POLYURETHANE

Single Vision

Finished

Semi-Finished





THE ONLY "HIGH IMPACT RESISTANT" AR COATED HIGH INDEX LENS



Advanced Polyurethane Resin

Impact Resistant Safety lenses

Ideal for Drill-Mounted Rimless Eyewear (Nylon Groove available)

Chemical resistance material with UV protection

Tint-Fast material Easy Tint lenses

Diameter 75mm Finished and Semi-Finished products available

ISO optical center 10mm

What is APEX POLYURETHANE?

APEX Finished and Semi-Finished Polyurethane lenses are high index, single vision lenses made of the most technologically advanced material. It is specially designed for both RIMLESS glasses and SAFETY eye wear. Fast and easy to tint, APEX Polyurethane materials provide a unique advantage to tinting.

Why APEX POLYURETHANE?

Most eye care practitioners prefer TRIVEX lenses for rimless glasses, but pricewise, most customers prefer polycarbonate lenses. APEX is a great alternative for both. The customer now has the option to choose APEX, which is as strong and clear like TRIVEX, but thinner and less expensive. While prices for APEX are comparable to Tintable or Aspheric Polycarbonate lenses, it is clearly the better value.

APEX provides a better choice for customers who are looking for:

- Rimless Glasses
- Safety Glasses
- Easy tint Sunglasses
- Sports Glasses











COMPARISON CHART

| | APEX | TRIVEX | Polycarbonate | MR High Index |
|------------------------------|---|---|-----------------|--|
| Chromatic Aberration | ABBE 42 | ABBE 43 | ABBE 30 | ABBE 42 |
| Optical Clarity | No Internal Stress | No Internal Stress | Internal Stress | No Internal Stress |
| Impact Resistance | Yes - APEX lenses are the ONLY "High Impact Resistant" AR coated High Index lenses. | Yes - Not as much as PC, but much more than regular plastic or High Index lenses. | Yes | It is fragile material. AR coated MR High Index lenses are not impact resistant. |
| Chemical Resistance | Very Good | Very Good | Poor | Good |
| Easy to Drill | Very Easy | Easy | Very Easy | Difficult |
| Easy to Tint | Easy | Easy | Difficult | Difficult |
| Thickness | Index 1.61 | Index 1.53 | Index 1.58 | Index 1.60 |
| Internal Stress & Distortion | No | No | Yes | No |
| Price Range | Middle | High | Low | Middle |

APEX™ POLYURETHANE FINISHED SINGLE VISION COATING TECHNOLOGY

APEX EZ TINT™ Tintable Hard Coating

The advantage of APEX™ POLYURETHANE material is fast absorbing for both color and impact. APEX™ POLYURETHANE lenses are one of the most fast and easily tintable lenses. You will save time and costs to produce custom made premium 1.60 Sunglasses.

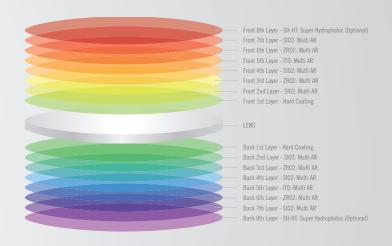
APEX™ POLYURETHANE material is sensitive to temperatures above 183°F as other high index lenses. To achieve the best results for a sunglass tint and maintain lens-center integrity, we suggest that you lower your normal dye pot temperature, or submerge the lenses in tint solution for no more than two to three-minute intervals, with cooling time in between.

APEX DOUBLE LAYERED HARD COATING™ AR

Double Layered Hard Multi Coating with Anti Reflective Coating

With 16-layers Double Hard Multi Coating technology, APEX™ POLYURETHANE finished single vision lenses are factory coated lenses with Double Hard, Anti-Smudge, Anti-Scratch, Anti-Glare, Anti-Reflective and Super Hydrophobic (optional).

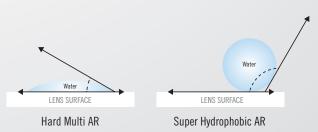
Lenses without anti-reflective coating reflect a high amount of light. The anti-reflective technology within the APEXTM POLYURETHANE process helps reduce reflections as low as 0.1% at a single wavelength. APEXTM POLYURETHANE Double Hard Multi Coated with AR provides clear vision particularly in low-light conditions, like night driving or when performing visual tasks like computer and mobile device use.



APEX SUPER CLEAR™ AR

Double Layered HMC AR with Super Hydrophobic Top Coating

APEX™ POLYURETHANE Hard Multi Coated with AR with SUPER HYDROPHOBIC top coat (optional) is a premium top coating for the high-end eyewear. This top coat protects the lenses from water, oils, adhesives and other chemicals. It provides the wearer easy to keep clean lenses.





APEX™ POLYURETHANE SEMI-FINISHED LENSES

APEX POLYURETHANE single vision Semi-Finished lenses are available uncoated and clear hard coated for FREE FORM Laboratories.

BASE CURVE CHART

| NOMINAL BASE CURVE | TRUE CURVE | SAGITTA 40mm | RADIUS | CENTRE THICKNESS | EDGE THICKNESS | BACK CURVE |
|--------------------|------------|--------------|----------|------------------|----------------|------------|
| 0.5 | 0.39 | 0.149 | 1341.025 | 10 | 15 | |
| 1 | 1.11 | 0.425 | 471.171 | 9 | 13 | |
| 2 | 1.94 | 0.743 | 269.584 | 9 | 12 | |
| 3 | 3.05 | 1.17 | 171.475 | 9 | 11 | |
| 4 | 4.02 | 1.546 | 130.099 | 9 | 9 | |
| 5 | 4.87 | 1.879 | 107.392 | 9 | 7 | |
| 6 | 6.03 | 2.337 | 86.733 | 9 | 6 | 4.29 |
| 7 | 6.91 | 2.691 | 75.797 | 9 | 5 | |
| 8 | 7.96 | 3.118 | 65.703 | 11 | 5 | |
| 9 | 8.745 | 3.441 | 59.839 | 12 | 4 | |
| 10 | 9.7 | 3.86 | 53.696 | 12 | 4 | |
| 12 | 11.8 | 4.77 | 43.22 | 18 | 6 | |



CERTIFIED SAFETY LENSES



ANSI Z87.1-2010 High Impact Prescription Lens Material Qualification





A2LA Accredited Certificate #1612.01