THE OPTICIAN'S ULTIMATE GUIDE:

Ultra-Fast Light-Reactive Lenses

Brought to you by:

sunsync®

LIGHT-REACTIVE LENSES

Contents

A Long-Awaited Solution to An Age-Old Problem.

Since the idea was born in the 1960s to create lenses that adjusted to differing light conditions, a pursuit has been ongoing to make them do it faster. Despite generation after generation of technology improvements, fade-back speed still lingered in the seven minute range. That all changed in October 2018, with the birth of ultra-fast photochromics.

As the name implies, an ultra-fast photochromic lens earns its name based on the superior speed in which it returns to clear. Designed to overcome one of the biggest pain points among photochromic wearers and eye care professionals, these modern marvels in light-reactive lens technology finally offer a solution to the slow fade-back barrier.

In this eBook, we'll investigate the ins and outs of this groundbreaking light-reactive lens type, including the technology, benefits, ideal patients, environmental variables, and dispensing tips.

"Think of the difference between a traditional photochromic environment and an ultra-fast environment like a mud pit versus a swimming pool."

Chapter 1: How Do Ultra-Fast Light-Reactive Lenses Work?

Let's quickly go back to move forward by revisiting how traditional light-reactive lenses work. This will allow you to better understand the technological advancement of ultra-fast lenses.

Photochromic lenses darken and fade back through a process in which individual molecules change shape by breaking and reforming a chemical bond.

When UV light is present, the bond is broken, opening individual photochromic dye molecules, which allows them to absorb more visible light. This is the dark or activated state.

Conversely, when UV light is largely absent, the bond reforms allowing the molecules to close. This allows more visible light to once again pass through the lens. This is the clear or deactivated state.

This chemical activity requires movement, and movement requires space.

THE BENEFITS OF A LITTLE BREATHING ROOM

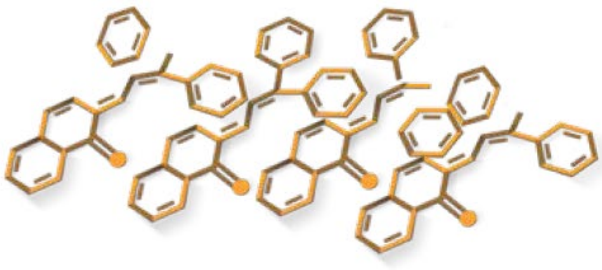
The keys to improving light-reactive lens performance are newer, more advanced photochromic dyes and a new kind of environment that allows for peak performance of these dyes over a long period of time.

An ideal environment provides both protection from degradation, and space to allow for faster activation and fade-back. Also, ideally, the environment containing the photochromic dyes would be the same across all lens materials. That is not the case for most manufacturers today.

Ultra-fast light-reactive lenses are made utilizing a unique process that provides a better environment for photochromic molecules by encasing them in a unique material that gives them room to change back and forth quickly. The flexibility and stability of this material also protects the photochromic molecules from severe performance degradation over time because it reduces steric hindrance, common in methods of photochromic dye application that utilize rigid materials.

SunSync Elite Lenses

Market Leader Lenses



Performance of photochromic lenses produced with traditional methods degrades over time. The unique construction of SunSync Elite lenses will allow photochromic molecules to perform like new, even after many months of wear.

"What really makes these lenses unique is that you don't have to sacrifice any traditional benefits to enjoy revolutionary fade-back speed."

Chapter 2: What Are the Benefits of An Ultra-Fast Light-Reactive Lens?

Obviously, the dramatic speed is the benefit that differentiates these lenses from anything else on the market. But there's more to these lenses than groundbreaking pace from dark to clear.

First, you don't have to sacrifice any of the benefits you enjoy with their standard counterparts to enjoy revolutionary fade-back speed.

Second, ultra-fast light-reactive lenses offer a collection of unique benefits all to themselves.

So what exactly are the benefits of this new breed of photochromic?

Let's find out.

