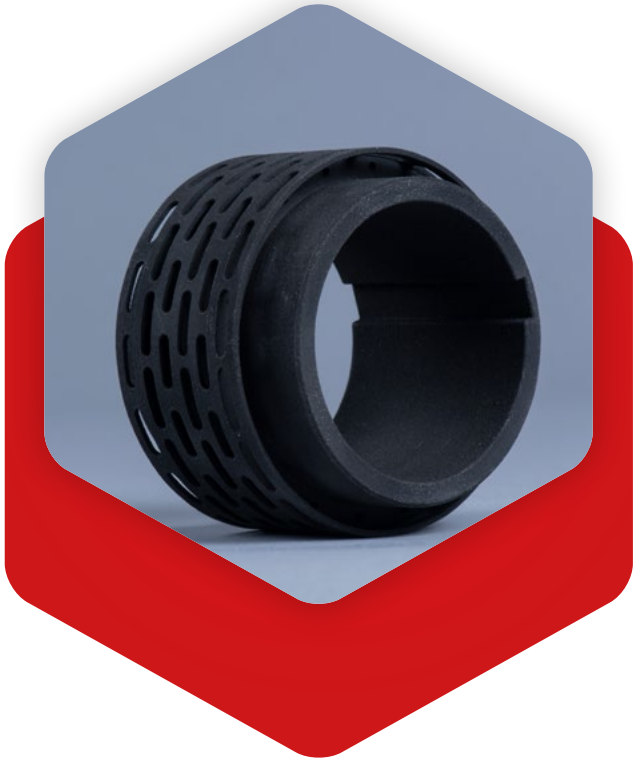
PRODWAYS MATERIALS

PA11-SX 1350

Black Polyamide 11 powder for Laser Sintering

MATERIALS



The PA11-SX 1350 is a high-performance polyamide. It is characterized by an outstanding impact resistance, high ductility and a good temperature resistance. This material is **particularly adapted for mechanical parts in engine, fuel or oil tanks and for the creation of complex end-use parts** with snap fit and living hinges.

Due to its good mechanical strength and durability, the PA11-SX 1350 is suitable for **additive manufacturing projects in a wide range of industries** such as automotive or aerospace.

The PA11-SX 1350 can be processed with the ProMaker P1000 printer.

KEY FEATURES & BENEFITS

- Good ductility and shock resistance
- Good temperature resistance
- Excellent stability over time and under difficult conditions

TYPICAL APPLICATIONS

- Mechanical parts
- Snap fit
- Living hinges

MATERIAL PROPERTIES

	TEST METHOD	VALUE
Base material		Polyamide 11
Appearance		Matte black
Bulk density [g/cm^3]	ISO 1068-1975	0.66
Sintered part density [g/cm^3]	Prodways Method	1.02
Average particle size (µm)	Laser diffraction	50
Melting point [°C]	ISO 11357-3	199 - 203

MECHANICAL PROPERTIES*

	TEST METHOD	VALUE
Tensile strength [MPa]	ISO 527	40 - 45
Young modulus [MPa]	ISO 527	1300 - 1350
Tensile elongation at break [%]	ISO 527	40 - 45
Flexural modulus (MPa)	ISO 178	1150 - 1250
HDT/A (1.8 MPa) [°C]	ISO 75	44

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

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