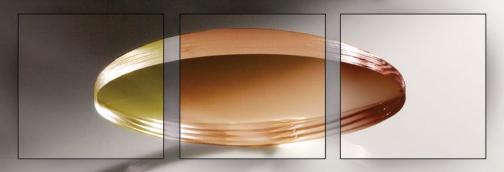
# The ART & SCIENCE of







## **TRANSITIONS DRIVEWEAR**

While everyday eyewear and sunwear are vital tools in our quest towards optimum vision, today's modern world demands more. In the past, clear eyewear was considered adequate. In bright light conditions, polarized sunwear was the best thing available. This is no longer true. Today, our lives are strongly influenced by the automobile, which has transformed the way we experience the world when we are outdoors.









Sunwear becomes top fashion

Danger of UV light recognized

Sports and

Driving becomes outdoor lifestyle an integral part of life

## DRIVEWEAR®







Progressive lenses introduced

1st plastic photochromic

Polarized Rx lens introduced

## TRANSITIONS DRIVEWEAR

a new lens category created

## **SUNWEAR**

Sunwear predates clear eyewear, historically. Early man, especially those found in areas of intense snow glare, formed early sunglasses by cutting narrow slits into thin-carved tusks to protect their eyes from blinding glare.

Much later, the first prescription sunglasses were made from colored glass, then progressed to tinted plastic lenses. Different colors were chosen for different activities, in an effort to maximize outdoor vision for a specific task. The limitation was that the lenses could only be one color, and the wearer could only have optimal vision in a narrow range of light conditions. Traditional sun lenses had to be very dark, and while they may have provided some comfort in bright light, they did not protect from blinding or reflected glare.

Polarized lenses were a great step forward in the evolution of sunwear. Not only do these lenses block out bright light, they also block out intense, blinding and reflective glare. These lenses have become increasingly popular with the introduction of high quality prescription polarized lenses such as NuPolar® lenses.

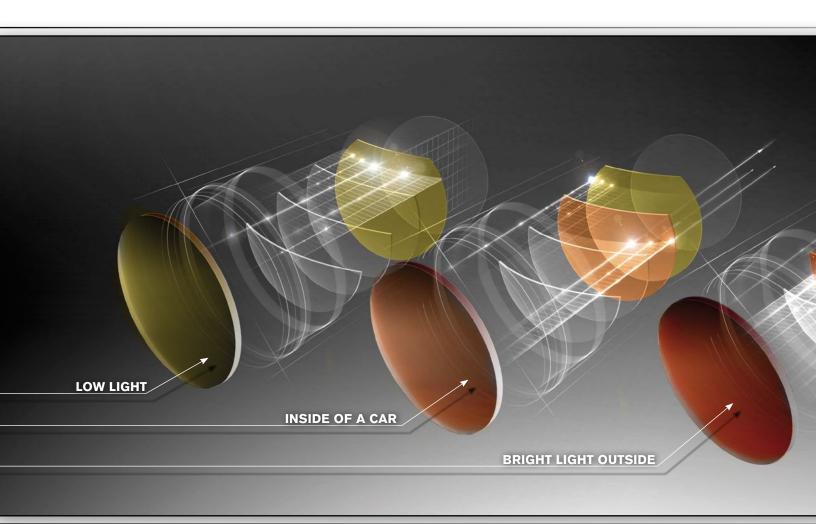
Traditional eyewear and sunwear serve the driving lifestyle with some shortcomings. Advanced photochromic eyewear, such as Transitions Signature™ and Transitions Vantage™ lenses, do not get dark in the car because the windshield blocks the UV light needed to activate their photochromic response. Transitions XTRActive® lenses have some moderate activation behind the windshield, but since they are not polarized, they do not block blinding glare. Traditional polarized lenses block dangerous glare, but do not adapt to varying light conditions. A third category of lenses is needed in our modern, automobile-centered world. Transitions Drivewear.

Transitions Drivewear sun lenses are capable of sensing and reacting to varying light conditions, both outside and behind the windshield of the car. From overcast conditions, to bright sunlight accompanied by blinding glare, Transitions Drivewear lenses provide the wearer with the ideal solution.

Transitions Drivewear sun lenses darken and change color through photochromics which are stimulated by both visible and UV light, and provide glare protection through polarization. By combining the strengths of polarization with Transitions® Photochromic Technology, Younger Optics and Transitions Optical, Inc. have developed the lens of tomorrow, Transitions Drivewear.

# THE TRANSITIONS DRIVEWEAR®

This lens is powered by using two of the most advanced technologies found in the eyeglass industry today - Transitions\* Photochromic dyes and NuPolar\* polarization technology.



