

kuraray

trosifol™
world of interlayers



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TROSIFOL®

ARCHITECTURAL

LAMINATED GLASS INTERLAYERS



TROSIFOL™ - WORLD OF INTERLAYERS

Kuraray's Trosifol™ business is a leading global specialist in the development, manufacture and supply of PVB and ionoplast interlayers for laminated safety glass applications in the architectural, automotive and photovoltaic industries.

The evolution of the Trosifol™ & Glass Laminating Solutions (GLS) merger has resulted in consolidation of the Trosifol®, SentryGlas® and Butacite® product brands into a single brand: the new Trosifol™.

Trosifol™ offers the world's broadest portfolio of innovative glass-laminating solutions, including structural and functional interlayers for safety and security applications, sound insulation and UV protection. For decorative applications, it supplies colored interlayers, digitally printable films and other innovative products for interior design projects. Trosifol® UltraClear films exhibit the lowest Yellowness Index (YID) in the industry.

Trosifol® products give applications an expression of strength, clarity and their own character, delivering advanced capabilities that enable engineers, designers and architects to save energy, increase safety and build with greater design freedom. Applications range from automotive and other transportation glazing, to architectural and structural glazing - located overhead, underfoot, and all around some of the world's most interesting spaces.



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TRANSPARENCY AND SAFETY



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SAFETY HIGHLIGHTS

Safety Interlayers

- World market leader in the architectural sector
- Lowest yellowness index of all PVB films in the market
- Trosifol® PVB films available with different degrees of adhesion levels
- Exclusive manufacturer of SentryGlas®
- Research and development centers in each region

SAFETY ADDITIONAL INFORMATION

Applications & Recommendations

- For laminated safety glass products made of heat-strengthened or fully tempered glass, we recommend high adhesion, e.g. Trosifol® UltraClear (formerly known as Trosifol® BG R20) and Trosifol® Clear (Butacite®) with J adhesion.
- If there is a need for high adhesion on open edges we recommend Trosifol® UltraClear or SentryGlas®.

Safety Interlayers – Physical properties

| Type | Adhesion | Film thickness [mm] | Color | Light transmittance* [%] | UV transmittance* [%] | Solar absorption* [%] |
|----------------------|------------|---------------------|------------|--------------------------|-----------------------|-----------------------|
| Trosifol® Clear | medium | 0.38 | Clear | 88 | < 2 | 18 |
| Trosifol® Clear | low/medium | 0.76 | Clear | 88 | < 1 | 19 |
| Trosifol® Clear | medium | 1.14 | Clear | 88 | < 1 | 20 |
| Trosifol® Clear | medium | 1.52 | Clear | 88 | < 0.5 | 21 |
| Trosifol® Clear | medium | 2.28 | Clear | 88 | < 0.5 | 22 |
| Trosifol® UltraClear | high | 0.76 | UltraClear | 88 | < 1 | 20 |
| Trosifol® UltraClear | high | 1.14 | UltraClear | 88 | < 1 | 20 |
| Trosifol® UltraClear | high | 1.52 | UltraClear | 88 | < 0.5 | 21 |

Safety Interlayers – Dimensions

| Type | Adhesion | Film thickness [mm] | Roll widths [mm] | Roll length refrigerated [m] | Roll length PE interleaved [m] |
|----------------------|------------|---------------------|------------------|------------------------------|--------------------------------|
| Trosifol® Clear | medium | 0.38 | 600-3210 | 500/1000 | 400 |
| Trosifol® Clear | low/medium | 0.76 | 600-3210 | 500/1000 | 250 |
| Trosifol® Clear | medium | 0.76 | 600-3210 | 250/500 | 200 |
| Trosifol® Clear | medium | 1.14 | 600-3210 | 150/330 | 150 |
| Trosifol® Clear | medium | 1.52 | 600-3210 | 125/250 | 125 |
| Trosifol® Clear | medium | 2.28 | 600-3210 | 95/177 | 95 |
| Trosifol® UltraClear | high | 0.76 | 600-3210 | 250/500 | 250 |
| Trosifol® UltraClear | high | 1.14 | 600-3210 | 150/330 | 150 |
| Trosifol® UltraClear | high | 1.52 | 600-3210 | 125/250 | 125 |

* LSG with 2 x 4 mm Floatglass according EN 410 / ISO 9050

Further light, solar and heat parameters can be calculated with Trosifol™ WinSLT App.

Trosifol® Clear = L Adhesion / M Adhesion

Trosifol® UltraClear = N Adhesion

Not all products are available in all regions.

EXCEPTIONAL STRENGTH

Photo: © Ivan Baan - Museo Jumex, Mexico



STRUCTURAL & SECURITY HIGHLIGHTS

Structural & Security Interlayers

- Extraordinary post-breakage strength
- High film shear modulus
- Excellent edge stability
- Outstanding clarity
- Open edge design thanks to SentryGlas®

STRUCTURAL & SECURITY ADDITIONAL INFORMATION

Applications & Recommendations

- SentryGlas® is the best choice, with over 20 years of outdoor exposure, for open edge applications that require the very best edge durability and optics.
- SentryGlas® is recommended for applications that require the highest structural performance over a broad range of temperatures and loads.
- SentryGlas® Translucent White provides full structural performance along with a translucent white effect for privacy.
- For moderate design temperature we recommend Trosifol® Extra Stiff.
- For elevated design temperature we recommend SentryGlas®.
- SentryGlas® Xtra™ has the best optical performance in very thick laminates.
- We recommend SentryGlas® Xtra™ for multi-ply laminate assemblies as an adhesion promoter is no longer required.

