

PP5701NC903-TDS

PP for 3D printing

It is a fiberglass-reinforced PP pellet material that is professionally tailored for large-scale equipment for 3D printing pellets. The material possesses characteristics such as high strength, high toughness, and easy printing, with low shrinkage and warping rates during printing. The printed products have excellent tensile and impact resistance, and are lightweight, waterproof, tough and durable, and have great chemical resistance. This material is suitable for printing molds to replace traditional wooden molds for industrial casting.

Part 1 Physical Properties

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Density	23°C	ISO 1183	g/cm ³	1.17
Melt Flow Rate	230°C, 2.16kg	ISO 1133	g/10min	3
Shrinkage Rate	/	ISO 294-4	%	0.5

Note: The typical physical properties are not intended for use as sales specifications.

Part 2 Mechanical Properties

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Tensile Strength	5mm/min	ISO 527-1	MPa	60
Elongation @ Break	5mm/min	ISO 527-1	%	10
Flexural Strength	2mm/min	ISO 178	MPa	75
Flexural Modulus	2mm/min	ISO 178	MPa	3800
Impact Strength, Notched	2.75J	ISO 179-1	kJ/m ²	18

Note: The typical physical properties are not intended for use as sales specifications.

Part 3 Thermal Property

Testing Items	Testing Conditions	Testing Methods	Units	Typical Values
Heat Deflection Temperature	0.45MPa	ISO 75-1	°C	130

Note: The typical physical properties are not intended for use as sales specifications.

Part 4 Recommended Processing Conditions

Parameters	Settings
Drying recommendations	80-100°C in a hot air dryer for 2-4hours
Extrusion Temperature	190-230°C

Disclaimer:

The values provided in this data sheet are for reference and comparison purposes only. They should not be used for design specifications or quality control. Actual values may vary depending on printing conditions. The ultimate performance of printed parts depends not only on the material but also on the part design, environmental conditions, and printing conditions. The product specifications are subject to change without notice.

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