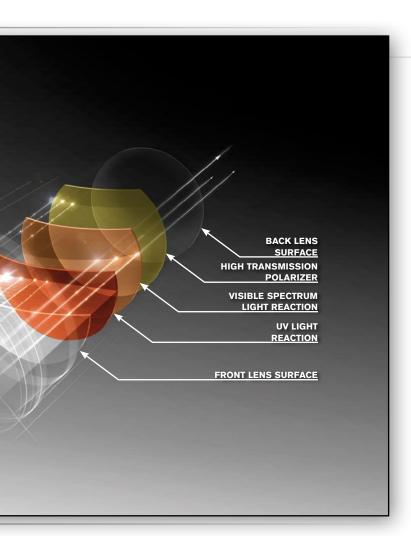
## TRANSITIONS PHOTOCHROMIC TECHNOLOGY

The photochromic properties of Transitions Drivewear sun lenses represent a breakthrough. In the past, photochromics responded only to UV light intensity. Upon exposure to UV light, the molecular structure of typical photochromics, such as the naphthopyrans, will change orientation and absorb light. Windshields of cars block UV light; therefore, conventional photochromics won't work inside the car.

The technology breakthrough needed for Transitions Drivewear was to find an array of molecules that would activate in visible light, not just UV light. This would allow for reaction of the molecules behind the windshield of a car.

Younger Optics, the maker of the lens, teamed up with Transitions Optical, Inc., one of the foremost innovators of photochromic technologies, for the latest developments in visible- and UV-activated dyes, to actualize the Transitions Drivewear sun lens.

## **ENGINE**



## **NUPOLAR TECHNOLOGY**

The polarization technology of Transitions Drivewear also represents a significant breakthrough in the use of polarization. Typically, efficient polarization by absorption only occurs when there are a large quantities of absorbers present; that is, when the lenses are dark. While this is desirable for the times when there is bright sunlight, it does not address lower light conditions, particularly during overcast weather. Transitions Drivewear sun lenses feature a high efficiency polarizer that provides excellent polarizing properties never found before in such a contrast-enhancing, light color. This was only achieved by pushing polarized manufacturing technologies to new levels of exceptional performance and light transmittance.

## **SYNERGY:**

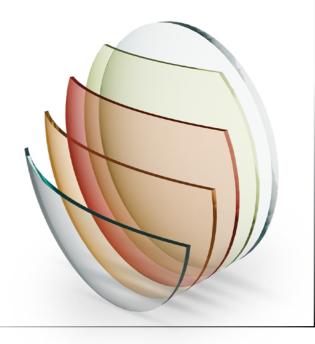
# COMBINING TRANSITIONS AND NUPOLAR TECHNOLOGIES

Transitions Drivewear lenses use advances in Transitions® Photochromic Technology and breakthroughs in Younger Optics' NuPolar® polarizing technology to create a unique new product.

Other attempts have been made to combine polarization and photochromics. These attempts did not work because the properties of the lens were not designed specifically to make the two technologies work together in a complimentary and synergistic way. The resulting products did not utilize either technology to its fullest potential or achieve the desired visual improvements.

Transitions Drivewear sun lenses go beyond these initial attempts by using each of these specific technologies in ways that enhances each one's capabilities.

Transitions Drivewear's combination of technologies is so advanced and novel that patents have been granted on this invention in many countries.



# TRANSITIONS<sup>TM</sup> **DRIVEWEAR® EFFECT**

The human eye is a wonderfully designed instrument to collect visual information. Transitions Drivewear's three different activation states have all been designed to maximize the eye's natural abilities in each of the different light conditions encountered both outside in direct light and behind the windshield of a car.

#### **OVERCAST / LOW LIGHT CONDITIONS**

At low lighting conditions, Transitions Drivewear sun lenses provide high transmission of light to maximize the total information to all the eye's visual receptors. This results in maximum visual acuity at this low lighting level. The high contrast polarizer removes glare that would otherwise destroy vision in low light conditions. In this stage, Transitions Drivewear sun lenses are a high contrast olive green color. As patient testimonials verify, there are no better lenses for driving under low light, overcast conditions.

## BRIGHT LIGHT BEHIND THE WINDSHIELD OF A CAR

During bright light conditions, behind the windshield of a car, Transitions Drivewear sun lenses darken to copper to control light intensity for optimum visual acuity. Many feel copper is the optimum color for a driving lens because it promotes preferential activation of the eye's red cones (and to a lesser extent, green cones), resulting in comfortable, crisp vision at these higher light levels. Transitions Drivewear's high-efficiency polarizer is absolutely essential

when driving, because it blocks out blinding glare, one of the most dangerous of all driving hazards. This behindthe-windshield response against bright light *and* glare is unique among Transitions lenses.

