

TECHNICAL DATA SHEET

ReForm rPETG GF20 + UV

Date of issue: 30-09-2025 / Date of update: 31-10-2025



ReForm rPETG GF20 + UV Pellets – Printability, Dimensional Accuracy, and UV-Resistance in One Material

ReForm rPETG GF20 + UV offers all benefits of our ReForm rPETG GF20 compound, but is enhanced with an additional UV stabilization, providing superior resistance to UV-induced degradation and color fading. This makes ReForm rPETG GF20 + UV ideal for both indoor and outdoor applications that require high mechanical strength.

Made from 100% post-industrial recycled PETG and reinforced with 20% long glass fibers, this compound offers an exceptional balance of printability with sustainability, stiffness, and UV-resistance. Its unique formulation ensures excellent layer adhesion, resulting in a rigid and easy-to-print material that performs reliably in demanding indoor and outdoor LFAM environments.

Its aesthetically pleasing surface finish and dimensional accuracy make it the preferred choice for manufacturers seeking both quality and sustainability in UV-exposed environments.

Key Features of ReForm rPETG GF20 + UV Pellets for LFAM

- **LFAM-Optimized Printability** – Easy-to-print and reliable performance in large-format 3D printing.
- **20% Long Glass Fiber Reinforcement** – Delivers superior stiffness and strength.
- **UV Stabilized** – For stable and reliable performance in both indoor and outdoor environments.
- **High Dimensional Stability** – Ideal for large, functional parts.
- **Impact & Wear Resistant** – Durable under mechanical stress.

Suitable Applications for ReForm rPETG GF20 + UV Pellets for LFAM

- **Electrical & Electronic (Outdoor) Enclosures** – Non-conductive, perfect for insulating housings and covers.
- **Architectural & Construction Elements** – Large-format decorative panels, facade elements, structural prototypes, and formwork that require UV-resistance..
- **Furniture & Interior/Exterior Design** – Custom furniture, art installations, and functional design pieces exposed to UV and where strength and surface finish matter.
- **Automotive & Transportation Components** – Structural parts, brackets, housings, and panels that need to withstand mechanical stress and heat in UV exposed environments.

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	-



TECHNICAL DATA SHEET

ReForm rPETG GF20 + UV

Date of issue: 30-09-2025 / Date of update: 31-10-2025



Processing Recommendations for ReForm rPETG GF20 + 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 + UV

ReForm rPETG GF20 + 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 + UV compound.

For optimal 3D printing results it is recommended to pre-dry ReForm rPETG GF20 + 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 + UV Pellets for LFAM

ReForm rPETG GF20 + 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 + 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.

All information supplied, whether in this document or otherwise, is believed to be reliable; however, it is provided on the express condition that the customer conducts its own evaluation to determine the product's suitability for any specific application. FormFutura B.V. makes no warranties, express or implied, regarding the accuracy or completeness of the information provided, the data on which it is based, or the results obtainable from the use of the product or such information. No warranty is made, whether of satisfactory quality, merchantability, fitness for a particular purpose, non-infringement of intellectual property rights, or otherwise, and none shall be implied.

