

ZEISS DuraVision Gold UV At a Glance

What is ZEISS DuraVision Gold UV?	As the premium-tier addition to the ZEISS DuraVision coating portfolio, ZEISS DuraVision Gold UV specifically addresses consumers' need for clear and hassle-free vision. It is an antireflective lens coating with a golden residual reflectance that offers a variety of functional benefits: better cleanability, high scratch resistance, lower lens yellowness as well as high clarity, especially in low-light conditions. Moreover, ZEISS DuraVision Gold UV lenses have a stylish appeal that brings a touch of luxury, elegance, and sophistication, making them perfect for enhancing individual looks and styles.
What is the difference to previous ZEISS DuraVision generations?	Unlike ZEISS anti-reflective coatings with other residual reflectance colors, the reflectance profile of ZEISS DuraVision Gold UV was carefully adjusted to provide high clarity and low lens yellowness in see-through. As a result, the residual reflex shows a subtle golden hue. Furthermore, it is the first ZEISS DuraVision coating that integrates ZEISS CleanGuard: a new technology that takes lens cleanability to a new level. Surface repulsion of oil, water and dirt is significantly better, making lenses easier and faster to clean.
Who is ZEISS DuraVision Gold UV for?	ZEISS DuraVision Gold UV is ideal for those who want clear and hassle-free vision. The lenses can be kept clear easily and are very scratch resistant. It's also a good choice for lens wearers who want to give their glasses an extra touch of sophistication and luxurious elegance as ZEISS DuraVision Gold UV lenses come with a highly aesthetic golden residual reflectance. Correspondingly, 2 out of 3 lens wearers like the color and the look of ZEISS lenses with DuraVision Gold UV. Moreover, the golden residual reflectance may also aesthetically enhance the choice of frame. In fact, the majority of surveyed consumers agrees that golden residual reflectance lenses are an excellent match to gold or brown-colored frames. ZEISS DuraVision Gold UV offers intriguing color combination effects with tinted prescription lenses – such as with the new Dusk Grey, Copper Brown, Burgundy and Midnight Blue – as well as with activated photochromic

 $^{^{\}rm 1}$ Eyeglass wearer consumer research study 2024 in Italy, China and USA, n=300

 $^{^2}$ 7 out of 10 respondents state ZEISS DuraVision Gold UV "complements the golden frame exceptionally well" and "complements the brownish frame exceptionally well", according to eyeglass wearer consumer research study 2024 in Italy, China and USA, n=300



	ZEISS PhotoFusion X lenses.
How will ZEISS DuraVision Gold UV benefit consumers?	Apart from its captivating golden reflectance, ZEISS DuraVision Gold UV offers a variety of functional benefits that enhance lens cleanability, durability and clarity. ZEISS DuraVision Gold UV makes lenses very durable. The Bayer test is an industry standard test to determine scratch resistance, and any score above 10 is considered to be very high. The average Bayer test result for ZEISS DuraVision Gold UV is a notable score of 16 ³ . When it comes to clarity, ZEISS DuraVision Gold UV offers a triple update compared to existing ZEISS lens coatings. Firstly, ZEISS DuraVision Gold UV reduces annoying night-time reflections on the lens surface to less than 0.8%. This makes lenses very clear — even luminous reflectance decreases the darker it gets. ⁴ Secondly, it offers up to six times lower reflectance for blue light compared to other coatings with blue or greenish residual hue. ⁵ Thirdly, ZEISS DuraVision Gold UV shows up to 90% lower measured lens yellowness compared to ZEISS DuraVision Platinum, therefore significantly reducing yellowish seethrough. ⁶
Better cleanability: Why is ZEISS DuraVision Gold UV faster to clean and more resistant against smudge?	Thanks to a new integrated technology called ZEISS CleanGuard, lenses are up to three times faster to clean as they show a greater repellence against water, oil and dirt. Likewise, consumers are convinced of the improved cleanability: 90% of consumers find ZEISS lenses with ZEISS CleanGuard technology easier and faster to clean compared to previous most premium coatings from ZEISS. ⁷
Less lens yellowness: How is a lower yellowish see-through achieved?	Lenses with coatings that have a blue or green residual reflectance present a certain degree of "lens material yellowness". By contrast, ZEISS DuraVision Gold UV lenses appear to be color-wise neutral, and free from yellowness. This is especially visible when holding a ZEISS DuraVision Gold UV lens against a white background. The explanation for this almost complete absence of yellowness in ZEISS DuraVision Gold UV is its relation to blue light. Compared to

