



## PA12- L 1600 Polyamide 12 powder for Laser Sintering

The PA12- L1600 is characterized by its excellent mechanical properties and a high elongation at break. This material is easy to process, presents a low water absorption and a good recyclability.

The PA12-L1600 meets the high expectations of the **manufacture functional prototypes and end-use parts with high mechanical properties and toughness**. It is also suitable for complex production and prototype plastic parts in the automotive or aerospace industry.

The PA12-L1600 can be processed with any ProMaker P series printers.

## KEY FEATURES

- Excellent mechanical properties
- Good part surface ease of postprocessing
- Low water absorption

#### MATERIAL PROPERTIES

	TEST METHOD	VALUE
Base material		Polyamide 12
Appearance		White
Bulk density [g/cm <sup>3</sup> ]	Prodways Method	0.48
Sintered part density [g/cm <sup>3</sup> ]	Prodways Method	0.95
Average particle size (µm)	Laser diffraction	60
Melting point [°C]	ISO 11357-3	179 - 187

# $\begin{array}{c} \checkmark & \checkmark & \texttt{TYPICAL} \\ \hline & \checkmark & \checkmark & \texttt{APPLICATIONS} \end{array}$

- Functional prototypes and enduse parts with high mechanical properties and toughness
- Alternative for complex spare parts production
- Multi-purpose industrial applications

### **MECHANICAL PROPERTIES\***

	TEST METHOD	VALUE
Tensile strength [MPa]	ISO 527	40 - 45
Young modulus [MPa]	ISO 527	1450 - 1600
Tensile elongation at break [%]	ISO 527	30 - 36
Flexural modulus (MPa)	ISO 178	1200 - 1300
HDT/A (1.8 MPa) [°C]	ISO 75	83,5

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

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