MEDICURE PVT LTD.
Helping to Redefine Yourself

MBI
MILLENNIUM
Biomedical Inc.

Experience the Beauty
with New Vision....

PreciSAL™

HYDROPHOBIC

Foldable Acrylic Intraocular Lens

Innovative Hydrophobic Intraocular Lenses
With Enhanced Vision & UV Protection, Made in USA

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MBI
MILLENNIUM
Biomedical Inc.

A Focus on Quality&Value

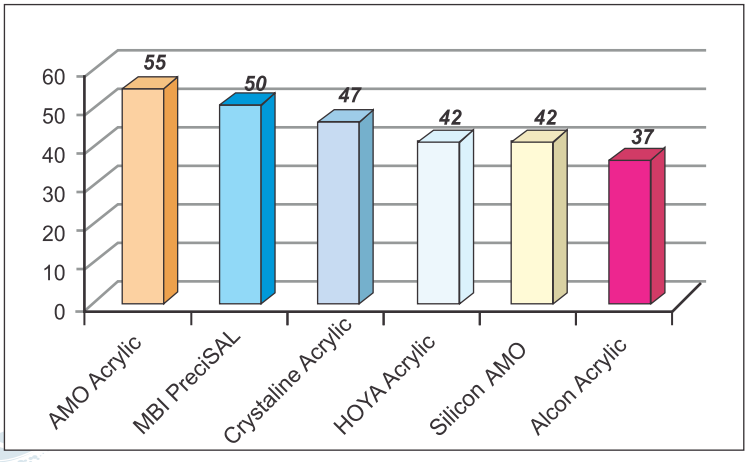
Hydrophobic Acrylic IOL's

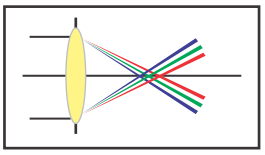
Millennium Biomedical Inc. (MBI), a USA based corporation, is FDA registered, and ISO 13485 certified company. MBI launched ***PreciSAL***™ a family of hydrophobic acrylic IOL's in 2008. Since the launch of this product line no glistening has been reported. MBI is engaged in development and manufacturing of innovative ophthalmic products and processes since 1997 in Southern California. MBI has developed a proprietary soft hydrophobic acrylic material that incorporates the most desirable UV blocking properties in their yellow and clear ***PreciSAL***™ Intraocular lenses. Utilizing this base material a unique family of intraocular lenses has been developed and CE mark approved. The name of ***PreciSAL***™ is coming from highest precision in soft acrylic lens. ***PreciSAL***™ intraocular lenses are available in diopter powers from 0D to 30D.

Chromatic aberration

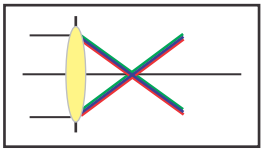
Chromatic aberration of each IOL material is a significant parameter for image quality and contrast sensitivity. Chromatic aberration is the failure of a lens to focus all colors to the same point.

The Abbe number is a significant parameter for the quality of materials. A higher Abbe number is associated with less chromatic aberration (chromatic dispersion) and better optical performance. ***PreciSAL***™ IOL has a relatively very good Abbe number of 50 compared to some of other competitors on the market.





IOL material with high chromatic aberration (low Abbe Number)



IOL material with less chromatic aberration (high Abbe Number)

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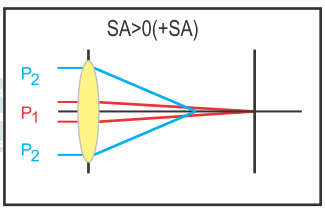
Enhanced Vision through *PreciSAL*™ Model 302AC

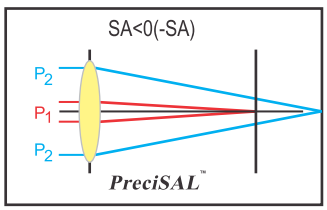
MBI offers aspheric intraocular lenses with negative spherical aberration (-SA) in clear and with blue blocker filter. In general, intraocular lenses can be manufactured with negative spherical aberration (-SA) or free of any spherical aberration (SA=O) or positive spherical aberration (+SA). Spherical aberration has an Impact on loss of contrast sensitivity and vision acuity.

Contrast sesitivity is important:

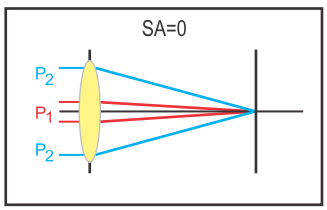
- In low-contrast environments where safety may be at risk (e.g. night driving)
- For seeing clearly in dim light (e.g. low room light, rain, fog, dusk)



Lens power (P) increases from center to edge $P_1<P_2$
The peripheral rays come to a shorter focus then rays through the central or axial area.



PreciSAL™(P) decreases from center to edge $P_1>P_2$
The peripheral rays come to a longer focus then rays through the central or axial area.



Lens power (P) is uniform from center to edge $P_1=P_2$
All rays come to one focus point.

Aspheric IOL with SA=0

The IOL leaves the pseudophakic eye with a modest amount of residual positive SA. This has an impact on contrast sensitivity.

