



TIPS NO 228  
 Revision B  
 Date: Oct 2010

**KODAK PRECISE® PROGRESSIVE LENS  
 IN STANDARD RESIN  
 Product Specifications & Processing Information**

**PURPOSE:** The following information will assist you in processing the KODAK Precise Progressive standard plastic lenses in uncoated and scratch resistant coating.

<b>CHARACTERISTICS</b>	<b>KODAK PRECISE Lens</b>
Refractive Index	1.499
Dispersion Value (Abbe)	58.0
Density	1.32
Visible Light	92%
Heat Distortion	165°F
UV Transmission Cutoff	355
Chemical Resistance	Excellent
Machinability	Excellent
Rear Surface Coating	Optional
Scratch Resistant	In-Mold RLXPlus®

**UNIQUE SEMI-VISIBLE MARK:** K<sub>+</sub>

**BLANK SIZE:** 75mm & 80mm diameter blanks, decentered 3mm.  
 Effective diameters are 81 and 86mm respectively.

**BASE CURVES:** 1.50, 3.25, 5.00, 7.00, 8.50

**POWER RANGE:** -8.50 TO +7.50

**ADD POWERS:** 1.00 to 3.00 in 0.25 Diopter Steps

**THICKNESSES:** We recommend a minimum center thickness of 2.0mm, or 2.1mm if AR coated

**KODAK Precise Progressive Standard Plastic Lens - DIMENSIONS**

<i>Nominal Curve</i>	<i>Diameter</i>	<i>True Curve</i>	<i>Radius mm</i>	<i>SAG at 50mm</i>	<i>Nominal Concave</i>	<i>Edge Thickness</i>	<i>Center Thickness</i>
1.50	75	1.46	363.014	0.86	3.00	14.8	14.2
3.25	80	3.21	165.109	1.90	6.00	14.2	10.4
5.00	80	5.25	100.952	3.14	6.00	11.7	11.6
7.00	80	7.07	74.965	4.29	6.00	9.5	12.5
8.50	75	8.64	61.343	5.33	6.00	7.3	13.4

**GENERAL:**

Processes used for surfacing CR-39<sup>®</sup> lenses should be applied to KODAK Precise Lenses.

**COMPUTER CALCULATION OF RX:**

The easiest, most efficient method to calculate and process values for an Rx is to use an existing computer software package that contains KODAK Precise Progressive Lens design data. If your software does not include this data, our Technical Services group will be happy to provide the necessary specifications. Please forward us the contact name and phone number of your software vendor. If you need a software program for processing lenses, Signet Armorlite has developed a computer program to calculate surfacing data. This program is available through Signet Armorlite's Technical Services Department.

**LAYOUT:**

All surfacing should be done in relation to the prism reference point located on the 180° line. We recommend that you block the lens on the prism reference point even though the corridor is decentered 3 mm. If blocking is done on the geometric center of the blank, you must calculate the amount of decentration prism needed to move the optical center to the prism reference point. The fitting cross is located directly above the prism reference point dot. This improves the accuracy of positioning the patient's pupil to the center of the corridor. If you use an automated lens blocker, such as the Gerber Step-One System, and if you are blocking on the cross, be sure to use a segment placement on the lens blank of 4mm down.

**SEMI-VISIBLE MARKINGS:**

KODAK Precise Progressive Lens markings have a "+" at the nasal and temporal sides along the 180° axis line. Located approximately 3mm below the nasal "+" is the Precise K+. Located approximately 3mm below the temporal "+" is the add power of the lens. These marks can be located by visually inspecting the lens. Position the lens at arm's length, preferably in front of an overhead fluorescent light. While moving the lens slowly, look through the lens for the semi-visible marks located along the surface of the lens. The marks will become visible at a given angle of light and be most visible as the lens nears the edge of the light fixture.

**REMOVAL/RE-MARKING THE TEMPORARY REFERENCE MARKS:**

The KODAK Precise Lens markings may be removed by wiping the surface with alcohol, acetone, or standard lens mark removing solvents. These marks are designed to withstand all processing procedures. They provide an easy way to verify the edging accuracy and can be removed before or after tinting.

To re-mark the lens, first locate the semi-visible markings, specifically the "+" symbols engraved along the 180° axis line (see above procedure for technique on locating the semi-visible marks). Once you have located the semi-visible markings, dot them on the lens and use the KODAK Precise verification chart for the final re-marking.

**IMPACT RESISTANCE:**

As a component, lenses of this design have been shown by testing to be capable of being processed to meet applicable impact resistance requirements of FDA regulation 21 CFR 801.410 and ANSI Z80.1. Conformance to this standard is the responsibility of all subsequent processors. Impact resistant lenses are not unbreakable. Lenses with visible damage should be replaced immediately.

**AR COATING:**

Because lens impact resistance is reduced by AR coatings, we recommend conducting impact tests for lenses AR coated and sold by your lab. It may be necessary to increase the minimum center thickness in order to meet impact resistance requirements. Please call Technical Services at (800) 759-0075 for additional information about coatings and impact resistance.

**FITTING AND FRAME SELECTION:**

The fitting point (+) has been positioned slightly higher than our other progressives. Therefore, you can fit the lens at the center of the pupil rather than at the bottom of the pupil. Always use monocular PDs and individual fitting heights when they differ more than 1.0 mm.

The minimum fitting height (sometimes called the segment height) of KODAK Precise Progressive Lenses is 17 mm. For smaller fitting height situations, we recommend KODAK Precise Short Progressive Lenses.

The frame shape, frame PD and patient's PD affect how much of the full addition reading area falls inside the frame. To insure these variables will not limit near vision, lay the frame (with the fit point marked) onto the KODAK Lens Dispensing Aid (part number K763-578.) Check to see if the blue shaded area is contained within each eye of the frame. This chart also references a recommended minimum distance up from the fitting point to the frame edge. We advise a minimum distance viewing area of approximately 12mm for patient comfort.

CR-39 is a registered trademark of PPG.

RLX*Plus* is a registered trademark and KODAK Precise is a trademark of Signet Armorlite, Inc.

KODAK Precise  
Standard Plastic  
Base Curve Selection Chart

