet.

### Special hazards arising from the substance or mixture

Dusts at sufficient concentrations can form explosive mixtures with air.  
Do not use a solid water stream as it may scatter and spread fire.

### Advice for firefighters

#### Special protective equipment for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Structural firefighters protective clothing will only provide limited protection.

### Special firefighting procedures

Extinguish fires started by molten material by using appropriate method for the burning material. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, and face mask. Move containers from fire area if you can do it without risk. In the event of fire and/or explosion do not breathe fumes.

## Section 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Do not touch or walk through spilled material.

#### For emergency responders

Keep unnecessary personnel away. Avoid inhalation of vapour, fumes, dust and/or mist from the spilled material. Avoid skin contact with molten resins. Molten material can cause burns. Handle molten material with care.

### Environmental precautions

Prevent further leakage or spillage if safe to do so.

### Methods and material for containment and cleaning up

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. Where possible allow molten material to solidify naturally.

### Reference to other sections

See Section 8 for personal protective equipment.

For waste disposal, see section 13.

## Section 7: Handling and storage

### Precautions for safe handling

Handle and open container with care. Avoid dust formation. Follow all SDS/label precautions even after container is emptied because they may retain product residues. Use non-sparking tools when opening or closing containers. Molten material can cause burns. Handle molten material with care.

### Conditions for safe storage, including any incompatibilities

Use care in handling/storage.

### Specific end use(s)

Not available.

## Section 8: Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

**Bulgaria. OELs. Regulation No 13 of Ministry of Labor & Social Policy, with Ministry of Health, on protection of workers related to exposure to chemical agents at work**

Components	Type	Value
DIMETHYL TEREPHTHALATE (120-61-6)	TWA	1.0000 mg/m3

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
DIMETHYL TEREPHTHALATE (120-61-6)	TWA	0.1000 mg/m3

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value
DIMETHYL TEREPHTHALATE (120-61-6)	STEL	5.0000 mg/m3
	TWA	2.0000 mg/m3

### Recommended monitoring procedures

Not available.

## DNEL

Material	Type	Route	Value	Form
DIMETHYL TEREPHTHALATE (DMT) (120-61-6)	Industry	Inhalation	35.0000 mg/m3	Long-term
		Dermal	77.0000 mg/kg/day	Short-term
		Inhalation	70.0000 mg/m3	Short-term
		Dermal	38.0000 mg/kg/day	Long-term

## PNEC

Material	Type	Route	Value	Form
DIMETHYL TEREPHTHALATE (DMT) (120-61-6)	Industry	Water	0.1300 mg/l	intermittent
		Water	0.0017 mg/l	Marine
		Water	0.2500 mg/kg	Sediment Freshwater
		Water	0.0250 mg/kg	Sediment marine water
		Soil	0.0400 mg/kg	Soil
Water	0.0172 mg/l	Fresh-water		

## Exposure controls

### Appropriate engineering controls

Keep formation of airborne dusts to a minimum. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Static charges created by dust generation in or near flammable vapours may cause flash fire.

### Individual protection measures, such as personal protective equipment

#### General information

In the case of respirable dust, use self-contained breathing apparatus.

#### Eye/face protection

Avoid contact with eyes. Wear dust goggles.  
Wear chemical goggles; face shield (if handling molten material).

#### Skin protection

##### - Hand protection

Protective gloves. For molten material use heat resistant gloves.  
Solvent-resistant gloves (butylrubber).  
Thickness: > 1 mm  
Permeation rate: >480 min

##### - Other

For molten product, use any type rubber thermal insulating gloves and other clothing as necessary to protect from thermal burns.

#### Respiratory protection

Avoid inhalation of fumes from molten product. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

#### Thermal hazards

Not available.

## Hygiene measures

Handle in accordance with good industrial hygiene and safety practices.

## Environmental exposure controls

Not available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

Appearance	Powder.
Physical state	Solid.
Form	Solid. Molten liquid.
Colour	White.
Odour	Slight to none.
Odour threshold	Not available.
pH	Not applicable.

