



PA11 Black

TOUGH, IMPACT-RESISTANT BLACK THERMOPLASTIC FOR PROTOTYPES AND FUNCTIONAL PARTS.

Nylon polyamide

Selective Laser Sintering (SLS)

THERMOPLASTIC POLYMER FOR STRONG, UV-STABLE PRODUCTS

PA11 Black is a Polyamide 11-based material designed for primary use in industrial applications. It is made from 100% bio-based substances. The material is well suited for technical end products: the material is a sustainable thermoplastic polymer that produces strong UV-stable prints.

The material also has superior mechanical performance compared to other polymers, such as Polyamide 12, which is widely used for rapid prototyping. PA11 Black also meets the USP Class VI requirements for medical applications.

APPLICATIONS

- Functional testing
- Functional prototypes
- Housings
- Mounts
- Gears
- Small complex parts

ADVANTAGES

- Superior mechanical properties
- UV-stable
- Low water uptake
- Flexible
- High strength
- Salt water resistant

Note: Not all products and materials are available in all countries — please consult your local sales representative for availability.

MATERIAL PROPERTIES

PA11 Black is a material that is bio-based and recyclable, which also meets requirements for medical applications. It has excellent mechanical properties, UV stability and low water absorption, making it ideal for both prototypes and functional parts.

PA11 BLACK		
THERMAL		
PROPERTY	VALUE	UNIT
Melting Point	200	°C
MECHANICAL		
PROPERTY	VALUE	UNIT
Density of finished parts	1.05	g/cm ³
Density of powder	0.65	g/cm ³
Tensile Strength	51	MPa
Elongation at break	51	%
Tensile Modulus	1700	MPa
Flexural Modulus	1200	MPa
Hardness	80	Shore D