#### **BRIGHT LIGHT OUTDOORS**

In outside bright light conditions, the eyes' visual receptors, the rods and cones, can easily get "oversaturated" with light. In bright direct sunlight, the Transitions Drivewear sun lens achieves its maximum dark brown color, which is designed for maximum filtration of this excess light. This means Transitions Drivewear is a great sunwear lens for more than just driving. Younger Optics has received many patient testimonials confirming that these unique polarized, photochromic sun lenses can make any outdoor activity more enjoyable.

## **OVERCAST**

## LOW LIGHT CONDITIONS HIGH CONTRAST OLIVE GREEN COLOR

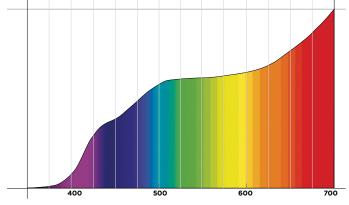
#### **COLOR**

designed to maximize useful light information reaching the eye

#### **POLARIZED**

to remove glare that would otherwise destroy vision in low light conditions





LIGHT TRANSMISSION IN LOW LIGHT CONDITIONS

## **DAYLIGHT**

## **DRIVING CONDITIONS COPPER COLOR**

## **COLOR**

## **POLARIZED**

designed to remove excess light and provide good traffic signal recognition; highlighting the reds and greens

to remove glare for safe driving vision

## **BRIGHT LIGHT**

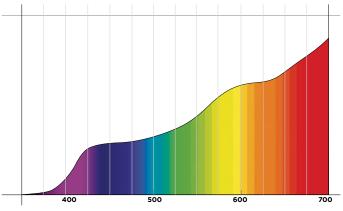
## **OUTSIDE CONDITIONS BROWN COLOR**

COLOR POLARIZED

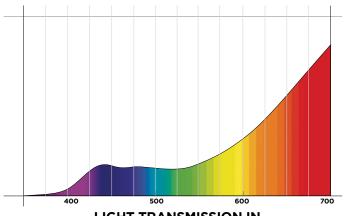
designed for maximum filtration to provide maximum of excess light so that the eye does not get saturated

comfort in high light conditions





**LIGHT TRANSMISSION** IN THE CAR



**LIGHT TRANSMISSION IN BRIGHT LIGHT CONDITIONS** 

# TRANSITIONS<sup>TM</sup> **DRIVEWEAR® MARKETING & TARGET GROUP**

Worldwide, there are nearly 1 billion drivers and the number is growing every year. Anyone of driving age that walks into the optical shop is a great candidate for Transitions Drivewear sun lenses. Though anyone can benefit from the improved vision delivered by Transitions Drivewear lenses, these are the target patients who should always have the benefits of Transitions Drivewear sun lenses explained to them:



## COMMUTERS

Patients who have a significant commute to and from work each day. If their commute times are in the early morning and late afternoons when the sun is low on the horizon, the need for Transitions Drivewear is even greater.









## **PROFESSIONAL DRIVERS**

Patients who make their living driving a motor vehicle, such as truck drivers, taxi drivers, travelling salespeople, bus drivers, ambulance drivers and law enforcement officers, simply should not be without the benefits of Transitions Drivewear lenses.



## **MOMS & DADS**

The driving task becomes even more challenging with children in the car. Additionally, the consequences of an accident become even greater. Whether driving to the store, soccer practice, or school... these parents need the driving edge brought by Transitions Drivewear sun lenses.











## **ELDERLY**

Elderly drivers may experience driving challenges such as slower reaction times and may be unable to turn their heads as quickly as younger drivers. Transitions Drivewear sun lenses offer advantages that can help. Elderly drivers love the visual comfort, glare blocking, and pleasing contrast brought by Transitions Drivewear sun lenses.





## **EVERY DRIVER NEEDS**



Transitions Drivewear sun lenses have the potential to greatly improve the optical industry and your business. With clearly definable features and benefits, Transitions Drivewear sun lenses are designed for the target market that includes nearly everyone: automobile drivers.

# TRANSITIONSTM DRIVEWEAR®

Younger Optics has received many positive testimonials from patients about their Transitions Drivewear sun lenses. As you can see, these lenses are favored not only for driving, but for all types of outdoor activities!



I've enjoyed my Transitions Drivewear prescription lenses for about 5 months so far. Yesterday was the test. We launched the boat in foggy conditions at daylight. Kept my glasses on the whole time with NO vision problems navigating the river. When the fog lifted, we found these fish!! Thanks for an awesome product.

Mark Uyehara Crestview, FL



I have not been able to drive for several years because of the bright light. But after purchasing my Transitions Drivewear, I can drive to church again. I also decided to purchase a new outfit to match my new sunglasses! Not bad for a young lady who is 77!

## Billie Jean Ransom Birmingham, AL



I like them very much. I noticed they really highlighted orange road construction signs so I had a set of Transitions Drivewear sun lenses made for my Randolph Ranger shooting glasses for clay target shooting. The clays are usually high visibility orange and they are much easier to see with these lenses.

