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UV protection and glare protection

What's the difference?

When the sun shines, we reach for our sunglasses to protect our eyes against bright sunlight and harmful UV rays. But glare protection is often confused with UV protection – even though they're two completely different things. The amount of glare protection or depth of tint a lens has does not reveal how much UV protection the lens offers. BETTER VISION explains: What's the difference between UV and glare protection? Why is UV protection important for tinted, sunglass and clear lenses? And how do you tell if a lens offers good UV protection?

Not many people know that to prevent our eyes being damaged by UV light, it's not only sunglasses that offer effective UV protection – clear lenses also get the job done. However, just because a pair of sunglasses has dark lenses, a tint or glare protection, doesn't mean it offers excellent protection against UV radiation. UV protection actually has little to do with depth of tint or glare protection. If your sunglass lenses feature a low-quality UV filter, wearing them can actually do more harm than good. That's because dark lenses let less light through, causing the pupil to dilate. So if your sunglass lenses have low UV protection, it can actually damage the cornea, conjunctiva and ultimately the parts of the inner eye such as the lens and even the retina. Besides glare protection, a good UV blocker is the most important feature of any sunglasses. Clear lenses should also have a UV filter in order to protect against radiation damage.

But there are major differences in quality when it comes to UV filters. There's no standard kind of UV protection. Whether they're clear or tinted, many lenses only protect the eyes against UV light up to a wavelength of 380 nm. Different health bodies, such as the World Health Organization (WHO), recommend UV protection up to 400 nm.¹ ZEISS lenses therefore automatically offer comprehensive UV protection up to 400 nm – that applies to clear, sunglass and tinted lenses.

While the CE mark on the inside of the frame temples indicates whether or not your sunglasses feature UV protection, it only guarantees protection against harmful UV rays up to 380 nm.





If you're unsure whether or not your glasses or sunglasses offer good UV protection, your optician will be happy to help. They can check to see if your glasses offer any UV protection and can recommend good lenses with UV protection. They can also help you find tints and self-tinting lenses with UV protection.

[The difference between UV and glare protection](#)

[The different types of glare protection](#)

The difference between UV and glare protection

Glare protection refers to the portion of sunlight we're able to see. So all dark lenses come with glare protection as it blocks or reduces part of the visible light. But there's also an invisible part, which is known as UV light. And our eyes need to be protected against this – even on cloudy days when the sun is only partially visible. If there's no UV protection, our eyes can become damaged. This can manifest in different ways – from harmless conjunctivitis and temporary “snow blindness” to destroying photoreceptor cells and causing cataract.

[> Read on to find out more about the different types of UV light in.](#)



The different types of glare protection

Any good pair of sunglasses will offer both UV and glare protection. Glare protection is about shielding the eyes from incident light by way of tinting or polarizing lenses, e.g. to reduce the occurrence of irritations caused by reflections off the water or wet roads. This protection is split between various categories – depending on the level of darkening. Sunglass lenses with effective glare protection are available for almost any requirements. The type of protection you need will depend on when and where you don your sunglasses.

- > Be it clear or sunglass lenses, all ZEISS lenses now feature UV protection up to 400 nm as standard
- > Explore more about the benefits and disadvantages of UV light

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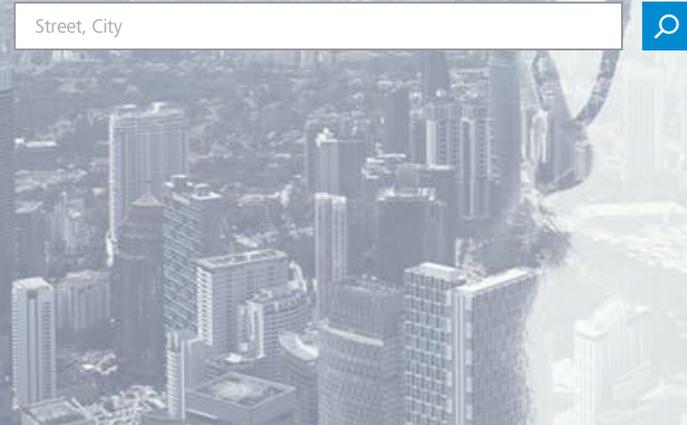
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¹ International Commission on Non-Ionizing Radiation Protection (ICNIRP), American Conference of Governmental and Industrial Hygienists (ACGIH), ISO 21348 (definitions of Solar Irradiance Spectral Categories), also applied in Australian Sunlens Standard AS/NZS 1067:2003 and definition adopted by the World Health Organization (WHO)



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