8 BENEFITS OF ULTRA-FAST PHOTOCHROMICS

1. Convenience

By quickly adapting to changing light conditions, ultra-fast light-reactive lenses keep up with today's fast-paced lifestyle. This takes the indoor-outdoor convenience factor of photochromics to a whole new level. This is a major benefit for people who move between indoor and outdoor environments throughout the day, as well as for outdoor enthusiasts constantly moving between bright and shaded areas.

2. Aesthetics:

Let's face it, we all want to look our best, right? Because they return to clear so much faster, patients don't have to linger in that awkward, half-tinted phase when coming inside. Clear looks better, and with ultra-fast photochromics, your patients spend more time in the clear zone than the creepy one.

3. 100% UV Protection

Ultra-fast light-reactive lenses block 100% of UVA and UVB radiation. This is a great point to mention when talking to patients concerned with their eye health, or parents considering a light-reactive lens for their child.

4. Blue Light Filtration

Outdoors in their darkened state, these lenses deliver exceptional filtration of blue light from sun and screens. Returning indoors, the lenses return to clear but the defensive properties hold strong, reducing exposure to blue light from digital screens, LED and CFL lighting.

ULTRA-FAST PHOTOCHROMIC BENEFITS

5. Longer Performance Lifespan

When a person doesn't have to swap out their lenses each year, it puts a little money back in their pocket. And when you provide your patients a better experience by providing them longer-lasting lenses, you're more likely to earn their business again. Considering it costs 5x more to acquire a new patient than retain an existing one, and a 5% increase in patient retention can yield as much as a 95% increase in profits*, you see the value of longer performance lifespan to the practice.

6. Safety

Ultra-fast photochromic lenses enhance safety for those reliant on strong prescriptions. When wearers go inside but their glasses remain dark, their natural tendency is to remove the glasses, which compromises their vision. A lens that starts fading back the second you walk indoors eliminates that need.

7. Fast Activation

Fast fade-back lenses activate more rapidly than standard lenses. That means more comfort due to less time in bright outdoor conditions.

8. Glare Reduction

Ultra-fast light-reactive lenses reduce glare as they darken, making for better, more comfortable viewing in high-glare environments.

* "Don't Spend 5 Times More Attracting New Customers, Nurture the Existing Ones," September 12, 2018,Forbes.com https://www.forbes.com/sites/jiawertz/2018/09/12/dont-spend-5-times-more-attracting-new-customers-nurture-the-existing-ones/#1d3a8c135a8e

"These lenses set a new standard in light-reactive lens performance and should be a first choice for any patient interested in a photochromic."

Chapter 3: Who's the Ideal Patient for An Ultra-Fast Light-Reactive Lens?

With any lens or enhancement, pinpointing a perfect candidate comes down to knowing the person on the other side of the dispensing table. This is where your experience, patient questionnaire, and a thorough discussion come into play.

Armed with specific types of patient information, you'll be able to clearly identify an ideal candidate and the ultra-fast photochromic that best meets their needs.

The following sections will help match patient priorities, occupation, and lifestyle factors to a specific ultra-fast photochromic. Keep in mind, these are suggestions. Your experience, intuition, and patient responses will obviously be the deciding factor on which lens to recommend and whether a patient is a good fit for a light-reactive lens.

PRIORITIES

Weighing up priorities can help you choose between different types of photochromics for different patients. People seeking the fastest possible fade-back speed and clearest indoor appearance are prime candidates for an ultra-fast lens like SunSync Elite. Those looking for extra darkness outdoors and in-car color retention, but still want fast fade-back speed would be better suited for an ultra-fast, extra reactive lens like SunSync Elite XT.

The following table highlights common patient priorities and which ultra-fast light-reactive lens best meets them:

Top Priority	Ultra-Fast Lens to Recommend
Fade-back Speed	sunsync Elite
Indoor Clarity	sunsync Elite
Outdoor Darkness	sunsync Elite XT
In-car Color Retention	sunsync Elite XT
Activation Speed	sunsync Elite OR sunsync Elite XT
UV Protection	sunsync Elite OR sunsync Elite XT
Blue Light Filtration	sunsync Elite OR sunsync Elite XT

OCCUPATION

A patient's occupation can be a determining factor in their fit as a photochromic wearer. Due to their versatility and performance, the ultra-fast variety are ideal for most job sites. A few immediately come to mind, but you can likely think of many more.

