

Technical Data Sheet

Onyx ESD

Static-dissipative micro carbon fibre filled nylon, 3D printing (FDM)

Typical Properties

- Static-dissipative, tightly controlled surface resistance
- Higher stiffness and strength than standard Onyx
- Very good surface finish
- Suitable for applications with strict ESD requirements

Typical Industries

- Electronics manufacturing
- Industrial robotics
- Process automation
- Semiconductor industry

	Test Method	Unit	Value
General Properties			
Density		g / cm ³	1.2
Mechanical Properties			
Tensile modulus	ASTM D638	MPa	4200
Tensile stress at yield	ASTM D638	MPa	52
Tensile stress at break	ASTM D638	MPa	50
Tensile strain at break	ASTM D638	%	25
Flexural strength	ASTM D7901	MPa	83
Flexural modulus	ASTM D7901	MPa	3700
Izod impact strength (notched)	ASTM D256-10, Method A	J / m	44
Thermal Properties			
Heat deflection temperature (0.45 MPa)	ASTM D648, Method B	°C	138
Electrical Properties			
Surface resistance	ANSI/ESD STM11.113	Ω	10 ⁵ ... 10 ⁷

The stated values are average values based on test specimens produced by the additive manufacturing process (FDM). They serve only as information about our product range and as an aid to material selection. The actual properties of manufactured parts additionally depend on print parameters, layer build-up and part geometry; we do not thereby provide any legally binding assurance of specific properties or of suitability for a particular purpose. Surface resistance can vary with humidity, part geometry and print orientation.