

#1

ESSILOR, #1 BRAND IN
EYEGLASS LENSES
WORLDWIDE*

CRIZAL[®]

A CRYSTAL-CLEAR,
NO-GLARE LENS

A MASTERPIECE OF CLARITY, PROTECTION
AND DURABILITY.



Crizal[®]

*Euromonitor, Eyewear 2020 edition; Essilor International; retail value sales at RSP.



INSPIRED BY NATURE...

For billions of years, nature has been crafting crystals through an intricate process that combines an array of different oxides in precise quantities, producing remarkable clarity and strength. Inspired by this natural process, Essilor created its most durable and clear anti-reflective technology.

Crizal® No-Glare lenses, redefining clarity and durability.

Essilor Research and Development has spent countless hours perfecting *Crizal* technology on the molecular level. Our highly intricate process blends pure oxide in nanoscopic layers to provide excellent clarity. We combine natural minerals like silica and zirconium to produce an anti-reflective treatment inspired by the clarity and durability of crystal.

OUR STRENGTHS

- ◆ A combination of advanced technologies: anti-reflective nanolayers, embedding into the lens, and Super Hydrophobic layers.
- ◆ Focus on excellence: Each *Crizal* lens innovation is the result of a thorough R&D process, allowing us to deliver high quality lenses For The Clearest Vision Possible.™

DESIGNED BY ESSILOR.

Crizal lenses combine technologies and nanoscopic layers to offer our best in clarity, durability, and protection. These layers are up to 50 times thinner than a strand of hair.

Clarity

Embedded anti-reflective layers reduce glare and allow 99% of light to pass through. A patent-pending nanolayer with Multi-Angular Technology™ further enhances clarity by reducing reflections at every angle.

Durability

An embedded hard coat, combined with the SR Booster™ layer, provides excellent scratch resistance. An HSD™ Super Hydrophobic layer resists smudges and makes lenses easier to clean.

Protection

A backside protection layer helps prevent UV rays from bouncing off the back of the lens and into the eyes while the front of the lens provides up to 100% protection* from these harmful rays. With Crizal® Previncia®, an additional layer on the front side filters up to 20% of Harmful Blue Light**.

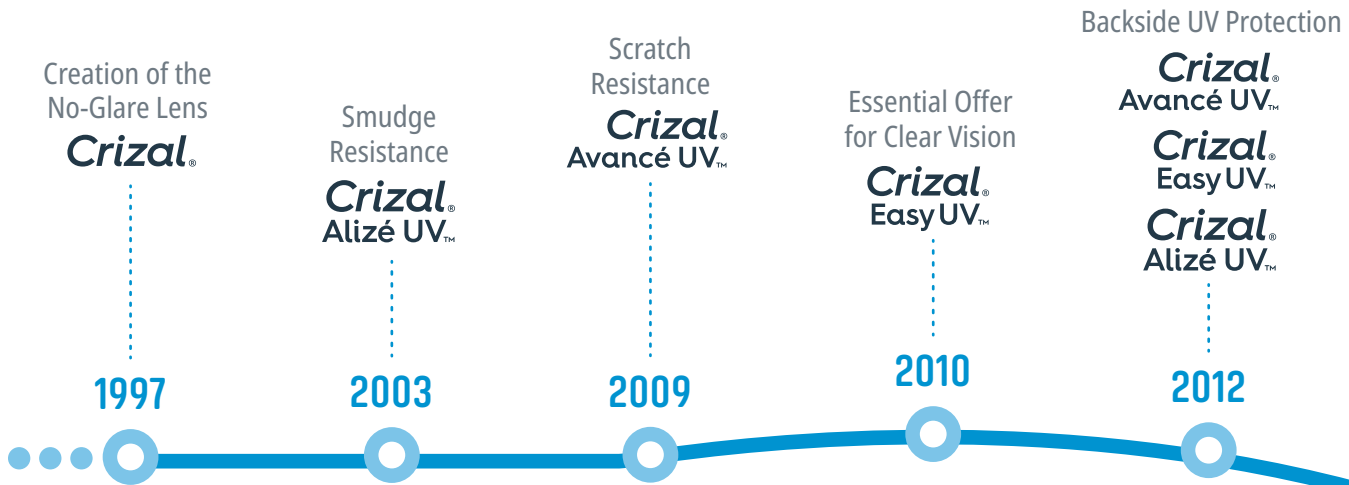


*With the exception of clear plastic (1.50) substrates.

**Harmful Blue Light is the blue-violet wavelengths between 415-455nm on the light spectrum, believed most toxic to retinal cells. Image represents the Crizal Sapphire® 360° UV No-Glare lens treatment stack. Thickness and order of layers is for demonstration purposes only.

IT'S ABOUT MASTERING INNOVATION

As a pioneer in the industry, Essilor has consistently introduced new innovations to *Crizal lenses*, redefining the standards of anti-reflective technologies for all patients.



* Compared with *Crizal*® Rock™ No-Glare treatment and depending on the lens configuration (hard-coat, index, etc.) and manufacturing process dispersion.

** Through in vitro experimentation on swine retinal cells, Essilor and the Paris Vision Institute identified the wavelengths of visible light believed most toxic to retinal cells, which fall between 415-455nm on the light spectrum and peak at 435nm (blue-violet light).