Working from Home: For many, the home has become the office. This change in environment has resulted in an increase in screen time and a need for breaks outside. A fast-changing lens allows people to quickly step outside for a little sunlight with 100% UV protection before coming back in to kick off a big video presentation with the confidence of clear lenses and solid blue light defense.

Recommendation: SunSync Elite for fast fade back and near-clear indoor appearance.

Construction: The ultra-fast activation and fade-back speeds are perfect for a variety of construction fields where people spend their days shifting from inside to outside and requiring outstanding visual clarity in both environments. And when you combine a safety lens with an ultra-fast photochromic, it's a hard second-pair suggestion to pass up.

Recommendation: SunSync Elite XT for darker outdoor color, great visibility, and in-car color retention for moving between job sites.

Dining: Waiters, bussers, hosts and hostesses make their living by providing fast service. Rapidly moving from a dim indoor dining area to a bright, outdoor patio requires a lens that keeps pace and provides clear vision without pause.

Recommendation: SunSync Elite for optimal indoor clarity and fastest fade back.

LIFESTYLE

An ultra-fast photochromic's quick adaptability to changing conditions makes them well-suited for patients who enjoy a variety of different lifestyle activities:

Outdoor Enthusiasts: Whether running, biking, hiking, or kayaking, athletes constantly shifting from bright to shaded conditions need a lens that keeps up with them and provide precise, clear vision for comfort and safety.

Recommendation: SunSync Elite XT for fast adaptation with extra-dark outdoor color and comfort.

Students: An ultra-fast lens that helps improve visual performance and appearance, while combatting blue light from digital screens, is a perfect fit for students from elementary to graduate school.

Recommendation: SunSync Elite for personal appearance and excellent blue light filtration.

Do-It-Yourselfers: When paired with a safety lens, an ultra-fast photochromic offers the visual clarity, comfort, and protection you need when measuring, drilling, and cutting—especially when moving from bright to dark environments or vice-versa.

Recommendation: SunSync Elite or SunSync Elite XT would both be excellent choices for great vision, comfort, and fast adaptability to changing environments.

"Setting realistic expectations about performance can be the difference between repeat patients and returned glasses."

Chapter 4: Setting Realistic Expectations

As is the case with all light-reactive lenses, setting realistic expectations about performance can be the difference between repeat patients and returned glasses.

Ultra-fast light-reactive lenses offer phenomenal benefits as discussed throughout this guide. But the standard processes by which all photochromic lenses activate and deactivate are susceptible to external influences.

Darkness, clarity, and reaction speeds can all be influenced by factors such as ambient temperature, weather conditions, and time of year.

Since ultra-fast light-reactive lenses are differentiated by fade-back speed, let's take a look at factors that can impact their ability to change from dark to clear in seconds.

INFLUENTIAL VARIABLES

Ambient Temperature:

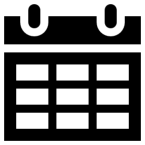
Temperature is perhaps the most common impact to light-reactive lens performance. Hot temperatures can speed up fade-back times but inhibit darkness. Cold temps can slow down fade back while increasing outdoor darkness.

Geography:

Southern states that are closer to the equator receive more UV and hotter temperatures, so these regions would enjoy the benefit of quicker fade-back speed. Conversely, inhabitants of colder, more northern states may experience a dip in fade-back speed, but darker color during winter months.

Time of Day:

Mornings are cooler than afternoons. So, the lenses will return to clear quicker in the warmer afternoon hours.



Time of Year:

Fall and winter months are colder, so the lenses may get a little darker and stay darker longer during these times of year. The warmer spring and summer months produce slightly faster fade-back speeds.

"Pointing out the deeper benefits of ultra-fast fade-back speed helps transition a patient from wanting these lenses to needing them.."

