



3.6. Gradal[®] Top 1.59 Poly Polarized Gray

Product Specifications

Material

- Polycarbonate, 85% Gray 3 with NuPolar[®] technology by Younger Optics
- $n_d=1.586$
- Abbe 30
- Specific Gravity 1.20 ^g/_{ccm}
- 100% UV-A and UV-B Protection

Technical Processing Notes

- Gradal[®] Top 1.59 Poly Polarized Gray lenses can be processed like any other quality polycarbonate progressive lens. Zeiss recommends a minimum center thickness of 1.8 mm to avoid damage to the embedded polarized film. Gradal[®] Top 1.59 Poly Polarized lenses of this minimum thickness fulfill the FDA standards of impact resistance.
- After blocking wait 30 minutes to allow lenses to cool before generating.
- Zeiss recommends de-blocking by cold knock-off or block ejector, but not by hot water.

Hard Coating

Zeiss Gradal[®] Top 1.59 Poly Polarized Gray semi-finished lens blanks feature a factory applied, scratch resistant hard coating.

Delivery Range

- Sph +3.25D to -6.00D
- Cyl up to -4.00D (total power not to exceed -6.00D)
- Adds 1.00D to 3.00D
- Prism up to 3.00D in addition to equithin





Lens Data Chart

Base Curve	Actual/Useable Diameter [mm]	Decentr. [mm]	True Curve [1.53]	CX Radius [mm]	Back Curve [1.53]	Center Thickness [mm]	Edge Thickness [mm]
3.70	75/80 round	2.5	3.46	153.18	6.45	9.8	13.6
4.70	75/80 round	2.5	4.38	121.01	6.45	11.4	13.7
5.50	75/80 round	2.5	5.00	106.00	6.45	8.8	10.2
6.30	75/80 round	2.5	5.65	93.81	6.45	9.7	10.3

Zeiss Gradal® lenses are designed to work perfectly with a thickness reducing prism. To achieve the thinnest and lightest lenses possible, Zeiss recommends a base down (270°) prism in the following graduation depending on the power of the addition.

Addition [D]	1.00	1.25	1.50 1.75	2.00	2.25 2.50	2.75	3.00
Prism [D]	0.50	0.75	1.00	1.25	1.50	1.75	2.00

Permanent Engravings

	Nasal Engraving	Temple Engraving
Gradal® Top 1.59 Poly Polarized Gray		



Base Curve Chart
Gradal® Top 1.59 Poly Polarized Gray

sph/-cyl	0.00	-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00
3.25																	
3.00																	
2.75			6.30														
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2.00																	
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0.50																	
0.25																	
0.00			4.70														
-0.25																	
-0.50																	
-0.75																	
-1.00																	
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-5.25																	
-5.50																	
-5.75																	
-6.00																	

- Zeiss highly recommends conforming to the base curve for a specific Rx power as displayed in the Base Curve Chart for Gradal® Top1.59 Poly Polarized Gray lenses. Picking another base curve for a certain power will decrease the imaging performance and may impact adaptation and patient satisfaction.
- Please be also aware that the base curve and the add power determine the nasal inset of the near portion. A base curve other than recommended restricts the usability of the intermediate zone and near portion due to a mismatch of distance power, add and required inset.