_

³ Average Bayer ratio across 1.5, 1.56, 1.59, 1.6, 1.67 ZEISS lenses

⁴ Luminous reflectance of lens surface in mesopic light conditions with adaptation coefficients m=0,5 or lower according to CIE ISO ISO/CIE 23539:2023(E). Mesopic surface reflectance was calculated from the theoretical spectral distribution of ZEISS DuraVision Gold UV applied to ZEISS 1.6 UVProtect lenses

⁵ Blue light reflectance characterizes the intensity of reflections over the blue light wavelength range between 380 and 500nm as defined in ISO 8980-3:2013(E)

⁶ Spectral distribution of the lenses transmittance and reflectance are measured on plano lenses with 2mm center thickness at ZEISS Global Testing Centers in accordance with ISO 8980-3

⁷ Eyeglass wearer consumer research study 2023 in Germany, n=105



other ZEISS DuraVision coatings like ZEISS DuraVision BlueProtect UV, ZEISS DuraVision Platinum UV or ZEISS DuraVision Chrome UV, ZEISS DuraVision Gold UV reflects less blue light. This has an impact on the so-called yellowness index: the more a lens reflects and/or blocks blue light, the yellower the hue of the lens may appear. When a lens absorbs blue light, this means the shorter wavelengths (blue) are absorbed, while the longer wavelengths such as yellow and red are transmitted — and that determines the visible lens color. In optical science this is an effect of subtractive color mixing. So, when a lens absorbs blue light, an excess of yellow and red wavelengths remains, resulting in a yellowish appearance of the lens material itself.

How does ZEISS DuraVision Gold UV give better clarity at night and in low-light conditions?

Anti-reflective coatings reduce surface reflections on the lens to increase light transmittance and improve perceived vision clarity. When light conditions change and the darker it becomes, the sensitivity of our eyes changes and adapts to lower-light – so-called mesopic and scotopic – conditions. In these conditions, reflections from the surrounding environment may be perceived more intensively by the human eye. This can cause discomfort and loss of vision clarity. When it comes to luminous reflectance in mesopic conditions, ZEISS DuraVision Gold UV helps reduce lens surface reflections. In other words, in low-light situations when it is harder to see clearly and reflections become more intense and irritating, ZEISS DuraVision Gold UV improves perceived vision clarity compared to ZEISS DuraVision Platinum UV and ZEISS DuraVision Chrome UV.

Availability: Can ZEISS DuraVision Gold UV be combined with other ZEISS lens materials, coatings and treatments?

ZEISS DuraVision Gold UV is available* on all lenses that have ZEISS DuraVision Platinum UV as coating option: single vision, office and digital lenses as well as bifocal and progressive lenses.

ZEISS DuraVision Gold UV can also be combined with sunglasses tints with prescription as well as with polarized lenses. Furthermore, it can be applied on ZEISS PhotoFusion X photochromic lenses and lenses from the ZEISS AdaptiveSun portfolio.

ZEISS DuraVision Gold UV is also available for ZEISS ClearView Finished Single Vision in combination with ZEISS UVProtect and ZEISS BlueGuard lens material. Available materials options comprise: 1.50, 1.56, Poly, 1.60, 1.67 and 1.74.

*Please note: Exact availability depends on market



ZEISS, DuraVision, CleanGuard, BlueProtect, ClearView, PhotoFusion, BlueGuard, UVProtect and AdaptiveSun are either trademarks or registered trademarks of Carl Zeiss AG or a ZEISS Group company.

Status: January 2025