

X-Cel Optical Material Performance

Index	Material	Total UV Blocking	UVA Blocking	UVB Blocking	Specific Gravity	Abbe Number
1.523	White Crown	31%	16%	62%	2.58	58.5
1.523	PGX	96%	96%	100%	2.41	57.6
1.523	PBX	96%	95%	100%	2.41	57.0
1.523	Photosun II	92%	92%	100%	2.41	57.0
1.523	Thin & Dark™ by Corning	96%	96%	100%	2.38	57.0
All	Polarized Glass All Colors	100%	100%	100%		
1.523	Autumn Gold™	99%	99%	100%	2.41	
1.523	Gray 1	89%	86%	100%	2.60	53.2
1.523	Gray 2	93%	90%	100%	2.60	54.5
1.523	Gray 3	95%	93%	100%	2.61	54.0
1.523	Green 1	95%	94%	100%	2.54	54.7
1.523	Green 2	98%	98%	100%	2.60	52.9
1.523	Green 3	99%	99%	100%	2.56	52.3
1.523	Rose 1	90%	90%	100%	2.53	58.2
1.523	Rose 2	92%	92%	100%	2.52	56.8
1.523	Tan C	99%	99%	100%	2.56	57.0
1.523	Canary Yellow	100%	100%	100%	2.51	59.3
1.523	G-15	97%	96%	100%	2.54	49.7
1.523	Rose Didymium	89%	86%	100%	2.64	57.6
1.563	ACE (Amethyst Contrast Enhancement)	89%	85%	100%	2.99	49.2
1.597	UVSG	100%	100%	100%	2.86	43.3
1.600	Corning Clear 16™	77%	69%	99%	2.38	42.0
1.601	Photosolar Gray	98%	98%	100%	2.75	42.5
1.701	High Index Glass	82%	75%	100%	2.99	30.3
1.801	High Index Glass	86%	81%	100%	3.24	25.4
1.80	Leaded X-Ray Glass	81%	74%	100%	5.18	25.4
1.498	X-Celite Hard Resin (Tintable)	96%	95%	100%	1.31	57.2
1.498	X-Cel Polarized Plastic Gray and Brown	100%	100%	100%	1.31	57.2
1.497	X-Cel Transitions™ Gray and Brown	100%	100%	100%	1.27	57.0
1.530	Aris™ Trivex™ Clear	100%	100%	100%	1.11	43.0
1.530	Aris™ Trivex™ Transitions® Gray and Brown	100%	100%	100%	1.11	43.0
1.530	Aris™ Trivex™ NXT® Fixed Tints and Photochromic	100%	100%	100%	1.11	43.0
1.530	Aris™ Trivex™ NXT® Polarized Colors	100%	100%	100%	1.11	43.0
1.554	High-X™ Clear (Tintable)	85%	80%	100%	1.20	38.0
1.554	High-X™ Transitions® Gray and Brown	99%	99%	100%	1.20	38.0
1.670	High-X™ Clear (Tintable) MR-10	100%	100%	100%	1.20	31.0
1.59	Polycarbonate (Non-Tintable Hard Coating)	99%	99%	100%	1.20	31.0
1.59	Polycarbonate Polarized Gray, Brown and Green	100%	100%	100%	1.20	31.0

- Notes: 1) Data are for 2.0mm thickness, except for Thin and Dark™ Glass (1.5mm).
 2) Data for photochromic materials are in the darkened state and provided by the material manufacturer.
 3) Total UV Band 290-380nm, UVA Band 315-380nm, UVB Band 290-315nm.

Didymium Technical Information

Rose Didymium is used by commercial and artistic glass blowers where yellow light filtering is desired. This glass must be at least 3.0mm thick in order to filter the yellow or sodium flare portion of the spectrum properly. The lenses should also be mounted in a Z87 frame. This material can be tempered the same as standard crown glass.

ACE (Amethyst Contrast Enhancement)

Although designed as an outdoor lens for contrast enhancement, this glass also filters out the 575nm band of the light spectrum and can be used for the artistic glass blowers safety eyewear when left at 3.0mm minimum center thickness.