

MATERIAL SAFETY DATA SHEET

according to Regulation (EU) No. 1907/2006

InnoCircle rPET Blue by Innofil3D BV

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Trade name : InnoCircle rPET Blue
 Chemical name : Polyethylene Terephthalate (recycled grade)
 Chemical family : Thermoplastic copolymer
 Use : Monofilament for 3D-printing
 Company : Innofil3D BV
 Street address : Eerste Bokslotweg 17
 Postal code and city : 7821 AT Emmen
 Country : The Netherlands
 Telephone number : +31 (0) 591 820 389

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]:

Not classified.

Classification according to Directive 67/548/EEC or 1999/45/EC:

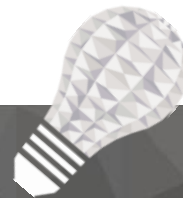
Not classified.

Adverse Physicochemical, human health and environmental effects:

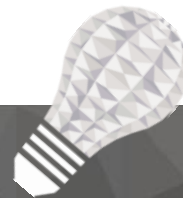
No relevant data available.

Label elements:

For classified products a derogation for affixing labels on the product - only in the form in which it is sold - exists under Annex 1 Section 1.3.4 of the CLP Regulation 1272/2008. However, all safety data sheets of classified products must include the appropriate label symbols and standard phrases. Under the derogation the product (in the form in which it is placed on the market) is not considered hazardous to human health by inhalation, ingestion, or skin contact or hazardous to aquatic environments. Under normal conditions hazardous or classified substances like additives are encapsulated in the polymer matrix and are not released. If the products is grinded, shredded, or heated users should inform themselves of the existing exposure limits and be aware of potential inhalation risks.



3. COMPOSITION/INFORMATION ON INGREDIENTS	
Chemical name	: Polyethylene Terephthalate
CAS Number	: 25038-59-9
Weight	: 100%
4. FIRST-AID MEASURES	
Eye contact	: Wash with plenty of water.
Skin contact	: Cool skin rapidly with cold water after contact with hot product.
Inhalation	: Dust from this product may cause irritation to the respiratory tract.
Ingestion	: Not applicable.
Note to physician	: Treatment based on symptoms.
5. FIRE-FIGHTING MEASURES	
Flammable properties	: Not classified as flammable by EC criteria.
Suitable extinguishing media	: Carbon dioxide (CO ₂), powder, alcohol-resistant foam, hazy water.
Explosion hazard	: Dust may cause a explosive mixture in air.
Reactivity	: Not applicable.
General measures	: Avoid dust formation.
Firefighting instructions	: Evacuate the personnel away from fumes.
Protection during firefighting	: Self-contained breathing apparatus.
Other information	: Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
6. ACCIDENTAL RELEASE MEASURES	
Personal precautions	: Ventilation, local exhaust, or breathing protection.
Environmental precautions	: Avoid dust formation. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal.
7. HANDLING AND STORAGE	
Safe handling advice	: Avoid dust formation.
Storage conditions	: Store in dry, cool, well ventilated places.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures : Either local exhaust or general room ventilation is usually required.

Control parameters:

Germany	TRGS 900 Occupational limit value (mg/m ³)	10 mg/m ³ inhalable dust limit value (3 mg/m ³ respirable)
Italy - Portugal - USA ; ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ inhalable dust limit value (4 mg/m ³ respirable)
Spain	VLA-ED (mg/m ³)	10 mg/m ³ dust limit values
Switzerland	VME (mg/m ³)	5 mg/m ³ dust limit values
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable dust limit value

Personal protective equipment

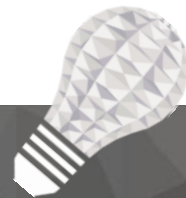
- Eye protection : Safety glasses.
- Skin and body protection : Not applicable.
- Respiratory protection : In case of dust formation, use respirator with filter.
- Hand protection : Gloves.
- Hygiene measures : Wash hand before eating, drinking, or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Filament.
- Color : Transparant light blue.
- Physical state : Solid at room temperature.
- Odor : Odorless.
- Melting point/range : > 220 °C
- Decomposition temperature : Product is stable under normal conditions.
- Density : > 1g/cm³
- Water solubility : Insoluble.

10. STABILITY AND REACTIVITY

- Stability : Product is stable.
- Conditions to avoid : Overheating.
- Materials to avoid : Not applicable.
- Decomposition : On burning; release of carbon monoxide - carbon dioxide.
- Polymerization : Not applicable.



11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

LD50 oral rat	: Not known.
LD50 dermal rat	: Not known.
LD50 dermal rabbit	: Not known.
LC50 inhalation rat (mg/l/4h)	: Not known.
LC50 inhalation rat (ppm/4h)	: Not known.

12. ECOLOGICAL INFORMATION

Mobility	: None.
Bioaccumulation	: Not applicable.
Ecotoxicity effects	: Product is practically insoluble in water, in view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. The product is not readily biodegradable.
Persistence and degradability	: Material is inert and not expected to be biodegradable or toxic.

13. DISPOSAL CONSIDERATIONS

Regional legislation (waste)	: Comply with applicable regulations for solid waste disposal.
Waste treatment methods	: If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.
Ecology - waste materials	: If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

14. TRANSPORT INFORMATION

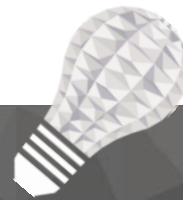
ADR/RID	: Not applicable.
AND/ADNR	: Not applicable.
IMDG	: Not applicable.
IATA-DGR	: Not applicable.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Contains no REACH candidate substance. Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management.

Chemical safety assessment	: No CSR necessary.
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16. OTHER INFORMATION

- The information in this Material Safety Data Sheet (MSDS) is mainly based on information used from the supplier of the raw materials which are used for production of the filaments.
- The information in this Material Safety Data Sheet (MSDS) is based on current knowledge and experience. No liability can be assumed for the accuracy and completeness of this information.
- Users should consider this information only as additional to other data gathered. Independent determination of suitability and completeness of information from all available sources is essential to ensure proper and safe use and disposal of these materials.
- The information in this MSDS applies for this specific material only. It therefore does not apply for its usage in combination with other materials or ways of processing.