**Advanced Interlayer Solutions** 

# Automotive Glazing



Trosifol<sup>®</sup> SentryGlas<sup>®</sup>



# Automotive Glazing

**KURARAY'S ADVANCED INTERLAYER SOLUTIONS DIVISION** is at the forefront of the glazing industry, providing the automotive sector with innovative solutions for safer, more efficient, and more comfortable vehicles.

Our state-of-the-art products underpin the development of lightweight, durable, and comfortable windshields, sunroofs and sidelites, offering superior head-up display clarity, and acoustic performance for enhanced passenger comfort.

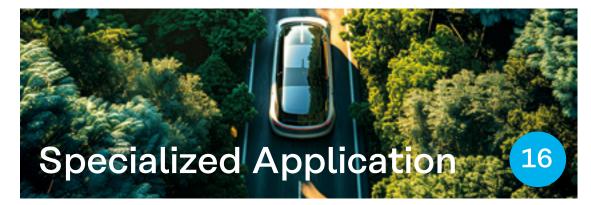
Explore the possibilities of our Advanced Interlayer Solutions and join us in shaping the future of glazing technology.

## Contents









## Windshields

# Superior performance for your windshields

### **EXPERIENCE SUPERIOR QUALITY AND DURABILITY** in Automotive Safety Glazing for windshields with Trosifol® Clear

PVB. Our product offers superior durability and excellent penetration resistance, meeting all requirements of ECE R43 and ANSI/ SAE Z26.1-1996.

Trosifol Clear<sup>®</sup> is available in various versions, tailored to meet the demands of all conventional lamination production processes. With multiple adhesion grades, you can enjoy optimum laminate performance. Our product provides low odor with excellent edge stability and can be supplied either interleaved or refrigerated.

#### PRODUCT HIGHLIGHT

Trust Trosifol Clear® to provide the highest level of protection while enhancing the driving experience.

#### PRODUCT

Trosifol<sup>®</sup> Clear V200/V500

#### PRODUCT

**Trosifol® Shadeband** 

V510

#### PRODUCT HIGHLIGHT

Enhance safety and comfort with Trosifol® Shadeband laminated safety glass.

#### **EXPERIENCE THE SUPERIOR COMBINATION OF**

**SAFETY AND COMFORT** with safety glass laminated with Trosifol® Shadeband. Like Trosifol® Clear, our shadeband product offers excellent penetration resistance and meets all requirements of ECE R43 and ANSI/SAE Z26.1-1996.

Trosifol<sup>®</sup> Shadeband also is available in different surface roughness levels and adhesion grades to meet the needs of a wide variety of customer processes. And with the addition of a shadeband, Trosifol<sup>®</sup> Shadeband provides superior driver and passenger comfort by reducing glare and enhancing visual clarity. Choose from blue, green, or grey shadeband colors to suit your preference.



### Acoustic

**TROSIFOL®** ACOUSTIC IS THE SOLUTION to the automotive industry's need for improved sound damping properties. Unlike conventional laminated windshields and tempered sidelites, which have limited sound damping properties, especially between 1 and 6 kilohertz (kHz), the human ear's sensitive frequency range.

Trosifol® Acoustic PVB interlayer offers excellent sound insulation and since its launch two decades ago, it has proven a popular choice for automobile manufacturers.

With Trosifol<sup>®</sup> Acoustic, you can expect superior sound insulation while meeting all safety requirements. Additionally, Trosifol<sup>®</sup> Acoustic provides excellent resistance to ice flower formation, ensuring durable laminates that will last the lifetime of the vehicle. Trust Trosifol<sup>®</sup> Acoustic for a quiet, comfortable ride. PRODUCT

Trosifol® Acoustic V220

#### 

Trust Trosifol® Acoustic for a quiet, comfortable ride.

#### PRODUCT

Trosifol® Acoustic Shadeband

V230

PRODUCT HIGHLIGHT

Experience a quieter and visually comfortable ride with Trosifol® Acoustic

Shadeband.

