

# 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               | GB/T 1033       | g/cm <sup>3</sup> | 1.17           |
| Melt Volume Rate | 230°C, 2.16kg      | GB/T 3682       | g/10min           | 3              |

*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            | GB/T 1040.2     | MPa               | 60             |
| Elongation @ Break   | 5mm/min            | GB/T 1040.2     | %                 | 10             |
| Flexural Strength    | 2mm/min            | GB/T 9341       | MPa               | 75             |
| Flexural Modulus     | 2mm/min            | GB/T 9341       | MPa               | 3800           |
| Izod Impact Strength | 2.75J              | GB/T 1843       | kJ/m <sup>2</sup> | 18             |

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

### Part 3 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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