

3Diakon™

3Diakon™ PMMA or Poly(methyl methacrylate) is known as having excellent weathering and UV stability combined with excellent impact performance and stiffness. PMMA is characterized as a transparent polymer (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 | 255±10°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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