Acoustic

**TROSIFOL® ACOUSTIC SHADEBAND** provides the perfect combination of acoustic benefits and visual comfort. Laminated safety glass incorporating Trosifol® Acoustic with a shadeband provides a more comfortable driving experience by reducing glare on sunny days. The shadeband is available in blue, green, or gray to match the aesthetics of your vehicle. With Trosifol® Acoustic Shadeband, you can enjoy improved sound insulation without compromising on style or safety.

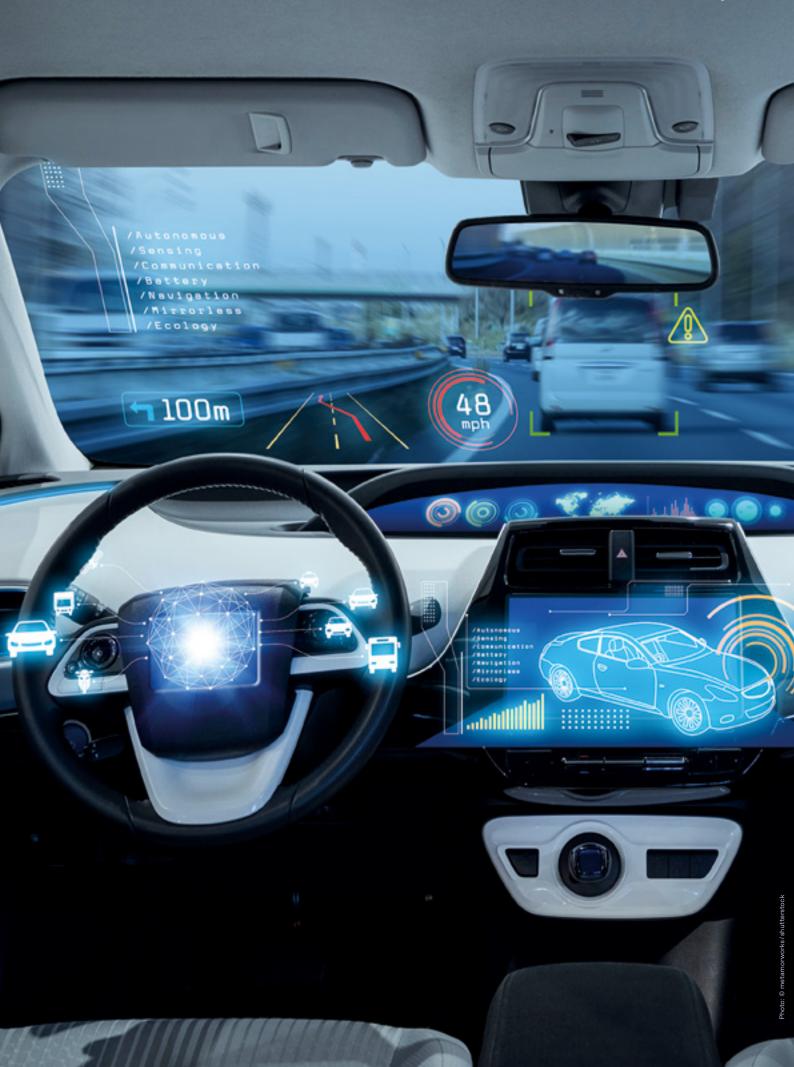
# Head-Up Display Clear

**THE TAPERED PROFILE OF WINDSHIELDS** laminated with Trosifol® The Wedge Monolayer allows the glazing to act as a combiner, overlapping the two reflections – one from the inside surface of the windshield and one from the outside surface – resulting in a high-quality image without ghosting.

The partial wedge design of Trosifol® The Wedge Monolayer allows for a thinner, lighter windshield construction compared to a full wedge profile. Additionally, the partial wedge design allows for longer rolls, easier roll handling, and improved sheet processing at the glass. With Trosifol® The Wedge, car manufacturers can offer their customers the benefits of Head-Up Display (HUD) technology while maintaining safety, comfort and style on the road.

