

## **MATERIAL SPEC SHEET**

# Nylon 12 PA

## **Technology: MJF**

COLOR OPTIONS:

Gray
Color dying
options, Black

White
Versatile coloring
dying options





#### **APPLICATIONS:**

Engineered to produce final parts and functional prototypes with fine detail and dimensional accuracy across a variety of industries.

### **DESCRIPTION:**

Nylon 12, comprising 40% glass beads, is a thermoplastic composite known for its superior mechanical attributes and remarkable recyclability. It exhibits exceptional resistance to oils, greases, aliphatic hydrocarbons, and alkalies. Additionally, it holds biocompatibility certifications, aligning with USP Class I-VI standards and adhering to US FDA guidelines for Intact Skin Surface Devices.

#### **FEATURES:**

Strong. Excellent chemical resistance.

TECHNICAL DATA		
PROPERTY	ASTM	METRIC UNITS
Tensile Strength	D638M	48 MPa
Modulus of Elasticity, Youngs Modulus	D638M	1700-XY, 1800-Z MPa
Elongation Break (%)	D638M	20%-XY, 15%-Z
Flexural Strength	D790M	65 MPa /9425 psi
Flexural Modulus	D790M	1730 MPa/251 ksi
IZOD Impact Strength (notched)	D256A	23 +/- 5 J/m
Heat Deflection Temperature @ 0.45 MPa/66 psi, (°C)	D648	175 <i>°</i> C









