

TECHNICAL DATA SHEET

ReForm rPETG Transparent FR EN13501-1 (B-s1, d0)

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



ReForm rPETG Transparent FR EN13501-1 (B-s1, d0) Pellets for LFAM

ReForm rPETG Transparent FR EN13501-1 (B-s1, d0) is an ultra-transparent, flame-retardant recycled PETG granulate engineered specifically for large-format additive manufacturing (LFAM). This advanced material delivers exceptional light transmission while the recycled material used in this formulation meets a B-s1, d0 fire behavior classification according to EN13501-1:2007+A1:2009 standards in its application.

Thanks to its unique combination of flame retardancy, optical clarity, and durability, ReForm rPETG Transparent FR EN13501-1 (B-s1, d0) is ideal for a wide range of indoor architectural applications, including lighting components, signage, office furniture, exhibition displays, and interior design elements.

In addition to its outstanding fire safety performance and high transparency, the material offers excellent impact strength, crack resistance, and ease of post-processing, making it an excellent choice for demanding industrial and design projects. Printed parts can easily be drilled, sawed, screwed, or adhesive bonded, offering maximum flexibility for post-processing and integration.

Choose ReForm rPETG Transparent FR EN13501-1 (B-s1, d0) for 3D printing functional and aesthetic applications that require transparency, strength, and fire safety.

Key Features of ReForm rPETG Transparent FR EN13501-1 (B-s1, d0)

- **Flame-Retardant Performance** – Meets EN 13501-1 (B-s1, d0) fire classification standards, offering excellent fire resistance and low smoke emission for safe indoor use.
- **Ultra-Transparent Finish** – Delivers exceptional light transmission and optical clarity, making it ideal for diverse functional and aesthetic applications.
- **High Impact Strength & Crack Resistance** – Ensures durability and reliability even in demanding large-format 3D printing projects.
- **Sustainable & Efficient** – Produced with recycled PETG feedstock as part of our ReForm initiative, reducing material waste and environmental impact.
- **European-Made Quality Compound** – Manufactured in Europe using high-grade recycled PETG, ensuring consistent quality, reliability, and traceability throughout the production process.
- **Good Chemical Resistance** - Good resistance to cleaning agents, various chemicals, and environmental factors, extending the printed part's lifetime and maintaining surface quality.

Suitable Applications for ReForm rPETG Transparent FR EN13501-1 (B-s1, d0)

- **Architectural Interiors** – Transparent wall panels, partitions, and decorative structural elements.
- **Lighting Solutions** – Luminaires, diffusers, light guides, and illuminated signage.
- **Signage & Displays** – Retail and exhibition displays, information panels, and design installations.
- **Office & Commercial Furniture** – Transparent or translucent furniture components with enhanced fire safety.
- **Industrial & Technical Parts** – Flame-retardant covers, protective shields, and functional prototypes.
- **Transportation & Public Spaces** – Components requiring both clarity and EN 13501-1 fire compliance.

Material properties	Typical value	Test Method
MVR (260°C, 2.16kg)	11-13 cm ³ /10min	ISO 1133
Density	1,27 g/cm ³	ISO 1183-1

Mechanical properties

Tensile modulus	2244 MPa	ISO 527
Flexural strength	71.4 MPa	ISO 178
Flexural modulus	2058 MPa	ISO 178
Elongation at yield	5%	ISO 527
Elongation at break	37%	ISO 527
Charpy impact strength (23 °C unnotched)	No break	ISO 179
Charpy impact strength (23 °C notched)	Ca. 9,8 kJ/m ²	ISO179



TECHNICAL DATA SHEET

ReForm rPETG Transparent FR EN13501-1 (B-s1, d0)

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



Thermal properties

HDT A	64 °C	ISO 75
HDT B	71 °C	ISO 75
Vicat softening temperature	82 °C	ISO 306

Flammability properties

Fire resistance	B-s1, d0	EN13501-1 material assessment
-----------------	----------	-------------------------------

Processing ReForm rPETG Transparent FR EN13501-1 (B-s1, d0)

Drying: 6-10hrs 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.

Zone 1: 210°C ±20 °C

Zone 2: 220°C ±20 °C

Zone 3: 230°C ±20 °C

Max temp: 240 °C

Die temp: 240°C ±20 °C

Storage and handling of ReForm rPETG Transparent FR EN13501-1 (B-s1, d0)

ReForm rPETG Transparent FR EN13501-1 (B-s1, d0) 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 Transparent FR EN13501-1 (B-s1, d0) will maintain its reliability and print performance over time.

Product export information

HS code:	39079980
Description:	PETG resin in primary form
Origin:	European Union

Disclaimer

The product and technical data provided in this datasheet are correct to the best of FormFutura BV's knowledge and are intended solely for reference and comparison purposes. Actual values may vary depending on printing conditions, model complexity, environmental factors, and other variables. Typical values are indicative only and do not constitute binding specifications.

All other information supplied, including that contained herein, is believed to be accurate but is provided on the express condition that the customer is responsible for making its own assessment to determine the product's suitability for a particular purpose.

FormFutura BV makes no warranties, express or implied, including but not limited to warranties of merchantability, fitness for a particular purpose, satisfactory quality, non-infringement of intellectual property, or any other matter, with respect to the information provided or the products described herein. No warranty shall be implied from the provision of such information or products, or from the results obtained from their use.

