

FibeCycle ecoFRP™ PETG-rGFxA

RECYCLED GLASS FIBER REINFORCED PETG



Technical Data

Product Description

Short Glass Fibre Reinforced PETG, composition A. Glass fiber sourced from recycled waterslide material. FibeCycle ecoFRP **PETG-rGFxA** is suitable for 3D Printing and exhibits exceptional printability, minimal stringing and warping, and impressive layer adhesion.

General

Material Status	• Pre-Production
Availability	• Montreal
Filler / Reinforcement	• Recycled Fibreglass
Additive(s)	• None

Physical		Dry	Conditioned	Unit	Test Method
Density			--	g/cm ³	ASTM D792
Molding Shrinkage					ASTM D6289
Across Flow		--	--	%	
Flow		--	--	%	
Water Absorption					ASTM D570
Saturation		--	--	%	
Equilibrium		--	--	%	
Viscosity Number			--	cm ³ /g	
Mechanical		Dry	Conditioned	Unit	Test Method
Tensile					ASTM D638
Tensile Modulus	(3D Printed, 45°)	--	1720	MPa	
Tensile Stress	(3D Printed, 45°)	--	30.5	MPa	
Elongation at Yield	(3D Printed, 45°)	--	3.74	%	
Elongation at Break	(3D Printed, 45°)	--	6.50	%	
Flexural					ASTM D790
Flexural Modulus		--	--	MPa	
Flexural Stress		--	--	MPa	
Impact		Dry	Conditioned	Unit	Test Method
Izod Notched Impact Strength					ASTM D256
-40 °C		--	--	kJ/m ²	
-30 °C		--	--	kJ/m ²	
+23 °C		--	--	kJ/m ²	
Thermal		Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature					ASTM D648
0.455 MPa, Unannealed		--	--	°C	
1.8 MPa, Unannealed		--	--	°C	
Melt Flow Index					ASTM D-1238
230 °C, 3.8 kg		--	--	g/10 min	
Melting Temperature		--	--	°C	