## PRODWAYS MATERIALS



# KEY FEATURES & BENEFITS

- Unmatched dimensional stability over time and under difficult conditions
- Good welding capabilities
- Suitable for translucent and shock resistant parts

## ✓ ✓ TYPICAL✓ ✓ APPLICATIONS

- Pipes and ducts
- Reservoirs and manifolds
- Economic and functional prototypes
- Multi-purpose industrial goods
- Durable jigs & fixtures

## **PP 1200**

# Polypropylene powder for Laser Sintering

### **DEVELOPED WITH:**



The PP 1200 is a versatile material characterized by an excellent plasticity, a good elongation at break, a low moisture absorption and a great durability.

Because of its high chemical resistance to most acids and bases and its welding capabilities, the PP 1200 is particularly suitable for fuel or oil tanks, shock resistant parts, complex end-use parts with snap fit and hinges covering a wide range of industrial applications.

The PP 1200 is an interesting material to expand 3D printing applications and volumes.

The PP 1200 can be processed with any ProMaker Pseries printers as a good alternative to PA12 for Additive Manufacturing applications.

### MATERIAL PROPERTIES

	TEST METHOD	VALUE
Base material		Polypropylene Polymer
Appearance		Translucent
Bulk density [g/cm³]	DIN EN ISO 60	0.3 - 0.45
Sintered part density [g/cm³]	ISO 61	0.89
Average particle size (µm)	Laser diffraction	60 - 70
Melting point [°C]	ISO 11357 (10 K/min)	136 - 143

#### **MECHANICAL PROPERTIES\***

	TEST METHOD	VALUE
Tensile strength [MPa]	ISO 527	20 - 25
Young modulus [MPa]	ISO 527	1150 - 1500
Tensile elongation at break [%]	ISO 527	20 - 25
Flexural modulus (MPa)	ISO 178	1050 - 1150
HDT/A (1.8 MPa) [°C]	ISO 75	55 - 65

<sup>\*</sup> Performance characteristics may change according to product application, operating conditions or level of refresh.

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