聚丰
POLYFUL

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# 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/cm3 | 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/m2 | 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 |