Chapter 5: Dispensing Tips for Ultra-Fast Light-Reactive Lenses

So, now you know the features, benefits, and technological advances that make ultra-fast light-reactive lenses a game-changing addition to the industry. But, what's the best way to pass that information along to your patients?

This chapter will focus on simple ways to win over first-time photochromic wearers, or bring back patients who swore off them after a poor experience with their old lenses.

As with any light-reactive lens, a good rule of thumb is to keep the science simple. As interesting as we may find the technology, patients don't care. They just care that it works. Think of it this way. When shopping for a new cell phone, do you care how the processor makes it fast, or do you just care that it provides the fastest, smoothest, best experience when streaming, shopping, posting, liking, and sharing?

A 5-PHASE APPROACH TO DISPENSING SUCCESS

1. Identify An Ideal Candidate:

As previously discussed, use your skills and understanding of each patient to assess whether their priorities and lifestyle match the features and benefits of an ultra-fast photochromic. Refer back to chapter three in this guide for a refresher if necessary.

2. Demonstrate the Difference:

Often, seeing one lens return to clear in less than 60 seconds while the other remains tinted for several more minutes is all a patient needs to say yes to an ultra-fast photochromic. SunSync Elite demonstration lorgnettes are available for this specific purpose. If you don't have a lorgnette, using two pairs of glasses with the different photochromics works just as well.

3. Dig into the Deeper Benefits:

Primarily, people are looking for three basic things out of life: more time, money, and confidence. Ultra-fast light-reactive lenses offer each:

- **Time:** Whether running errands, meeting with clients, or grabbing a quick bite, having a light-reactive lens that changes on the fly allows a person to go about their day without delay.

- **Money**: With a longer performance lifespan, patients won't have to dig into their pocket as frequently. This doesn't mean they won't get another pair next year, nor does it mean you shouldn't recommend it again in 12 months time. Technology upgrades, material extensions, and color additions are of interest to patients year after year. Also, as a multipurpose lens, parents won't have to fork out every time a child loses track of a second pair.

- **Confidence**: By clearing up quickly rather than lingering in that half-tinted phase, your patients look great and feel more confident in their appearance whether they're on a date, in a meeting, or out with friends.

4. Share Success Stories:

Whether they're your own or relayed to you by patients, personal anecdotes and success stories add a huge amount of credibility to your recommendation. 97% of people look for reviews before purchasing these days.* And a positive review from their trusted eye care professional goes a long way in alleviating purchase anxiety and validating their choice to go with an ultra-fast photochromic.

5. Set Realistic Expectations:

As discussed in chapter four, setting realistic expectations around performance sets the stage for the best wearer experience. Remember, these performance variables are simply the lenses adapting to their environment. And on the theme of realistic expectations, light-reactive lenses of any kind should not be presented as a replacement for sunglasses. While they share benefits, each product provides their own unique qualities. Ultra-fast light-reactive lenses are an ideal recommendation for people seeking convenience, comfort, clarity, and defense against UV and blue light.

On the following page, you'll find a dispensing cheat sheet to print and keep on hand when recommending ultra-fast light-reactive lenses to patients.

* "20 online review stats to know in 2019", April 9, 2019,Qualtrix.com, https://www.qualtrics.com/blog/online-review-stats/

ULTRA-FAST LIGHT-REACTIVE LENSES DISPENSING CHEAT SHEET

Dispensing Checklist:

- ☐ Identify an ideal candidate.
- ☐ Demonstrate the difference.
- ☐ Discuss deeper benefits.
- ☐ Share success stories.
- ☐ Set realistic expectations.

Priority Reference Chart

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LIGHT-REACTIVE LENSES

Thank you for reading the *Optician's Ultimate Guide to Light-Reactive Lenses*. If you haven't done so already, be sure to read *The Optician's Ultimate Guide to Extra Reactive Light-Reactive Lenses*, and *The Optician's Ultimate Guide to Standard Light-Reactive Lenses.*

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