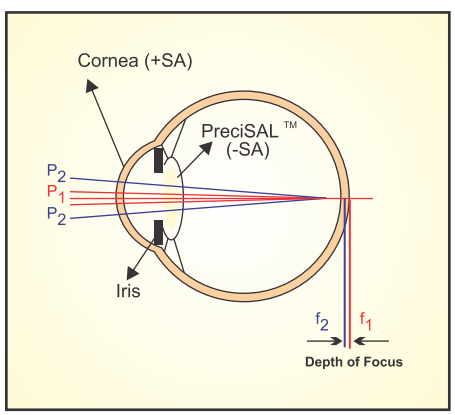
Aspheric IOL with SA<0

This kind of IOLs have a negative spherical aberration (-SA) so that it attests all or part of positive SA of the average cornea.

MBI manufactures all aspheric IOL with negative spherical aberration (-SA) to offset most of the SA of the cornea to get the best vision acuity and contrast sensitivity with modest depth of focus. The residual SA is 0.044µm at 5mm cornea diameter size.

	Spherical Abberration SA	Cornea	Total SA	Image sharpness	Depth of focus
Standard IOL SA>0	+	+	++	Poor	+
Aspheric IOL SA=0	0	+	+	Good	+
Aspheric IOL with SA<0	–	+	0	Excellent	0

Enhanced Vision & Depth of Focus

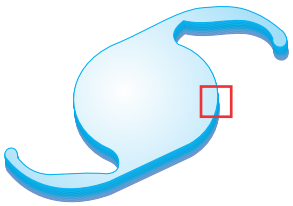


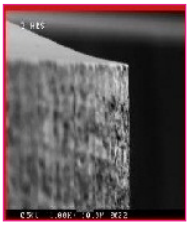
*Enhanced vision with **PreciSAL**™ aspheric IOL*

In young eyes, the natural lens typically has negative SA and offsets the positive spherical aberration (+SA) of cornea. An old patient can still have 20/20 vision but could have difficulties in the lower contrast condition (foggy). The aspheric ***PreciSAL***™ IOL's are calculated so that the residual spherical aberration in the eye is adjusted for best vision acuity and good contrast sensitivity.

The state–of–the–art intraocular lens with highest precision from MBI

MBI has developed a proprietary soft hydrophobic acrylic material that ncorporates the most desirable UV blocking properties in their yellow and clear ***PreciSAL***™ intraocular lenses. Surgeons don't need to change their implantation technique. ***PreciSAL***™ IOL's can be implanted through a 2.2mm inclsion. MBI offers you a trouble free, controlled implantation with the highest quality standards. Excellent sharp edge in optic and haptics on both side of the lens, high quality material, unique design and material with less than 0.5% water content are many of the features that make ***PreciSAL***™ one- of- a-kind. MBI doesn't manufacture the ***PreciSAL***™ in the molding injection process, which could create micro vacuoles during and after the molding process. Since the launch of ***PreciSAL***™ IOL's in 2008 no glistening has been reported.





SEM picture with 1000 times magnification , which shows the 90 degree edge of the PreciSAL optic under electron microscope.

PreciSAL™

HYDROPHOBIC

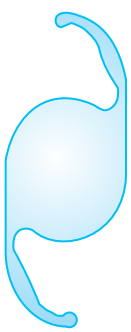
Foldable Acrylic Intraocular Lens

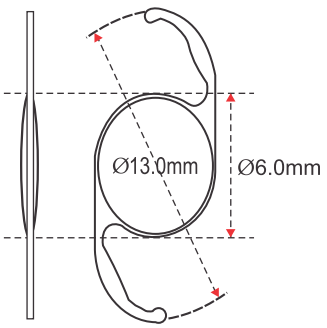
Innovative Hydrophobic Intraocular Lenses
With Enhanced Vision & UV Protection, Made in USA

- Easy implantation through 2. 2 mm incision.
- No glistening.
- Sharp square edge on both sides to minimize PCO.
- Excellent Centration.
- Slow and controllable unfolding.
- Superior optical quality.

Model 302AC

PreciSAL™





302AC

IOL Design	Single Piece for posterior capsular bag
Material	Hydrophobic Acrylic with UV absorbers Aspheric: Model , 302AC
Optic Diameter	6.0 mm
Overall Length	13.0 mm
Haptic Angle	0^0
Optic Design	Biconvex, square edged optic and heptic
Diopter Range	0D to 30D 0D to 10D in 1D increments 10D to 30D in 0.5D increments
Refractive Index	1.5
Material Water Content	<0.5% 0.100]
A-Constant*	*SRK II:117.90
ACD*	4.75
Method of Sterilization	Ethylene Oxide (ETO)
UV Cut Off at 10%	≥385nm 302AC
Recommended Insertion Instrument	MDJ Mini Glider & Cartridge : Incision size < 2.2nm (Model 00265 Mini B)
Packaging	The soft hydrophobic acrylic intraocular lenses are suplied dry, in a lens tray packaged in a Tyvek peel pouch

(*) Estimates only: surgeons are recommended to use their own venture based up on their personal experience.

CE 0434

Manufactured by :

MBI
MILLENNIUM
Biomedical Inc. CA, USA

Marketed by :

MEDICURE PVT LTD.
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