Glazing the way: HUD clarity and windshield efficiency with innovative wedge design. PRODUCT

Trosifol® The Wedge Monolayer W20xx/W50xx



#### PRODUCT

Trosifol® The Wedge Shadeband

W21xx/W51xx

#### 

Enhance safety and comfort with Trosifol® Shadeband laminated safety glass: superior glare reduction in blue, green or grey.

# Head-Up Display

#### EXPERIENCE THE ADVANCED SAFETY AND COMFORT

**COMBINATION:** Trosifol® The Wedge Shadeband offers exceptional comfort and safety. Our shadeband product, like Trosifol® The Wedge Monolayer, satisfies all ANSI/SAE Z26.1-1996 and ECE R43 criteria while providing exceptional penetration resistance. To satisfy the requirements of a broad range of customer processes, it is also offered in various surface roughness levels and adhesion grades. Trosifol® The Wedge Shadeband, which has been added, reduces glare and improves visual clarity to provide enhanced comfort for drivers and passengers. To meet your preference, choose a shadeband color from blue, green or grey.

**TROSIFOL® THE WEDGE ACOUSTIC** combines excellent HUD image quality with superior acoustic performance. The acoustic version of Trosifol® The Wedge is based on the same formulation as our standard automotive Trosifol® Acoustic.

Comparing Trosifol® The Wedge Acoustic to a complete wedge profile, the partial wedge design enables a lighter and thinner windshield structure. This partial wedge shape also allows for longer rolls, simpler roll handling, and better sheet processing at the glass laminator.

Trosifol® The Wedge Acoustic is offered with a variety of roughness levels and adhesion grades to accommodate a wide range of laminating processes.

#### PRODUCT

Trosifol® The Wedge Acoustic W22xx

PRODUCT HIGHLIGHT



Invaluable when it comes to highest level of quiet, safe and comfortable driving experience.



### PRODUCT HIGHLIGHT

Optimize driving with Trosifol® The Wedge Acoustic Shadeband: clearer vision and reduced glare in stylish colors.

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Trosifol® The Wedge Acoustic Shadeband

PRODUCT

W23xx

offers all of the excellent HUD image quality, safety and durability of Trosifol<sup>®</sup> The Wedge Acoustic, but with the addition of a shadeband at the top of the windshield, to reduce glare and increase occupant comfort.

Available shadeband colors include blue, green and grey. Trosifol® The Wedge Acoustic Shadeband is offered with a variety of roughness levels and adhesion grades to accommodate a wide range of laminating processes.

#### BUTACITE G IS MADE FROM 100% RECYCLED PVB and is

specifically engineered for optimal yield and impact performance, ensuring high-quality laminates for both OEM equipment and aftermarket replacement glass. It is important for laminators and their customers to define and maintain appropriate visual acceptance standards to ensure consistent use of this environmentally friendly product. PRODUCT HIGHLIGHT

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Discover new paths: attitude meets sustainability.

PRODUCT

Butacite G GV100/GV101

### Sunroof

# Photo: © RISHAD - stock.adobe.com

# Improve driving experience with panoramic clarity

#### PRODUCT

Trosifol<sup>®</sup> Clear V200/V500

#### PRODUCT HIGHLIGHT

You can rely on Trosifol Clear® to improve your driving experience while offering the best possible protection. **ENHANCE YOUR CAR'S SUNROOF** with Trosifol<sup>®</sup> Clear PVB for superior safety and durability. Our product has exceptional robustness and outstanding penetration resistance, satisfying every ANSI/SAE Z26.1-1996 and ECE R43 criteria.

Several adhesion grades of Trosifol Clear® are available, each designed to satisfy the requirements of a standard lamination production process. Our product comes in both interleaved and refrigerated forms and has a minimal odor and excellent edge stability.

#### USE TROSIFOL® GREYS INTERLAYER TO IMPROVE OCCUPANT COMFORT AND THE VISUAL APPEAL OF YOUR CAR'S SUNROOF.

With the help of our innovative solutions, you can add an eye-catching hue to your laminated glass while still preserving the superior functional capabilities delivered by Trosifol<sup>®</sup> Clear.

