

# Nylon 11 / PA 11

## Key Features

Chemical resistance • High ductility • Biocompatibility

## Applications

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

## Product Description

This thermoplastic material delivers optimal mechanical properties, including excellent strength and ductility, ideal for functional parts like prostheses and sports equipment. Derived from renewable vegetable castor oil, it minimizes environmental impact and waste by reusing surplus powder batch after batch, achieving up to 70% reusability. This cost-efficient solution ensures consistent performance while providing industry-leading surplus powder reusability, optimizing both cost and part quality.

## Properties

Tensile modulus	1,800 MPa
Tensile strength	52 MPa
Elongation at break (XY/XZ/YX/YZ, ZX/ZY)	50, 35%
Flexural strength @5%	70 MPa
Flexural modulus	1,800 MPa
Powder melting point (DSC)	202°C
Heat deflection temperature (0.45 MPa)	185°C
Heat deflection temperature (1.80 MPa)	54°C
Density	1.05 g/cm <sup>3</sup>
Hardness	80D

## Reference

For more detailed source information, please consult the original document linked [here](#). We encourage users to verify the data's relevance and suitability for their specific needs.

