

3Diakon™

3Diakon™ PMMA or Poly(methyl methacrylate) is a transparent thermoplastic. It is known as having excellent weathering and UV stability combined with excellent impact performance and stiffness. PMMA is characterized as a transparent material (more transparent after post processing) and it is reasonable easy to print.

KEY FEATURES

- Strong, lightweight and rigid material
- High impact resistant
- Good abrasion resistance
- Transparent and glossy after post processing (sanding)
- UV resistance
- BPA free



3Diakon™

COLOURS



Clear

Filament Specs.

Size	Ø tolerance	Roundness
1.75mm	± 0,05mm	≥ 95%
2.85mm	± 0,10mm	≥ 95%

Material Properties

Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,14 g/cm ³
MFI 230°C/3,8kg	ISO 1183	1,7 g/10min
Tensile Strength at Yield	ISO 527	43 MPa
Impact Strength Charpy method 23°C (notched)	ISO 179	6,2 kJ/m ²
Flexural Modulus	ISO 178	1900 MPa
Flexural Strength	ISO 178	62 MPa
Vicat softening temperature	ISO 306B	91°C
Heat deflection temperature HDT B	ISO 75A	93°C
Transmittance	ASTM D1003	91,5%

Print Properties

Description	Typical value
Nozzle Size	0.4mm
Bed Adhesion	Dimafix *
Nozzle Temperature	260±5°C
Bed Temperature	100°C
Layer Height	0.2mm
Print Speed	50 mm/s
Fan Speed	0%
Extrusion Multiplier / Material Flow	95%
Retraction Distance	4mm
Retraction Speed	25 mm/s
Difficulty to Print	Intermediate
Drying Required	6-12 hours 70-80°C suggested

* Dimafix is used with a glass buildplate.

ADDITIONAL INFO

We recommend to print large objects of 3Diakon™ in heated chambers to create a nice and smooth printed object. Storage: Cool and dry (15-25°C), this enhances the shelf life significantly.

For information about 3Diakon™ filament you can contact:

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