TECHNICAL DATA SHEET

ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV
Date of issue: 10-10-2025 **/ Date of update:** 31-10-2025

ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV for Large-Format Additive Manufacturing (LFAM)

ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV offers all benefits of our 20% glass fiber filled ReForm rPETG GF20 but with additional flame retardancy and UV stabilization.

The ingredients used in this formulation achieve a B-s2, d0 rating under the EN 13501-1 fire classification standard for construction materials. Next to this, our ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV compound has been enhanced with an additional UV stabilization, providing superior resistance to UV-induced degradation and color fading. This makes ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV ideal for both indoor and outdoor applications that require mechanical strength and fire safety.

Thanks to its low warping, excellent layer adhesion, and high mechanical strength, ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV ensures consistent and reliable performance in large-format 3D printing. Its aesthetically pleasing surface finish and dimensional accuracy make it the preferred choice for manufacturers seeking quality, fire safety, and sustainability.

Choose ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV for 3D printing functional and aesthetic applications that not only need to be strong and stiff, but also require UV resistance, and fire safety.

Key Features of ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV Pellets for LFAM

- **Flame-Retardant Performance** – Meets EN 13501-1 (B-s2, d0) fire classification standards, offering excellent fire resistance and low smoke emission for safe indoor and outdoor use.
- **UV-Stabilized** – Ideal for both indoor and outdoor applications.
- **20% Long Glass Fiber Reinforcement** – Delivers superior stiffness and strength.
- **LFAM-Optimized Printability** – Easy-to-print and reliable performance in large-format 3D printing.
- **European-Made Quality Compound –** Manufactured in Europe using high-grade recycled PETG and additives, ensuring consistent quality, reliability, and traceability throughout the production process.

Suitable Applications for ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV Pellets for LFAM

- **Outdoor Enclosures for e.g. Electrical / Telecom Gear** – Its non-conductive, UV-resistant, flame retardant, and high strength and stiffness make it perfect for fire safe outdoor insulating housings and covers.
- **Architectural & Construction Elements** – Large-format decorative panels, facade elements, structural prototypes, and formwork.
- **Furniture & Interior Design** – Custom indoor and outdoor furniture, art installations, and functional design pieces where strength, safety and surface finish matter.
- **Automotive & Transportation Components** – Structural parts, brackets, housings, and panels that need to be fire safe and withstand mechanical stress and heat.
- **Safety Equipment / Panels** – Pannels in public transport and/or walls or partitions in buildings needing fire safety and UV resistance.

Material properties	**Typical value**	**Test Method**
Melt mass-flow rate (MFR @ 200 °C /5kg)	1,2 g/10min	ISO 1133
Density	1,39 g/cm^3	ASTM D792
Mechanical properties		
Tensile strength	75 MPa	ISO 527
Tensile modulus	4500 MPa	ISO 527
Elongation at break	4%	ASTM D638
Impact strength (notched)	7,4 kJ/m^2	ISO 179
Thermal properties		
HDT (@ 045MPa)	85 °C	ASTM D648
Melt temperature	240 °C	-
Flammability properties		
Fire Resistance	B-s2, d0	EN13501-1 material assessment

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Processing Recommendations for ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV Pellets for LFAM

Pre-Drying: 8-10hrs at 65 °C (<400ppm / 0,04%) *

Do not exceed a drying temperature of 65 °C, as higher temperatures may cause pellet softening and caking within the drying hopper.

Prolonged (pre-)drying is required for ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV
ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV is made from recycled PETG materials that have been used in outdoor applications. Therefore, it is recommended to pre-dry for at least 8-10 hours at 65 °C and lower the moisture content in the ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV compound.

For optimal 3D printing results it is recommended to pre-dry ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV pellets to a moisture content below 400 ppm.

Zone 1: 210°C ±10 °C	**Zone 2:** 220°C ±10 °C	**Zone 3:** 230°C ±10 °C
Max temp: 240 °C	**Die temp:** 230°C ±20 °C	

Typical extrusion settings may require optimization based on hardware used.

Storage and Handling Guidelines for ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV Pellets for LFAM

ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV is an inert and safe material under standard storage conditions, presenting no significant hazards. To ensure maximum quality, stability, and long-term performance, proper storage practices are recommended.

For best results:

- Store in a tightly sealed container to protect against moisture absorption.
- Keep in a dry, cool, and well-ventilated environment.
- Avoid direct exposure to sunlight or intense artificial light to preserve material integrity.

By following these guidelines, ReForm rPETG GF20 FR EN13501-1 (B-s2, d0) + UV will maintain its reliability and print performance over time.

Product export information

HS code:	39079980
Description:	Recycled PETG resin with glass fiber reinforcement in primary form
Origin:	European Union

Disclaimer

The product and technical data provided in this datasheet are, to the best of FormFutura B.V.'s knowledge, accurate at the time of publication and are intended solely for reference and comparative purposes. Actual results may vary depending on printing conditions, model design, environmental factors, and other variables. The values presented are typical, non-binding, and should not be interpreted as guaranteed specifications.

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