

TECHNICAL DATA

CI26

Special Attributes

Nature: Copolymer of hydroxyethyl methacrylate and methyl methacrylate

The CI26 is firmly established as the leading hydrophilic material for the production of intraocular lenses. The material displays the perfect balance between machining characteristics, refractive index and foldability. The mechanical properties ensure the lens can be folded and injected easily while allowing for a smooth and controlled unfolding. A wide range of lens designs, utilising an incision size as low as 1.8 mm are based on this material. Our unique manufacturing technology ensures the material properties are consistent for repeatable and predictable results.

Contamac offers a yellow version of this material (CI26Y) in order to improve the blue light absorption which is believed to reduce the risk of age related macular degeneration.

Material Characteristics

PROPERTY	CI26	CI26 YELLOW
Swell Factor at 20°C	1.13	1.13
Water Content at 20°C	26 %	26 %
Refractive Index at 20°C Hydrated	1.460	1.460
Refractive Index at 35°C Hydrated	1.458	1.458
Refractive Index	1.51	1.51
Density Hydrated	1.18 g/cm ³	1.18 g/cm ³
Tensile Strength	2.5 MPa	2.5 MPa
Elongation to Break	250 %	250 %
Modulus	3.0 MPa	3.0 MPa
UV Blocker	Standard	Standard
Diameter	12.70 & 16.00 mm	12.70 & 16.00 mm
Thickness	3.00 mm	3.00 mm

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Machining Recommendations

LATHE TYPE	RPM	BULK CUT	FINE CUT
Manual	7,000	0.50 mm	0.05 - 0.10 mm
CNC	7,000	0.50 mm	0.05 - 0.10 mm
Air Bearing	9,000	0.50 mm	0.05 - 0.10 mm

Diamond Tooling

TOOLING	RADIUS
Rough	0.30 - 0.50 mm
Fine	0.25 - 0.50 mm

Environment Control

For best manufacturing conditions Contamac recommends 19-23°C with a relative humidity of 45% - 60%

Polishing

Contamac's CI26 material can be polished using tumble polishing methods.

Hydration

Hydrate the finished IOL in borate buffered pH 7.2 isotonic saline or a similar buffered saline solution.

The values quoted on this data sheet are indicative of the typical values that can be obtained for the material. For the complete specification, please contact Contamac at +44 (0)1799 514800 or sales@contamac.co.uk. Unauthorised copy or reproduction of the above information is strictly prohibited without the prior consent of Contamac Ltd.

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