<b>Melting point/freezing point</b>	141 °C
<b>Boiling point, initial boiling point, and boiling range</b>	284 °C
<b>Flash point</b>	151 °C Cleveland closed cup
<b>Auto-ignition temperature</b>	516 °C
<b>Flammability (solid, gas)</b>	Not available.
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Oxidising properties</b>	Not applicable.
<b>Explosive properties</b>	Not applicable.
<b>Explosive limit</b>	Not applicable.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Relative density</b>	1.3673
<b>Relative density temperature</b>	20 °C
<b>Density</b>	1.35 g/cm <sup>3</sup>
<b>Solubility (Water)</b>	28.7 mg/L at 20 °C
<b>Partition coefficient (n-octanol/water)</b>	2.25 Log Kow
<b>Decomposition temperature</b>	Not available.
<b>Bulk density</b>	500 kg/m <sup>3</sup>
<b>Viscosity</b>	Not available.
<b>Percent volatile</b>	Not available.
<b>Other data</b>	
<b>Chemical family</b>	Esters
<b>Molecular weight</b>	194.19
<b>Specific gravity</b>	1.2 at 20°C (solid)
<b>Other information</b>	No relevant additional information available.

## Section 10: Stability and reactivity

### Reactivity

Not available.

### Chemical stability

Stable at normal conditions.

### Possibility of hazardous reactions

Not expected to occur.

### Conditions to avoid

Dust may form explosive mixture in air.

### Incompatible materials

Strong acids, alkalies and oxidizing agents.

### Hazardous decomposition products

Irritating and/or toxic fumes and gases may be emitted upon the products decomposition. At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

## Section 11: Toxicological information

**General information** Not available.

### Information on likely routes of exposure

**Ingestion** Not classified.

**Inhalation** Not classified.

**Skin contact** Not classified.

**Eye contact** Not classified.  
**Symptoms** Not available.

**Information on toxicological effects**

<b>Product</b>	<b>Test results</b>
DIMETHYL TEREPHTHALATE (DMT) (120-61-6)	Acute Dermal LD50 Guinea pig: > 5000 mg/kg Acute Inhalation LC50 Rat: > 6 mg/l Acute Oral LD50 Rat: 3200 mg/kg Subchronic Inhalation NOAEC Rat: 86.4 mg/m3 Subchronic Oral NOAEL Rat: 500 mg/kg/day (rat 96 days)

**Skin corrosion/irritation** Animal testing indicates that this material is not a skin irritant.  
**Serious eye damage/eye irritation** Animal studies indicate this substance is not an eye irritant.  
**Skin sensitisation** The results of a test in guinea pigs showed this substance not to be a skin sensitizer.  
**Respiratory sensitisation** Not classified due to lack of data.  
**Germ cell mutagenicity** Not classified due to lack of data.  
**Carcinogenicity** Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.

ACGIH = American Conference of Governmental Industrial Hygienists.  
IARC = International Agency for Research on Cancer.  
NTP = National Toxicology Program.  
NIOSH = National Institute of Occupational Safety and Health.  
OSHA = Occupational Safety and Health Administration.

**Reproductive toxicity** Animal testing did not show any effects on fertility.  
**Specific target organ toxicity - single exposure** Not classified due to lack of data.  
**Specific target organ toxicity - repeated exposure** Not classified due to lack of data.  
**Aspiration hazard** Not classified due to lack of data.

**Mixture versus substance information**

Not available.

**Other information** Not available.

**Section 12: Ecological information**

**Toxicity**

<b>Product</b>	<b>Test results</b>
DIMETHYL TEREPHTHALATE (DMT) (120-61-6)	EC50 Algae: 27.6 mg/l 96.00 Hours EC50 Daphnia: > 23.5 mg/l 48.00 Hours LC50 Zebra danio (Danio rerio): 13 mg/l 96.00 Hours

**Persistence and degradability** Readily biodegradable.  
**Bioaccumulative potential** This product is readily biodegradable and shows a low potential to bioaccumulate.  
**Mobility** Not available.  
**Environmental fate - Partition coefficient** Not available.  
**Mobility in soil** Not available.  
**Results of PBT and vPvB assessment** Not available.  
**Other adverse effects** Not available.

**Section 13: Disposal considerations**

**Waste treatment methods**

**Residual waste**

Not available.

**Contaminated packaging**

Not available.

**EU waste code**

Not available.

**Disposal methods/information**

Dispose in accordance with all applicable regulations.

**Section 14: Transport information****General**

The transport information above applies to the molten DMT (bulk shipment) only. Solid DMT (as in drum and sample shipments) is not regulated as a hazardous material for shipment.

**ADR**

<b>UN number</b>	UN3256
<b>UN proper shipping name</b>	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (DIMETHYL TEREPHTHALATE)
<b>Transport hazard class(es)</b>	3
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No
<b>Tunnel restriction code</b>	D/E
<b>Labels required</b>	3
<b>Special precautions for user</b>	Not available.

**RID**

<b>UN number</b>	UN3256
<b>UN proper shipping name</b>	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 61 °C, at or above its flash-point (DIMETHYL TEREPHTHALATE)
<b>Transport hazard class(es)</b>	3
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No
<b>Labels required</b>	3
<b>Special precautions for user</b>	Not available.