Trosifol® Greys allows you to deploy visually appealing and functional glazing solutions that satisfy all ANSI/ SAE Z26.1-1996 and ECE R43 criteria for penetration resistance and light transmittance.

#### PRODUCT

**Trosifol® Greys** V705/V550/ V800

#### PRODUCT HIGHLIGHT

Trust Trosifol® Greys to deliver superior performance, stunning visual effects and increased occupant comfort in your vehicle.

#### 

Trust advanced sound-protection film to enhances passenger comfort and safety.

#### PRODUCT

Trosifol® Acoustic Grey

V820

## Acoustic

#### TROSIFOL® ACOUSTIC GREYS IS A SPECIAL

**SOUND-PROTECTION FILM** for sunroofs. It is optimized to largely exclude the frequencies and ambient noise created by moving vehicles to increase passenger comfort.

The multilayer film not only offers sound-absorbing properties, but also delivers the same level of safety as standard PVB films for the exacting requirements of Automotive Glazing.

#### TROSIFOL® NATURAL UV IS SUITABLE FOR VIPV (VEHICLE-INTEGRATED PHOTOVOLTAICS) SUNROOFS

providing benefits for solar energy harvesting by vehicles. With high UV permeability, this PVB film allows for enhanced solar energy capture for vehicle's photovoltaic cells and increased solar power generation. Additionally, the PVB layer provides impact resistance, protecting against potential damage. **PRODUCT** Trosifol<sup>®</sup> Natural UV

V260

## Sidelites

# Superior noise damping and peripheral vision clarity

#### UPGRADE YOUR VEHICLE'S SIDELITES WITH

**TROSIFOL® CLEAR PVB** for superior safety and clarity. Our product provides exceptional robustness and exceptional resistance to penetration, satisfying all ANSI/SAE Z26.1-1996 and ECE R43 criteria.

Trosifol Clear® is available in various adhesion and roughness grades, which are designed to satisfy the requirements of all traditional lamination production methods. Our product can be given either interleaved or refrigerated and offers low odor and excellent edge stability. PRODUCT

Trosifol<sup>®</sup> Clear

#### DDO

#### PRODUCT HIGHLIGHT

Trosifol Clear® provides the maximum level of protection while improving your driving experience.

#### PRODUCT

Trosifol® Acoustic

V220

#### PRODUCT HIGHLIGHT

Trust Trosifol® Acoustic for a quiet, comfortable ride.

#### **TROSIFOL®** ACOUSTIC IS THE SOLUTION to the automotive industry's need for improved sound damping properties. Unlike tempered sidelites, which have limited sound damping

Unlike tempered sidelites, which have limited sound damping properties between 1 and 6 kilohertz (kHz) – the human ear's sensitive frequency range – Trosifol® Acoustic PVB interlayer offers superior sound insulation. Since its launch two decades ago, Trosifol® Acoustic has been a popular choice for automobile manufacturers in combatting noise penetration in vehicles.

With Trosifol<sup>®</sup> Acoustic, you can expect superior sound insulation while meeting all safety requirements. Additionally, Trosifol<sup>®</sup> Acoustic provides excellent resistance to ice flower formation, ensuring durable laminates that will last the lifetime of the vehicle. Trosifol<sup>®</sup> Acoustic is offered in several levels of roughness and adhesion grades to accommodate a wide variety of lamination processes. It is available as a clear sheet or with a shadeband for reduced glare.





#### A SPECIAL SOUNDPROTECTION FILM FOR SIDELITES IS TROSIFOL® ACOUSTIC GREYS.

To improve passenger comfort, it is tuned to primarily block out background noise produced by moving cars and is available in a broad range of different gray tints to meet your expectations (1-57% visible light transmission).

In order to meet the strict criteria of Automotive Glazing, the multilayer film not only has sound-absorbing qualities but also provides the same level of safety as regular PVB films.

