

## POM FILAMENT

### END USE

Monocure 3D White POM 1.75mm 3D Printer filament (Acetal or Polyoxymethylene) is an engineering plastic with the desirable characteristics of high stiffness and a low coefficient of friction. That low coefficient of friction is where Monocure 3D White POM 1.75mm 3D Printer filaments can have a major impact on what can be produced with fused filament 3D printers: gears, bearings, and moving parts.

### PHYSICAL PROPERTIES

Product Code(s)	POM-WHITE-1000
Colour(s)	White
Melt Flow Index (g/10min)	9±1 (Test Standard - ASTM D1238)
Hardness M Scale	75 (Test Standard - ASTM D785)
Flexural Strength (MPa)	85 (Test Standard - ASTM D790)
Elastic coefficient (MPa)	2700 (Test Standard - ASTM D790)
Tensile Strength (MPa)	62 (Test Standard - ASTM D638)
Extend ratio (%)	45 (Test Standard - ASTM D638)
Impact Strength (MKJ/m <sup>2</sup> )	6.5 (Test Standard - ASTM D256)
Water absorption ratio (%)	0.22 (Test Standard - ASTM D570)
Molding shrinkage ratio (%)	1.8-2.2

### APPLICATION

Because of its good chemical, heat resistance and low friction, POM is used to print moving parts such as gear wheels, ball bearings, etc.

### PRINTER SETTINGS

Spool Net Weight: 1kg	Print Temperature: 210-250°C	Bed Temperature: +110°C
Diameter: 1.75mm ± 0.05mm	Print Speed: 20-50mm/s	Heated Chamber Recommended