



MATERIAL SAFETY DATA SHEET
according to Regulation (EU) No. 1907/2006

Innofil3D EPR PET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING

Product information

Trade name : EPR PET

Chemical name : Polyethylene Terephthalate

Chemical family : Thermoplastic polyester

Use : Monofilament for 3D-printing

Company : Innofil3D BV.
 Eerste Bokslootweg 17
 7821 AT Emmen

Telephone : +31 (0)591 69 2117

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2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

No risk exists to the health of employees if the product is handled and processed properly.

3. COMPOSITION / INFORMATION ON INGREDIENTS

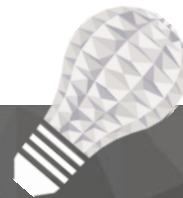
Chemical nature

Virgin PET
 CAS Number: 25038-59-9

4. FIRST AID MEASURES

Inhalation : No specific intervention is indicated since the compound is non-hazardous. However, if persons have been exposed to excessive levels of fumes from overheating or combustion or dust, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms persist.

Skin contact : PET is unlikely to cause any hazard on skin contact. If molten polymer contacts skin, cool rapidly with plenty of cold

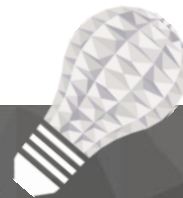


	water and obtain medical attention for treatment of the burn. Do not remove frozen material from burned skin.
Eye contact	: If molten material contacts the eye, immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Note to physician	: Burns should be treated as thermal burns. The material will come off during healing; therefore, immediate removal from skin is not necessary.

5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media	: All generally used extinguishing media are suitable.
Flammable properties	: Combustion products: CO ₂ , H ₂ O and, if combustion is incomplete, CO.
Special fire and explosion hazard	: Powdered material can form explosive dust – air mixtures.
Special fire fighting procedures	: Keep personnel removed from and upwind of fire. Wear self-contained breathing apparatus and full protective equipment to prevent contact with skin and/or eyes.

6. ACCIDENTAL RELEASE MEASURES	
Personal precautions	: Use appropriate protective equipment during cleaning.
Environmental precautions	: PET is not biological degradable. Do not dispose in the environment.
Methods for cleaning up	: When spilled or leaked, remove the material to avoid slipping. Recycle or incinerate at appropriate waste facilities.

7. HANDLING AND STORAGE	
Handling	: See section 8 for appropriate precautions to ensure safe handling.
Fire and explosion precautions	: To avoid fire or explosion, avoid and if necessary remove dust and keep away from sources of ignition. Vigilance towards the effects of electrostatic charge is advanced.
Storage conditions	: Store in accordance with relevant precautions and safe material handling practises.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls : Ground connection is necessary in case of electrostatic charge. Use suction systems in case of excessive dust and/or fume formation.

Exposure limits : Not established.

Personal protective equipment

Handling of granules / chips : In case of dust formation, wear dust mask. Keep equipment, rooms and clothing clean.

Handling of molten polymer : Wear heat protecting gloves, safety glasses and avoid direct skin contact as molten material can cause severe burns. Keep equipment, rooms and clothing clean.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : Granules (solid at room temperature)
 Odour : Odourless

Relevant data

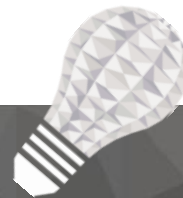
Melting point : > 60°C
 Flash point : Not applicable
 Auto-ignition temperature : Not applicable
 Explosion hazard : See section 7
 Density : 1.38 ± 0.04
 Solubility in water : Not applicable
 pH value : Not applicable
 Octanol / water partition coefficient : Not applicable
 Vapour pressure : Negligible

10. STABILITY AND REACTIVITY

Conditions to avoid : Decomposition will occur in the presence of oxygen at temperatures in excess of 350°C.

Incompatibility : Material can react with strong oxidizing agents.

Decomposition : Combustion products include CO₂ and CO. Thermal decomposition products include acetaldehyde and ethylene.



11. TOXICOLOGICAL INFORMATION

Effects of exposure : No adverse toxic effects expected on exposure by inhalation, ingestion, or by skin/eye contact. Animal testing indicates that Polyethylene Terephthalate does not have carcinogenic, mutagenic, developmental or reproductive effects.

12. ECOLOGICAL INFORMATION

The material is a high molecular weight polymer with very low water solubility. As such, it is expected to have a low biochemical oxygen demand and to cause essentially no oxygen depletion in aquatic systems. It is expected to have a low potential to affect aquatic organisms, secondary waste treatment microorganisms, and the germination and early growth of plants.

13. DISPOSAL CONSIDERATIONS

Recommendation : It is preferable to recycle the material, disposal on household waste disposal facilities and incineration are however possible. Discharge, treatment and/or disposal is subject to national, state or local regulations. European waste code: EURAL code 070213.

14. TRANSPORT INFORMATION

ADR / RID : Not regulated
 ADN/ADNR : Not regulated
 IMDG : Not regulated
 IATA-DGR : Not regulated

15. REGULATORY INFORMATION

Labelling according to EC Directives

No labelling

16. OTHER INFORMATION

-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.