# Nylon 11 / PA 11

## **Key Features**

Impact resistance • Biocompatibility • High ductility

## **Applications**

Prototyping • End-use parts • Machine building • Medicine, dentistry • Consumer goods

## **Product Description**

Nylon 11 powder stands out as a high-performance, bio-based nylon material ideal for creating highly ductile and robust parts in functional prototyping and small batch production. Offering superior flexibility and impact resistance compared to Nylon 12 powder, it excels in printing thin walls and parts that require resilience to bending or impact, ensuring durability and reliability in various applications.

#### **Properties**

Tensile modulus	1,600 MPa
Tensile strength	49 MPa
Elongation at break	40%
Flexural strength	55 MPa
Flexural modulus	1,400 MPa
Heat deflection temperature (0.45 MPa)	182°C
Heat deflection temperature (1.80 MPa)	46°C
Softening temperature	189°C
Density	1.03 g/cm <sup>3</sup>
Hardness	75D
Flame retardancy (thickness of the sample tested = 3.00 mm)	UL 94 HB

#### Reference

For more detailed source information, please consult the original document linked <u>here</u>. We encourage users to verify the data's relevance and suitability for their specific needs.