Interlayer performance comparison

| Properties | Trosifol® Clear / UltraClear | | | Trosifol® Extra Stiff | | | SentryGlas® Ionoplast | | |
|----------------------------------------------------------------|------------------------------|----------|----------|-----------------------|----------|----------|-----------------------|----------|----------|
| | Good | Advanced | Superior | Good | Advanced | Superior | Good | Advanced | Superior |
| Post Breakage Performance at room temperature | ✓ | | | | | ✓ | | | ✓ |
| Post Breakage Performance at elevated temperature | ✓ | | | | ✓ | | | | ✓ |
| Structural Properties/ Coupling effect at room temperature | ✓ | | | | | ✓ | | | ✓ |
| Structural Properties/ Coupling effect at elevated temperature | ✓ | | | | ✓ | | | | ✓ |
| Clarity | | ✓* | ✓** | | ✓ | | | | ✓ |
| Sealant compatability/ Edge stability | ✓* | ✓** | | | ✓ | | | | ✓ |

* Valid for Trosifol® Clear
 ** Valid for Trosifol® UltraClear



Photo: © Sangpol Punnadeh - shutterstock.com

Conversion table MPa to kpsi

| MPa | kpsi | MPa | kpsi | MPa | kpsi |
|-----|-------|-----|--------|------|---------|
| 10 | 1.450 | 50 | 7.251 | 400 | 58.015 |
| 15 | 2.175 | 60 | 8.702 | 500 | 72.519 |
| 20 | 2.900 | 70 | 10.513 | 600 | 87.023 |
| 25 | 3.625 | 80 | 11.603 | 700 | 101.526 |
| 30 | 4.351 | 90 | 13.053 | 800 | 116.030 |
| 35 | 5.076 | 100 | 14.503 | 900 | 130.534 |
| 40 | 5.801 | 200 | 29.007 | 1000 | 145.037 |
| 45 | 6.526 | 300 | 43.511 | 1100 | 159.542 |



Trosifol™ GlasGlobal

For performing structural analysis for glass:
www.trosifol.com/trosifol-glasglobal



Trosifol™ WinSLT

For calculating the light, solar and heat parameters of glazing specifically containing films from the Trosifol™ product range:
<https://www.trosifol.com/de/trosifol-winslt-tool/>



Photo: © Goettsch Partners

Structural & Security Interlayers* – Physical properties

| Type | Adhesion | Film thickness [mm] | Color | Light transmittance*1 [%] | UV transmittance*1 [%] | Solar absorption*1 [%] |
|-------------------------------|----------|---------------------|-------------------|---------------------------|------------------------|------------------------|
| Trosifol® Extra Stiff | high | 0.76 | Clear | 88 | < 1 | 20 |
| SentryGlas® | high | 0.76 | Clear | 88 | < 1 | 19 |
| SentryGlas® | high | 0.89 | Clear | 88 | < 1 | 19 |
| SentryGlas® | high | 1.52 | Clear | 88 | < 1 | 20 |
| SentryGlas® | high | 2.28 | Clear | 88 | < 1 | 21 |
| SentryGlas® Translucent White | high | 0.80 | Translucent White | 81 | 57 | 20 |
| SentryGlas® Xtra™ | high | 0.89 | Clear | 88 | < 1 | 20 |
| SentryGlas® Xtra™ | high | 1.52 | Clear | 88 | < 1 | 21 |
| SentryGlas® Xtra™ | high | 2.28 | Clear | 88 | < 1 | 22 |
| SentryGlas® Xtra™ | high | 2.53 | Clear | 88 | < 1 | 22 |

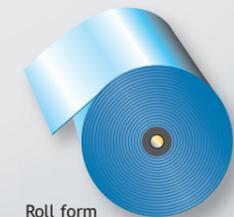
* LSG with 2 x 4 mm Floatglass according EN 410 / ISO 9050

