



Scan for more!

Ultrafuse® Pellets rPETG

The Ultimate Choice for Sustainable,
Cost-Effective Large Scale 3D
Printing



Material Overview

03-07-2024

OVERVIEW

Ultrafuse® Pellets rPETG sets the standard for sustainable, cost-efficient Large Scale 3D printing as the easy-to-print material with high surface quality and transparency from a traceable recycled source.

Sustainable, Traceable and Food Safe

Made from recycled and glycol-modified polyethylene terephthalate (PET) derived from traceable post-industrial waste, Ultrafuse® Pellets rPETG ensures food contact safety through a unique recycling process.

Optical Excellence and Stability:

Ultrafuse® Pellets rPETG is available in its natural, colorless form with high transparency, in eye-catching translucent blue and in solid black, delivering durable, low-distortion, low haze results with a high-gloss finish that is ideal for applications requiring superior appearance and surface quality.

Key Benefits:

- **Recycled:** Traceable industrial waste source
- **Food Grade:** Suitable for food contact application
- **Superior Optical Appearance:** High gloss, low haze and high transparency (natural)
- **Low warp and Glossy Finish:** Ease of printing for high detail and large-scale prints
- **Project stability:** Excellent batch to batch stability
- **Pre-dried:** Pellets come pre-dried ready to be processed
- **Reliable Delivery:** Ready to ship after order, available in industrial quantities

QUICK FACTS

Material:

- Recycled, glycol-modified PET Pellets, available in three colors

Offer:

- Pellet size: Cold cut, cylinder-like
- Diameter & Length: ~3mm
- 1.000 KG, sealed big bag with inliner & moisture content
- <500ppm, ready to print



Scan for more!

Ultrafuse® Pellets rPETG

Product Line:

Ultrafuse® Pellets – Standard Line

Technology:

Fused Granulate Fabrication (FGF)

Key Benefits:



Recycled



Traceable



Optical
Excellence

Suited for:



Prototypes



Decorative
parts



Automotive
parts



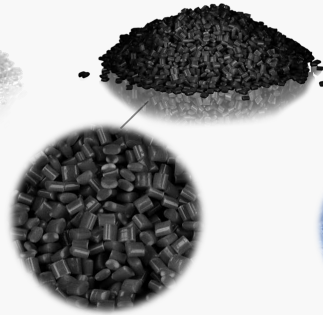
Architectural
Parts

This information and values are presented as guidance only and based on Forward AM's knowledge and experience. It is believed to be accurate, however all guarantees are explicitly denied. This document was updated July 2024.

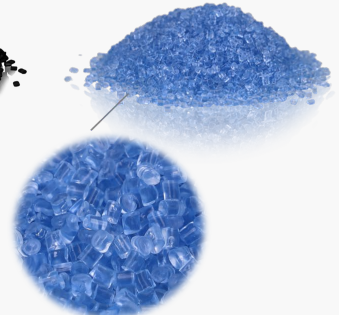
Ultrafuse® Pellets
rPETG Natural



Ultrafuse® Pellets
rPETG Black



Ultrafuse® Pellets
rPETG Translucent Blue



TECHNICAL SPECIFICATIONS

Mechanical properties*

Standard

Value

XY / XZ / ZX

HDT (0.45 MPa) (°C)	ISO 75-2	71
Tensile Strength (MPa)	ISO 527	38,6 / - / 14,7
Elongation at Break (%)	ISO 527	4,3 / - / 1,2
Young's Modulus (MPa)	ISO 527	1640 / - / 1334
Impact Strength Izod (notched) (kJ/m ²)	ISO 180	4,4 / 3,3 / 1,5
Impact Strength Izod (unnotched) (kJ/m ²)	ISO 180	48,2 / 21,9 / 4,4

*measured on respective filament

PRINT SETTINGS

Drying Recommendations

Temperature	Min. 55 °C; Max. 65 °C (prevent sticking)
Time	6 - 13 h
Condition	200 - 500 ppm

Drying conditions are depending on hardware setup. Dehumidifying dryer with agitator can use higher temperatures for short time (65°C for 4h)

Recommended Extrusion Parameters

Zone 1 Temperature	195 – 200 °C
Zone 2 Temperature	200 – 235 °C
Zone 3 Temperature	195 – 235 °C
Nozzle Temperature	195 – 235 °C
Extrudate Temperature	200 – 245 °C