

What are Transitions® XTRActive® lenses?

They are everyday adaptive lenses that offer **extra protection** from light outdoors, indoors, and even in the car:

- Outdoors: Uniquely designed for extra light protection, even in the brightest sun and the hottest conditions
- Indoors: A hint of tint helps protect eyes from harsh indoor lighting, helping to reduce eyestrain and fatigue
- In the car: Achieves up to category 2 darkness¹ behind the windshield to protect eyes from sunlight while driving

How do Transitions XTRActive lenses work?

Transitions XTRActive lenses use a different formulation of photochromic dyes that feature a broad spectrum dye specially designed to react to both UV and visible light for extra darkness outdoors and even in the car.

Most photochromic lenses react primarily to UV light. That's why they change when in the sun and remain clear indoors. In the car, the glass in car windshields blocks most UV light. That's why most photochromics do not provide sufficient darkening in the car.

But the special photochromic molecules in Transitions XTRActive collect "extra" energy in the lower visible light spectrum, enabling the lens to darken more, even in the hottest climates, AND activate behind the windshield of a car.

What is the % darkness of Transitions XTRActive lenses compared to Transitions® Signature™ VII lenses?

Transitions XTRActive lenses are uniquely designed for extra protection from light, even in the brightest sun and the hottest conditions. In fact, Life360™ data (which measures how the lenses perform in real world conditions, real locations and real situations) shows that based on an average of real world measurements taken in hot conditions (above 90°F/ 32°C), Transitions XTRActive lenses are 17% darker¹ than Transitions Signature VII lenses.

Are Transitions XTRActive lenses fully clear indoors?

Transitions XTRActive lenses are designed to have a hint of tint inside to provide extra protection from harsh indoor lighting. However, Transitions XTRActive lenses provide a good level of clarity indoors and can be worn as a replacement to clear lenses inside. At their clearest state indoors with an anti-reflective coating, the lenses have an average indoor light transmission of 90%¹. In fact, 3 out of 4 wearers are satisfied or very satisfied with the level of indoor clarity when wearing Transitions XTRActive lenses².

Do Transitions XTRActive lenses activate while driving?

Yes, Transitions XTRActive lenses have an average darkness of 53% and can achieve up to category 2 darkness¹ behind the windshield to protect eyes from sunlight while driving. Because Transitions XTRActive lenses are developed to take advantage of the lower wavelengths of the visible spectrum they are able to achieve what other everyday photochromic lenses do not. In fact, 4 out of 5 wearers are satisfied or very satisfied with Transitions XTRActive lenses when driving in sunny conditions². And nearly 9 out of 10 eyecare professionals agree that even though Transitions XTRActive lenses don't block blinding glare behind the windshield like polarized sun lenses, Transitions XTRActive lenses would still benefit patients more than a clear lens would in the car³.

The performance of *Transitions XTRActive* lenses behind the windshield may be influenced by a variety of factors, including temperature, the position of the driver in the car, the shape and inclination of the windshield, and characteristics of the windshield.

Why do they activate behind the windshield? Is this because there is a hint of tint to start with?

There is a misperception that the hint of tint of *Transitions XTRActive* lenses is the reason why the lenses are activated in the car. This is not the case. A unique photochromic dye package allows the lenses to activate in both UV and visible light. So even though car windshields block most UV, there is enough visible light available behind the windshield of a car to activate the special dyes in *Transitions XTRActive* lenses.

Are *Transitions XTRActive* lenses suitable for night driving?

Yes, *Transitions XTRActive* lenses are suitable for any activity that would normally require clear lenses, which includes driving at night². Adding an anti-reflective coating to *Transitions XTRActive* lenses may make night driving even more comfortable as the treatment reduces distracting glare.

What about the fade back speed?

Because they activate to a darker state, the fade back speed for *Transitions XTRActive* lenses is not as fast compared to *Transitions Signature VII* lenses. However, our research shows that patients who value darkness prioritize it over fade back speed, and show high intent to purchase the lenses after trying the product. Live wearer test results show that 7 in 10 clear lens wearers intend to purchase the product after trial².

How do *Transitions XTRActive* lenses perform in hot temperatures?

The challenge is, because fade-back speed is driven to the clear state by heat, when it is very hot outside, the photochromic molecules are pushed back to clear even as UV light energy is driving them to darken. This is why the performance of every photochromic lens is influenced by temperature.

To overcome this challenge, *Transitions XTRActive* lenses use a different formulation of photochromic dyes. *Transitions XTRActive* lenses feature a broad spectrum dye specially designed to react to both UV and visible light for extra darkness outdoors, even in hot temperatures.

In fact, 4 out of 5 wearers are satisfied or very satisfied with the level of darkness outdoors².

¹ Transitions Optical, Inc. Real World Measurements, (2012-2013), average of *Transitions XTRActive* grey and brown. Category

² darkness is defined as a range between 57% and 82% tint; European Standard reference

² *Transitions XTRActive* lenses are suitable for night driving as per the ISO 14889 standard