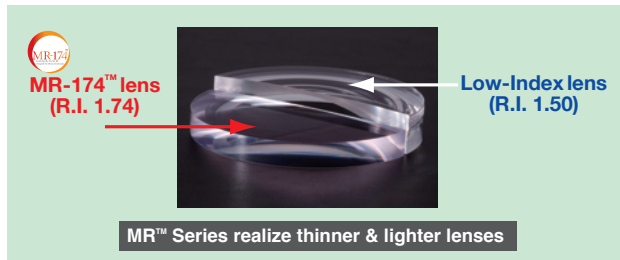


MR™ Series Lens Features

HIGH REFRACTIVE INDEX

- Refractive index 1.60, 1.67 & 1.74 materials are available.

Comparison of Lens Thickness (-6.00D lenses)

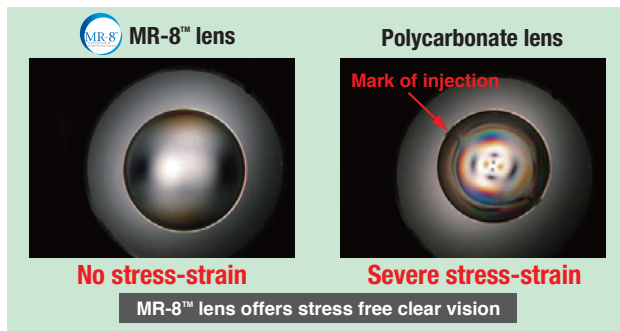


SUPERB OPTICAL QUALITY

- Both high refractive index and high Abbe number provide optical performance similar to glass lenses.
- Glass mold-casted MR™ Series shows minimal stress-strain.

Stress-Strain Observation

Crossed Nicol method using polarizing film and white light source



DURABILITY & WEATHERABILITY

- Good weatherability provides minimal change in lens color after years of use.
- Compatible with various coating materials.

Carbon Arc Test: 200hrs

Comparison of lens color before and after exposure to strong UV light

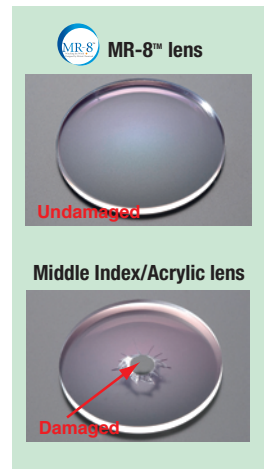
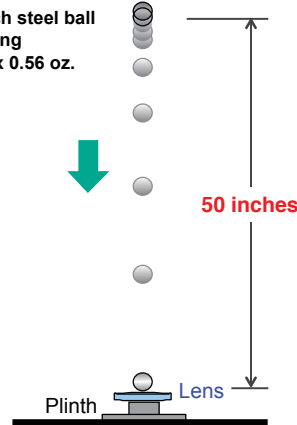


MECHANICAL STRENGTH

- Good impact resistance contributes to eye safety.
- Easily processable for precise progressive design.
- Ideal for fashionable "Rimless frame" and "High curve lens".

US-FDA Drop Ball Test

5/8-inch steel ball weighing approx 0.56 oz.

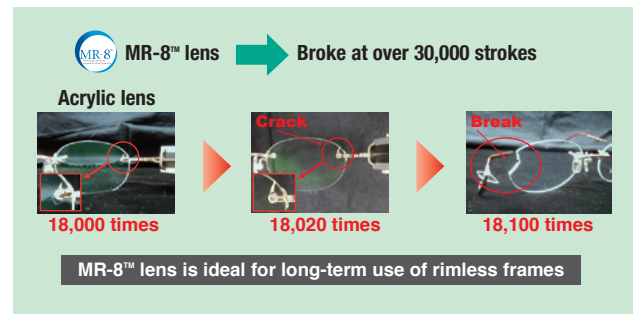
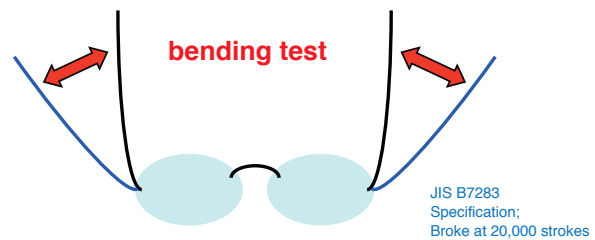


US-FDA (Food and Drug Administration) Sec. 801.410 "Use of impact-resistant lenses in eyeglasses and sunglasses"

MR-8™ lens has good impact resistance

Butterfly Test

Edurance test under cyclic load for rimless frame



Physical properties of lenses made with MR™ Series vs. other optical materials

	MR™ Series				Other				
	MR-8™	MR-7™	MR-10™	MR-174™	PC	Acrylic (R.I. 1.60)	Middle Index	ADC (CR-39® RAV7®)	Crown Glass
Refractive Index (ne)	1.60	1.67	1.67	1.74	1.59	1.60	1.55	1.50	1.52
Abbe Number (ve)	41	31	31	32	28-30	32	34-36	57	59
Heat Distortion Temp. (°C)	118	85	100	78	142-148	88-89	-	84	>450
Tintability	Good	Excellent	Good	OK	None	Good	Good	Good	None
Impact Resistance	Good	Good	Good	OK	Good	OK	OK	OK	Poor
Static Load Resistance	Good	Good	Good	OK	Good	Poor	Poor	Good	Good

CR-39 is a trade mark of PPG Industries, Inc. RAV7 is a trade mark of ACOMON AG.

All tests were conducted under specified test methods at Mitsui Chemicals, Inc. and are not guaranteed as specifications.