



PLX

COST EFFECTIVE AND RELIABLE RESULTS

MADE FOR



bigrep **ONE**



bigrep **PRO**



bigrep **STUDIO**

COMPATIBLE
FFF 3D PRINTERS

BigRep's PLX filament is optimized for large-format 3D printers and consistently delivers **high-quality parts at an attractive price**. Particularly **easy to print**, PLX achieves beautiful print surfaces on even the most demanding geometries.

PLX is **incredibly versatile**, allowing printer settings to be tuned for either higher speeds or beautifully smooth surface finishes. PLX delivers **consistent results** that make it a reliable material for large-format printing in any industry. Given its balanced performance under various mechanical stresses, PLX is a great all-around filament choice.

As a PLA-based material derived from organic compounds, PLX is **biodegradable** under the correct conditions. **CO2 neutral** and environmentally friendly, it has a much lower ecological impact than other plastics derived from fossil fuels.



Easy to Print for
Wide Range of Uses



More Affordable for
Cost Savings



Highly Consistent
Print Results



Beautiful Surface
Quality



Reduced
Environmental Impact



PHYSICAL PROPERTIES	TEST METHOD	VALUE
Density	ISO 1183	1.25 g/cm ³
Filament Diameter	-	2.85 mm +/- 0.05
Color Availability	-	Black, White
Filament Net Weight	-	2.5, 4.0, 8.0 kg
MECHANICAL PROPERTIES	TEST METHOD	VALUE
Tensile Strength	ISO 527	48 MPa
Tensile Modulus	ISO 527	3100 MPa
Elongation at Break	ISO 527	20%
Flexural Strength	ISO 178	90 MPa
Flexural Modulus	ISO 178	2800 MPa
Charpy Unnotched Impact Strength	ISO 179	20 kJ/m ²
Charpy Notched Impact Strength	ISO 179	4 kJ/m ²
THERMAL PROPERTIES	TEST METHOD	VALUE
HDT - B - 0.45 MPa	ISO 75	68 °C
HDT - A - 1.8 MPa	ISO 75	62 °C
Vicat Softening Temperature	ISO 306	78 °C
Glass Transition Temperature (Tg)	DSC	63 °C
Melting Temperature (Tm)	DSC	170 - 180 °C
COMPLIANCE	✓ REACH Compliant ✓ RoHS Certified ✗ FDA Compliant	

PROPERTIES	RECOMMENDED USAGE
Nozzle Temperature	190 - 220 °C
Bed Temperature	50 - 70 °C
Printer Compatibility	BigRep ONE, BigRep STUDIO, BigRep STUDIO G2
Fan Speed	75 - 100%
Surface Adhesion	- Kapton (additional adhesion using glue, e.g. Magigoo) - BigRep SWITCHPLATE
Drying	PLX is slightly hygroscopic. Recommended drying at 50 °C for 4 - 6 hours.
Storage and Shelf Life	Keep dry, avoid sunlight, and store at room temperature. Use BigRep SHIELD for best results. When stored properly, product has a shelf life of 24 months.
Handling	Use the BigRep Keep-Dry Box for best material printability.
Post-Processing	Wear gloves to avoid possible microdamage to skin. Use a dust mask and protective glasses when processing.
Support	- Breakaway - BigRep BVOH