**Edmund Casto** Somers Point, NJ



These are great for driving in all conditions, even when the bright sun reflects off the snow we get here in Michigan. I spend a lot of time outdoors and wear them all the time. They reduce glare and make it easier to see wildlife and the contours of the land when covered with snow.

## **Gary McMillan**

Battle Creek, MI



I love my Transitions Drivewear shades. I actually have two Rx pair, one with only a distance correction and one with my full Rx. I always get compliments on how sharp they look, and they are awesome for biking, hiking, indoor and outdoor sports... and of course driving. Thanks so much!

Mimi Sander Boulder, CO



About a year ago I asked if the Transitions Drivewear sun lens would be sufficient for a planned trip to Antarctica. I was assured they would handle the bright sun and reflections off the snow and ice. In January 2011 I finally got to Antarctica and I couldn't have been happier with my Transitions Drivewear sunglasses. They were comfortable on sunny days, snowy days, rainy days, and overcast days. Thanks for making such a marvelous product.

## **Daniel Hope**

Athens, GA

## PATIENT TESTIMONIALS



I have never had sunglass lenses better than these. This year I got my first Transitions Drivewear Image\* progressive lenses and I swear that Transitions Drivewear has me hooked and I will never use anything else. I am recommending them to the 26,000 members of the Ulysses Motorcycle Club here in Australia as must-have eyewear for riding. The difference between Transitions Drivewear and normal sunglass lens technology is amazing. Congratulations and thanks for bringing such a superior product to the market.





I have three pairs of Transitions Drivewear sun lenses. The one in the photo I wear exclusively to play baseball. I had Lasik surgery eight years ago and I was looking for a very good sun lens. This is the perfect commodity and offers excellent protection for eyes. I've had them for two years and it has been the best investment in sunwear I've made in my life.

Wilmar Ortiz

San Juan, PR



I love my Transitions Drivewear sunglasses; I wear them all of the time. Once, driving in a rainstorm, I thought to myself, it's crazy to be wearing sunglasses while there is very little sun out. But when I took off my Transitions Drivewear I couldn't see anything at all. So I put them back on and the road was much clearer. I have been an optician for 14 years, and I always recommended them.

**Stacey Scott** Dodge City, KS



I work on a Snorkel Cruise boat for Pacific Whale Foundation on Maui, Hawaii. The Transitions Drivewear sun lenses work great on the boat in the bright sun on the ocean. I'm delighted with them.

**George Morris** 

Battle Creek, MI



In the past I had to keep changing glasses from my "blended prescription tri-focal" to non-prescription sunglasses. Now I can wear the same glasses in all conditions and actually see. Now my headaches are gone. I wear my Transitions Drivewear sun lenses all of the time, whether hiking, working under my hydroponic grow lights, hiking in the mountains, or just scoping out the beach.

**David Ostler** 

Honolulu, HI



Being a truck driver, I felt it was an excellent investment to get glasses that block the glare of the sun in your vehicle when driving. I no longer have to use my sun visor to block the sun when driving. My new sun lenses were perfect when my wife and I went to Hawaii for our 25th anniversary.

Melvin L. Duncan

Blue Springs, MO

# FOR MORE INFORMATION AND TECHNICAL DETAILS, VISIT WWW.DRIVEWEARLENS.COM

#### TRANSITIONS' DRIVEWEAR' SUN LENS AVAILABILITY

	PRESCRIPTION RANGE	BASES	ADD RANGE
HARD RESIN			
Single Vision	-9.00 to +7.50	1, 2, 3, 4, 5, 6, 7, 8	-
Flat Top 28	-8.00 to +6.00	2, 4, 6, 8	1.00 - 3.00 in 0.25 steps
IMAGE* Progressive	-8.00 to +6.00	2, 4, 6, 8	1.00 - 3.00 in 0.25 steps
POLYCARBONATE			
Single Vision	-8.00 to +6.00	2, 4, 6, 8	-
IMAGE* Progressive	-9.00 to +7.00	2, 4, 6, 8	1.00 - 3.00 in 0.25 steps
Camber™ Lens Blank	-	.05, 2, 3, 4, 5, 6, 7, 8	-
TRILOGY® TRIVEX®			
Single Vision	-7.00 to +7.50	2, 4, 6, 8	-
Finished Plano w/backside ARHC	Plano	6	-

### CAUTION:

Transitions Drivewear sun lenses should not be used for night driving.

### CAUTION:

As with all photochromic lenses, Transitions Drivewear will become much darker in cold, sunny environments, and may limit visibility in extremely cold weather. Use special caution when operating open air vehicles such as convertibles, motorcycles, snowmobiles, or all terrain vehicles, or engaging in activities such as skiing.

## TRANSITIONS DRIVEWEAR SUN LENSES BLOCK 100% OF UVA/UVB RAYS



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