#### PRODUCT HIGHLIGHT

Count on cutting-edge sound-absorbing film in Automotive Glazing to improve passenger comfort and safety.

#### PRODUCT

Trosifol® Acoustic Greys V820



## ENHANCE THE VISUAL APPEAL AND OCCUPANT

**COMFORT IN YOUR CAR'S SIDELITES** with Trosifol® Greys interlayer. Our innovative product allows you to include a layer of attractive tint in your laminated glass, while maintaining the same excellent properties as if produced with Trosifol® Clear.

With Trosifol® Greys you can produce aesthetically pleasing and functional glazing solutions which meet all requirements of ECE R43 and ANSI/SAE Z26.1-1996 for penetration resistance and light transmittance.

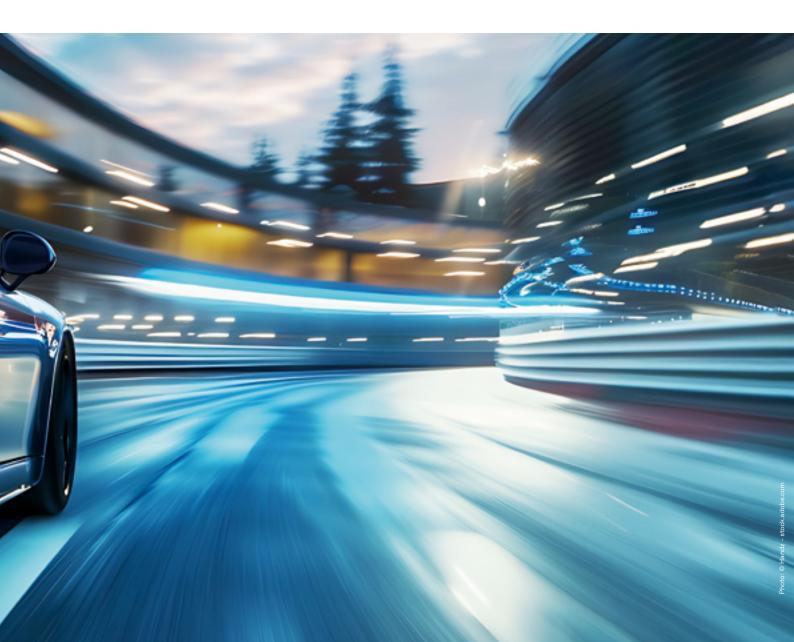
#### PRODUCT

PRODUCT

**HIGHLIGHT** 

Trosifol<sup>®</sup> Greys are known for their superior passenger comfort and overall aesthetic impacts.

> **Trosifol® Greys** V705/V550/ V800



# Specialized Application

# Shaping tomorrow's glazing

## **Printed PVB** for Suproof

**TROSIFOL® SKYVIERA®** is a special PVB film and print which adds design and lighting function to any laminated roof glass. No limits - the print can be illuminated in any color & almost any design can be realized.

Depending on customer needs the print can be designed to be almost transparent or opaque in the off mode.

PRODUCT

Trosifol<sup>®</sup> SkyViera<sup>®</sup> V800 SV

#### PRODUCT HIGHLIGHT

For an unparalleled & customized ambient lighting experience.

# **Printed PVB**

#### PRODUCT

Trosifol<sup>®</sup> CamViera<sup>®</sup> V800 CV

#### OUR SPECIAL PVB & PRINT FILM FOR WINDSHIELDS

is a groundbreaking innovation designed to elevate car user experience by adding design options and advanced functionality. It ensures not only a safer driving experience but also enhances vehicle aesthetics with its cutting-edge technology and seamless integration in the windshield.



all

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# Contact



#### FOR FURTHER INFORMATION

on products from Kuraray, please visit www.kuraray.com. You can find further information on our Trosifol® and SentryGlas® products at www.trosifol.com.

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#### **WORLD OF INTERLAYERS**

Innovative solutions for **Automotive Glazing** 

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