

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) &amp; 2015/830

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**
**1.1 Product identifier**

Product Name TPD  
 Synonyms N,N'-Diphenyl-N,N'-bis(3-methylphenyl)-(1,1'-diphenyl)-4,4'-diamine  
 Chemical Name N,N'-Bis(3-methylphenyl)-N,N'-diphenylbenzidine  
 Chemical Formula C<sub>38</sub>H<sub>32</sub>N<sub>2</sub>  
 CAS No. 65181-78-4  
 EC No. Not Applicable  
 REACH Registration No. Not applicable.

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

Identified Use(s) PC21 Laboratory chemicals

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

Company Identification Ossila Limited  
 Address of Supplier Solpro Business Park  
 Windsor Street  
 Sheffield  
 Postal code S4 7WB, UK  
 Telephone: +441142999180  
 E-mail info@ossila.com  
 Office hours 08:00 - 17:00

**SECTION 2: HAZARDS IDENTIFICATION**
**2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Aquatic Chronic 2: Toxic to aquatic life with long lasting effects

**2.2 Label elements**

According to Regulation (EC) No. 1272/2008 (CLP)  
 Product Name TPD

Hazard Pictogram(s)



GHS09

Signal Word(s) Warning

Hazard Statement(s) H411: Toxic to aquatic life with long lasting effects

Precautionary Statement(s) P273: Avoid release to the environment.

**2.3 Other hazards**

None known.

**2.4 Additional Information**

Not applicable.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**
**3.1 Substances**

Hazardous ingredient(s)	CAS No.	EC No.	%W/W	Hazard Statement(s)
N,N'-Bis(3-methylphenyl)-N,N'-diphenylbenzidine	65181-78-4	Not Applicable	≤100	Aquatic Chronic 2 H411

**3.2 Mixtures**

Not applicable.

**SECTION 4: FIRST AID MEASURES**
**4.1 Description of first aid measures**

Inhalation Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.  
 Skin Contact Rinse skin with water. If skin irritation occurs, get medical advice/attention.  
 Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Ingestion Rinse out mouth with water. Get medical advice/attention if you feel unwell.

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

SECTION 11: Most important symptoms and effects, both acute and delayed

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

Treat symptomatically.

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

Suitable Extinguishing media As appropriate for surrounding fire.

Unsuitable extinguishing media As appropriate for surrounding fire.

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

May decompose in a fire, giving off toxic and irritant vapours.

**5.3 Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Provide adequate ventilation. Wear protective clothing as per section 8.

**6.2 Environmental precautions**

Avoid release to the environment.

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

Sweep up spilled substance but avoid making dust. Use vacuum equipment for collecting spilt materials, where practicable. Dispose of contents in accordance with local, state or national legislation.

**6.4 Reference to other sections**

See Also Section 8, 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Avoid breathing dust/fume/gas/mist/vapours/spray. Use only in a well-ventilated area. Wear protective clothing as per section 8. Wash hands thoroughly after handling.

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

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Storage temperature

Ambient.

Storage life

Product is light sensitive. Store in the dark.

Incompatible materials

None known.

**7.3 Specific end use(s)**

Not known. See Section: 1.2.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**8.1.1 Occupational Exposure Limits**

No occupational exposure limit assigned.

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
	65181-78-4					

Region EU United Kingdom  
Source EU Occupational Exposure Limits UK Workplace Exposure Limits EH40/2005 (Third edition, published 2018)

**8.2 Exposure controls**

**8.2.1. Appropriate engineering controls**

Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

**8.2.2. Personal protection equipment**

**Eye Protection**

Wear eye protection with side protection (EN166).



**Skin protection**

Wear protective clothing and gloves: Impervious gloves (EN 374).





Respiratory protection A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

Appearance	Solid: Powder/Crystals Colour: White
Odour	Not known.
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	175-177 °C
Initial boiling point and boiling range	Not known.
Flash Point	Not known.
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	Not known.
Solubility(ies)	Solubility (Water): Not known. Solubility (Other): Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.

### 9.2 Other information

None.

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## SECTION 10: STABILITY AND REACTIVITY

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### 10.1 Reactivity

None anticipated.

### 10.2 Chemical Stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Not known.

### 10.4 Conditions to avoid

Not known.

### 10.5 Incompatible materials

Not known.

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

Acute toxicity - Ingestion	No data available.
Acute toxicity - Skin Contact	No data available.
Acute toxicity - Inhalation	No data available.
Skin corrosion/irritation	No data available.
Serious eye damage/irritation	No data available.
Skin sensitization data	No data available.
Respiratory sensitization data	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	No data available.
Reproductive toxicity	No data available.
Lactation	No data available.
STOT - single exposure	No data available.
STOT - repeated exposure	No data available.

Aspiration hazard No data available.  
**11.2 Other information** Not known.

**SECTION 12: ECOLOGICAL INFORMATION**
**12.1 Toxicity**

No data available.  
 Toxicity - Aquatic invertebrates Not known.  
 Toxicity - Fish Not known.  
 Toxicity - Algae Not known.  
 Toxicity - Sediment Compartment Not known.  
 Toxicity - Terrestrial Compartment Not known.

**12.2 Persistence and Degradation**

Not known.

**12.3 Bioaccumulative potential**

Not known.

**12.4 Mobility in soil**

Not known.

**12.5 Results of PBT and vPvB assessment**

Not known.

**12.6 Other adverse effects**

Not known.

**SECTION 13: DISPOSAL CONSIDERATIONS**
**13.1 Waste treatment methods**

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator.

**13.2 Additional Information**

Disposal should be in accordance with local, state or national legislation.

**SECTION 14: TRANSPORT INFORMATION**
**14.1 UN number**

UN No. 3077

**14.2 UN proper shipping name**

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (N,N'-Diphenyl-N,N'- bis(3-methylphenyl)-(1,1'-diphenyl)-4,4'-diamine)

**14.3 Transport hazard class(es)**

ADR/RID 9  
 IMDG 9  
 IATA 9

**14.4 Packing group**

Packing group III

**14.5 Environmental hazards**

Environmental hazards Classified as a Marine Pollutant.

**14.6 Special precautions for user**

Special precautions for user Not known.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not known.

**SECTION 15: REGULATORY INFORMATION**
**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

REACH: ANNEX XIV list of substances subject to authorisation Not listed

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed

Community Rolling Action Plan (CoRAP) Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Not listed

Not listed

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Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals	Not listed
<b>National regulations</b>	
Other	Not known.
<b>15.2 Chemical Safety Assessment</b>	A REACH chemical safety assessment has not been carried out.

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**SECTION 16: OTHER INFORMATION**

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The following sections contain revisions or new statements:

**LEGEND**

Acronyms	ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road CAS : Chemical Abstracts Service CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures DNEL : Derived No Effect Level EC : European Community EINECS : European Inventory of Existing Commercial Chemical Substances IATA : International Air Transport Association IBC : Intermediate Bulk Container ICAO : International Civil Aviation Organization IMDG : International Maritime Dangerous Goods LTEL : Long term exposure limit PBT : Persistent, Bioaccumulative and Toxic PNEC : Predicted No Effect Concentration REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals RID : Regulations concerning the International Carriage of Dangerous Goods by Rail STEL : Short term exposure limit STOT : Specific Target Organ Toxicity UN : United Nations vPvB : very Persistent and very Bioaccumulative
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