

### **3D Printing Filament**

#### **TECHNICAL DATA SHEET - PRO Series ASA**

Commercial Name: MatterHackers PRO Series ASA

**Designation:** 3D printing material

Manufacturer: MatterHackers

Product Description

ASA is an advanced 3D printing material that combines exceptional thermal and UV resistance, making it an ideal choice for parts that need to function in high-temperature environments or in outdoor conditions. Its UV inhibitor prevents color change and mechanical property degradation, allowing for parts with long-lasting strength and visual properties.

- · Unmatched UV resistance
- · Exceptional temperature resistance
- · High strength and durability

# **Storage**

PRO Series ASA filament should be stored between 15 - 25°C, in its original packaging, in a clean and dry environment. When following these recommended storage procedures the minimum shelf life will exceed 12 months.

# **Material Specifications**

PROPERTY	VALUE	TEST METHOD
Tensile Strength	49 Mpa	ASTM D638
Tensile Modulus	2160 MPa	ASTM D638
Tensile Elongation	25%	ASTM D638
Flexural Strength	79 Mpa	ASTM D790



Flexural Modulus	2300 MPa	ASTM D790
Melt Flow Index	12 g/10 mins	ASTM D1238
Glass Transition Temperature	95°C	ASTM D1525
Heat Deflection Temperature	86°c at 1.82 MPa	ASTM D648
Izod Impact Strength, Notched	175 J/m 3.2mm Sample	ASTM256
Rockwell Hardness	103 R	ASTM D785

## **Filament Specifications**

PROPERTY VALUE

Diameter 1.75mm	1.75 ± 0.02mm
Diameter 2.85mm	2.85 ± 0.02mm
Density	1.07 g/cm3
Print Temperature	250±10°C
Bed Temperature	100±10°C
Material Drying Temperature	80°C-90°C (not necessary but recommended)
Build Surface Material	Powder Coated PEI

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