



Press Release

ZEISS Eyeglass Lenses Available with Full UV Protection Beginning in 2018

Protecting a person's eyes from ultraviolet radiation is essential for healthy vision. In the future, clear organic ZEISS lenses will offer full UV protection: ZEISS UVProtect also covers the range between 380 and 400 nanometers.

AALEN, Germany, 30/07/2018

Many eyeglass wearers are fully aware that UV radiation can severely damage their eyes, but quite frequently they do not take adequate measures to protect their vision. There are various reasons for this. A lot of people who wear eyeglasses think that UV protection is only necessary in extremely bright sunlight. And even then, many of them only wear sunglasses some of the time. Or they own sunglasses but never wear them. Furthermore UV radiation is omnipresent – all day long, and even in the shade or when it is cloudy.

Thus ZEISS decided to go one step further, and in the future all ZEISS eyeglass lenses made of plastic – clear and tinted – will feature the same high level of UV protection up to a wavelength of 400 nm that goes beyond the requirements stipulated by the prevailing standards for corrective lenses. For sunglass lenses the common standard is already at 400 nm, but for clear lenses it ends at 380 nm.

Current industry standards define a wavelength of 380 nanometers as the upper limit for UV protection in clear eyeglass lenses. This means that, up until now, most lenses fall short of fully protecting a person's eye from high-energy UV radiation, which is still potent at wavelengths up to 400 nm in the spectral range and poses a risk to eye health. UV radiation damages and can accelerate aging of the eye, can cloud the lens as well as cause a 'sunburn' on the cornea ("Photokeratitis") or can lead to skin cancer on the eyelids. That is why full UV protection is so important.

Around 40% of UV radiation that reaches the Earth is between 380 and 400 nanometers. In particular these long UV radiation waves penetrate more deeply into the tissue, making them a potential risk factor for cancer. Five to ten percent of all cases of skin cancer affects the eyelids; they are subjected to UV radiation on an ongoing basis. Lenses with full UV protection can help reduce this risk. UV radiation is a major factor in the development of different eye diseases such as cataract, i.e. a clouding of the lens which, if left untreated, can lead to blindness. But even



before a cataract is diagnosed, it can slowly alter a person's vision, including reduced contrast or color perception.

To better protect the eyes and the tissue right around the eye, the wearer needs eyeglass lenses with UV absorption above 380 nm, and up to 400 nm. This also applies to clear eyeglasses lenses. UV protection is not a tint. Rather, it is the result of special technologies in the plastic lens material.

Ultraviolet Radiation - UV C, B, A

Eye diseases to which UV radiation is a major or contributory cause.



Photokeratitis – Sunburn of the cornea and conjunctiva due to excessive UV exposure:

Temporary symptoms include pain, intense tears, eyelid twitching, discomfort from bright light and constricted pupils



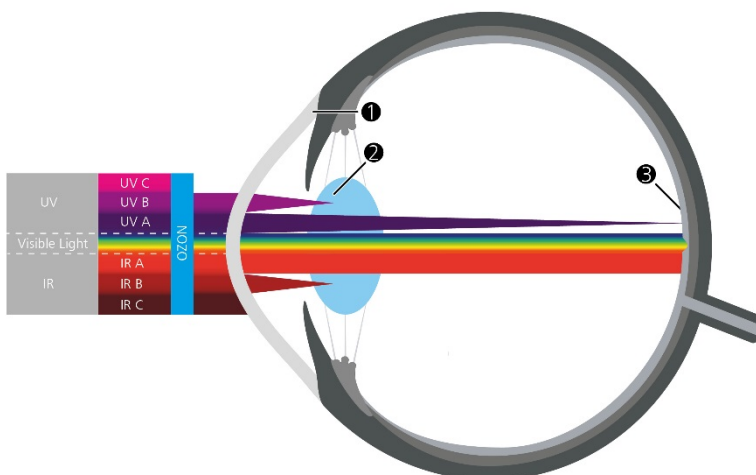
Cataract – Clouding of eye's crystalline lens, typically progressing over time:

Decrease in vision, visual impairment, blindness



Retinal Damage – Medical condition of damage to eye's retina:

Blurred vision, vision loss



ZEISS organic lenses with UVProtect technology offer improved protection for the eye, eyelid and the skin around the eye.

ZEISS UVProtect closes the gap between 380 and 400 nm. Beginning in the middle of 2018, all current organic ZEISS branded lenses will come standard with full UV protection*. Just as sunscreen can protect the skin against signs of aging caused by UV radiation, clear ZEISS organic eyeglass lenses offer UV protection for up to 400 nm. ZEISS developers have succeeded in modifying the plastic currently used for eyeglass lenses so that they absorb the entire relevant UV spectrum without limiting the wearer's vision.



"UV protection is important for healthy vision," says Sven Hermann, Chief Marketing Officer & Chief Sales Officer at ZEISS Vision Care. "ZEISS is now expanding the range of UV protection to include clear lenses. As a lens manufacturer, it is ZEISS' task as well as that of the eye care professional to actively educate patients about UV protection and associated health risks. It is important to explain to the eyeglass wearer that UV radiation is present not only when the sun is shining, but all the time – all day long, and even on cloudy days. The particular lens tint also has nothing to do with the quality of UV protection. What matters is that the UV radiation is absorbed in the lens material, which is why eyeglass wearers should definitely pay attention to the quality information from the manufacturer. We need to draw greater attention to the fact that strong sunlight and glare can damage your eyes and that sunglasses are important for everyone"

*ZEISS UVProtect is available for all plastic lenses from ZEISS, excluding special lenses such as Aphakia and bifocals.

UVProtect is a registered trademark of Carl Zeiss Vision GmbH.

Press contact

Vision Care
Joachim Kuss
Phone +49 151 42112288
E-Mail: joachim.kuss@zeiss.com

www.zeiss.com/newsroom
www.zeiss.com/vision-news

About ZEISS

ZEISS is an internationally leading technology enterprise operating in the fields of optics and optoelectronics. The ZEISS Group develops, produces and distributes measuring technology, microscopes, medical technology, eyeglass lenses, camera and cinema lenses, binoculars and semiconductor manufacturing equipment. With its solutions, the company constantly advances the world of optics and helps shape technological progress. ZEISS is divided up into the four segments Research & Quality Technology, Medical Technology, Vision Care/Consumer Products and Semiconductor Manufacturing Technology. The ZEISS Group is represented in more than 40 countries and has over 50 sales and service locations, more than 30 manufacturing sites and about 25 research and development centers around the globe.

In fiscal year 2016/17 the company generated revenue approximating €5.3 billion with over 27,000 employees. Founded in 1846 in Jena, the company is headquartered in Oberkochen, Germany. Carl Zeiss AG is the strategic management holding company that manages the ZEISS Group. The company is wholly owned by the Carl Zeiss Stiftung (Carl Zeiss Foundation).

Further information is available at www.zeiss.com

Vision Care

The Vision Care business group is one of the world's leading manufacturers of eyeglass lenses and ophthalmic instruments. The business group develops and produces offerings for the entire eyeglass value chain that are distributed globally under the ZEISS brand. The business group is allocated to the Vision Care/ Consumer Products segment. In fiscal year 2016/17 the segment generated revenue of €1.1 billion with around 9,770 employees.