*** Best-in-class is defined as best performance of a certain attribute within the *Crizal*® portfolio // *Crizal*® Rock is 70% more scratch resistant than *Crizal*® Avancé UV™ based on Internal Sand Resistance test 2019 –compared to all previous generation of *Crizal* coating.

MULTI-ANGULAR TECHNOLOGY
WITH IMPROVED UV PROTECTION

30%* LATERAL
REFLECTION
REDUCTION
FOR BEST-IN-CLASS TRANSPARENCY**

UP TO
20%
OF HARMFUL BLUE
LIGHT** IS REFLECTED
ALSO BLOCKS HARMFUL UV RAYS

20%*
FEWER FRONTAL
REFLECTIONS

UP TO
70%
MORE SCRATCH-
RESISTANT THAN
ITS PREDECESSOR
CRIZAL® AVANCÉ UV™
FOR BEST-IN-CLASS
DURABILITY***

Harmful Blue-Violet
Light Protection

**Crizal®
Previncia®**

2013

Multi-Angular
Technology

**Crizal®
Sapphire 360° UV**

2017

Enhanced UV
Protection

**Crizal®
Avancé UV™**

**Crizal®
Previncia®**

2018

High-Resistance
Technology™

**Crizal®
Rock™**

2021





Crizal
Sapphire®
360° UV

BEST-IN-CLASS CLARITY¹

Crizal
Previncia®

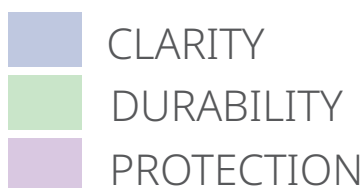
BEST-IN-CLASS PROTECTION¹

Crizal
Rock™

BEST-IN-CLASS DURABILITY¹

Crizal
Alizé UV™

Crizal
EasyUV™



Crizal® Alizé UV™
+ best clarity in the portfolio
+ improved durability and
optimal UV protection²

Crizal® Alizé UV™
+ Harmful Blue Light³ filtration
+ optimal UV protection²

Crizal® Alizé UV™
+ best scratch resistance in the
portfolio + optimal UV protection²

Crizal® Easy UV™ + improved cleanability, smudge
resistance and comprehensive UV protection²

Durable no-glare lens with comprehensive
UV protection²

FOR THE CLEAREST VISION POSSIBLE™

Crizal® lenses are worn by millions of people around the world.

There's a *Crizal* technology for every patient, every need, and every lifestyle.

(1) Best-in-class is defined as best performance of a certain attribute within the Crizal® portfolio.

(2) In a clear lens, *Crizal Alizé UV* and *Crizal Easy UV* offer comprehensive UV protection, while *Crizal Sapphire® 360° UV*, *Crizal® Rock™*, *Crizal® Prevencia®*, and *Crizal® Avancé UV™* offer optimal UV protection, on all lens materials except 1.50 clear plastic, the higher the E-SPF® index, the greater the level of UV protection provided by the lens // E-SPF is an index rating the overall UV protection of a lens. E-SPF was developed by Essilor International and endorsed by third party experts. The E-SPF index relates to lens performance only and excludes direct eye exposure that depends on external factors (wearer's morphology, frame shape, position of wear).

(3) Harmful Blue Light is the blue-violet wavelengths found between 415–455nm on the light spectrum believed most toxic to retinal cells. Harmful Blue Light protection only available with *Crizal Prevencia*. *Crizal Prevencia* No-Glare lenses filter at least 20% of Harmful Blue Light.

FOR PATIENT SATISFACTION, RECOMMEND CRIZAL® LENSES

▶ THE LEADING NO-GLARE BRAND FOR BOTH PATIENTS AND EYECARE PROFESSIONALS

9/10

consumers would purchase *Crizal* No-Glare lenses again**

4/5

consumers prefer *Crizal* No-Glare lenses over ordinary lenses***

VOTED READER'S CHOICE*

most favorite AR brand ten years in a row!

BRAND	Clarity	Durability	UV Protection
<i>Crizal</i> Sapphire® 360° UV	★★★★★	★★★★	★★★★★
<i>Crizal</i> Rock™	★★★★	★★★★★	★★★★★
Competitor A	★★★	★★★	★
Competitor B	★★★★	★★★	★★★

Clarity is a function of light passing through the lens, glare reduction, and reflections on the surface of the lens. Durability is defined as durability of the AR (top coat) over time, and includes cleanability in terms of micro-scratches from heavy pressure/repeated cleaning. UV protection factors in lens technology that protects the wearer from UV rays coming in from the front AND bouncing off the back of the lens.

*Based on EyeVote results. EyeVote is a survey of eyecare professionals conducted each year by Jobson's 20/20 and Vision Monday, the eyewear industry's leading information resource.

** (2016) Consumer study of 896 participants who purchased *Crizal*® lenses in connection with a promotion, conducted by Essilor.

*** (2016) Independent eyeglass wearers study of 200 participants, conducted by Dr. Han-Seok Seo at the University of Arkansas Sensory Science Laboratory and sponsored by Essilor.