**ADN**

<b>UN number</b>	UN3256
<b>UN proper shipping name</b>	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (DIMETHYL TEREPHTHALATE)
<b>Transport hazard class(es)</b>	3
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Environmental hazards</b>	No
<b>Labels required</b>	3
<b>Special precautions for user</b>	Not available.

**IATA**

<b>UN proper shipping name</b>	MOLTEN MATERIAL NOT PERMITTED. SOLID MATERIAL IS NOT REGULATED
<b>Subsidiary class(es)</b>	-
<b>Environmental hazards</b>	No
<b>ERG Code</b>	3L
<b>Special precautions for user</b>	Not available.

**IMDG**

<b>UN proper shipping name</b>	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flash-point above 60 °C, at or above its flash-point (DIMETHYL TEREPHTHALATE)
<b>Transport hazard class(es)</b>	3
<b>Subsidiary class(es)</b>	-
<b>Packing group</b>	III
<b>Marine pollutant</b>	No
<b>EmS No.</b>	F-E,S-D
<b>Special precautions for user</b>	Not available.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No information available.

**Section 15: Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulations**

**Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)**

Not listed.

**Regulation (EC) No. 1907/2006, Article 59(1). Candidate List**

Not listed.

**Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V**

Not listed.

**Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I**

Not listed.

**Other regulations**

The product does not need to be labelled in accordance with EC directives or respective national laws.

**National regulations**

Not available.

**Germany**

**Water Hazard Class** WGK1, ID Number 0723

**Chemical safety assessment**

Not available.

**Section 16: Other information**

**List of abbreviations**

Not available.

**References**

Not available.

**Information on evaluation method leading to the classification of mixture**

Not available.

**Full text of any statements or R-phrases and H-phrases** None.

**under Sections 2 to 15**

**Revision information**

Section 2: Hazards identification: Other hazards  
Composition / Information on Ingredients: Disclosure Overrides  
Section 11: Toxicological information: Reproductive toxicity

**Training information**

Not available.



## Disclaimer

This Safety Data Sheet ("SDS") contains selected information about a specific INVISTA product or group of products. It relates only to the identified product and any identified uses and is based on information available as of the date hereof. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. THIS SDS WAS PREPARED PURSUANT TO GOVERNMENT REGULATIONS THAT IDENTIFY SPECIFIC TYPES OF INFORMATION TO BE PROVIDED HEREIN. IT IS THEREFORE NOT INTENDED AS, AND DOES NOT CONTAIN, A COMPLETE STATEMENT OF, AND DOES NOT CONSTITUTE A REPRESENTATION, WARRANTY OR GUARANTY WITH REGARD TO, A PRODUCT'S CHARACTERISTICS, USES, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR THE SUITABILITY, SAFETY, EFFICACY, HAZARDS OR HEALTH EFFECTS OF THE PRODUCT, WHETHER USED SINGULARLY OR IN COMBINATION WITH ANY OTHER PRODUCT, EXCEPT TO THE EXTENT REQUIRED BY THE RELEVANT LAW AND REGULATIONS. Purchasers and users of the product are responsible for determining that the product is suitable for the intended use and that their workers and the general public are advised of any risks resulting from such use. Nothing contained in this SDS shall be construed to modify any of the commercial terms pursuant to which the product was sold by INVISTA including, but not limited to, terms and conditions addressing each party's respective rights and obligations with regard to warranties, remedies and indemnification.

Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of the SDS, and any supplementary SDS or written warnings that they may receive from INVISTA from time-to-time. In addition, if purchasers and users believe or have reason to believe that the SDS or other information provided to them by INVISTA is inaccurate or in any way insufficient for any purpose, they should immediately notify INVISTA of the same, and of the basis for their belief (for example, studies, data, reports of incidents, etc.) so that INVISTA can determine whether modification or supplementation of the SDS, or other measures, are appropriate. Failure of purchasers and users to timely provide such notice shall be deemed a waiver by purchasers and users of any and all claims, demands or causes of action, including causes of action based on an alleged failure to warn, for personal injury or damage to the environment or property arising from or attributable to the use of product.

This disclaimer shall be effective to the extent allowed by law. Should any provision be deemed to be ineffective or unenforceable, that provision shall be deemed severed from the disclaimer and the remaining provisions shall continue to have full force and effect.

<b>Issue date</b>	23-Aug-2012
<b>Revision date</b>	23-Aug-2012
<b>Print date</b>	23-August-2012