Structural & Security Interlayers* – Dimensions for Products on rolls

| Product | Thickness [mm] [mil] | | Color | Roll Widths [mm] | | Roll Widths [in] | | Roll Lengths [m] [ft] | |
|-------------------------------|----------------------|----|---------------|-----------------------------------------|---------------------------|------------------|-----|-----------------------|---------|
| | | | | | | | | | |
| Trosifol® Extra Stiff | 0.76 | 30 | Clear | 1000/1300/1600/2000/2250/2600/3210 | 40/51/63/78/88/102/126 | 250 | 820 | | |
| SentryGlas® | 0.76 | 30 | Clear | 1050/1150/1300/1600/2250/2400/2600/2700 | 41/45/51/63/88/94/102/106 | 250 | 820 | | |
| SentryGlas® | 0.76 | 30 | Clear | 1220/1530/1830 | 48/60/72 | 200 | 656 | | |
| SentryGlas® | 0.76 | 30 | Clear | 1530 | 48 | 50 | 164 | | |
| SentryGlas® | 0.76 | 30 | Clear | 1050/1600/2250/2400/2600/2700 | 41/63/88/94/102/106 | 60 | 197 | | |
| SentryGlas® | 0.89 | 35 | Clear | 1220/1530/1830/2250/2400/2500/2700 | 48/60/72/88/84/102/106 | 200 | 656 | | |
| SentryGlas® | 0.89 | 35 | Clear | 1530/2250/2400/2500/2700 | 60/88/94/102/106 | 50 | 164 | | |
| SentryGlas® Translucent White | 0.80 | 31 | Transl. White | 1220/1830/1530 | 48/72/60 | 200 | 656 | 200/50 | 656/164 |

Structural & Security Interlayers* – Dimensions for Sheet Products

| Product | Thickness [mm] [mil] | | Sheet Widths [mm] | | Sheet Lengths [m] [ft] | |
|-------------------|----------------------|-----|-------------------|-------|------------------------|----|
| | | | | | | |
| SentryGlas® | 0.89 | 35 | 610-2160** | 24-85 | 6 | 19 |
| SentryGlas® | 1.52 | 60 | 610-2160** | 24-85 | 6 | 19 |
| SentryGlas® | 2.28 | 90 | 610-2160** | 24-85 | 6 | 19 |
| SentryGlas® | 2.53 | 100 | 610-1830 | 24-72 | 6 | 19 |
| SentryGlas® | 3.04 | 120 | 610-1830 | 24-73 | 6 | 19 |
| SentryGlas® Xtra™ | 0.89 | 35 | 610-2160** | 24-85 | 6 | 19 |
| SentryGlas® Xtra™ | 1.52 | 60 | 610-2160** | 24-85 | 6 | 19 |
| SentryGlas® Xtra™ | 2.28 | 90 | 610-2160** | 24-85 | 6 | 19 |
| SentryGlas® Xtra™ | 2.53 | 100 | 610-2160** | 24-85 | 6 | 19 |



Roll form



Sheet form

* The table shows the global product program. Not all products are available in all regions.

** Oversize shipment possible up to 2500 mm / 99 inches

Not all products are available in all regions.



CUSTOMIZED SOUND INSULATION



Photo: © sheri99/shutterstock.com

Acoustic Interlayers

- Sole supplier of mono- and multilayer PVB for the acoustic glazing market
- R_w or STC/OITC values of 50 dB and better in insulated glass
- Trosifol® SC Multilayer may be combined with standard and colored PVB
- Trosifol® SC Monolayer has the best optical properties in terms of “orange peel”

Applications & Recommendations

- Thanks to its high adhesive strength, Trosifol® Sound Control Monolayer is particularly suitable for laying between plies of heat-strengthened or fully tempered glass.
- Trosifol® SC Multilayer is ideal for achieving impact resistance level P2A conforming to EN 356.
- Trosifol® SC Multilayer can be combined with other Trosifol products.
- Best optical properties in terms of orange peel with Trosifol® SC Monolayer.
- Laminated safety glass containing a Trosifol® SC Monolayer / Trosifol® SC Multilayer has up to 3 dB better sound insulation than the same construction with standard PVB film.



Photo: © PRESS GLASS SA



Photo: © Dubova/shutterstock.com

Acoustic Interlayers – Physical properties

| Type | Adhesion | Film thickness [mm] | Color | Color Code | Light transmittance* [%] | UV transmittance* [%] | Solar absorption* [%] |
|-------------------------|----------|---------------------|------------|------------|--------------------------|-----------------------|-----------------------|
| Trosifol® SC Monolayer | high | 0.76 | UltraClear | - | 88 | < 1 | 19 |
| Trosifol® SC Monolayer | high | 1.52 | UltraClear | - | 88 | < 0.5 | 21 |
| Trosifol® SC Multilayer | low | 0.50 | UltraClear | - | 88 | < 1 | 20 |
| Trosifol® SC Multilayer | low | 0.76 | UltraClear | - | 88 | < 1 | 20 |

Acoustic Interlayers – Dimensions

| Type | Film thickness [mm] | Roll widths [mm] | Roll length refrigerated [m] | Roll length PE interleaved [m] |
|-------------------------|---------------------|------------------|------------------------------|--------------------------------|
| Trosifol® SC Monolayer | 0.76 | 600-3210*2 | - | 200/450 |
| Trosifol® SC Monolayer | 1.52 | 600-3210*2 | - | 100 |
| Trosifol® SC Multilayer | 0.50 | 3210 | 350/700 | 370/700 |
| Trosifol® SC Multilayer | 0.76 | 600-3210*2 | 470 | 230 |

* LSG with 2 x 4 mm Floatglass according EN 410 / ISO 9050

*2 is a made to stock product; Standard stock sizes / [mm]: 1000/1300/1600/2000/2250/2600/3210

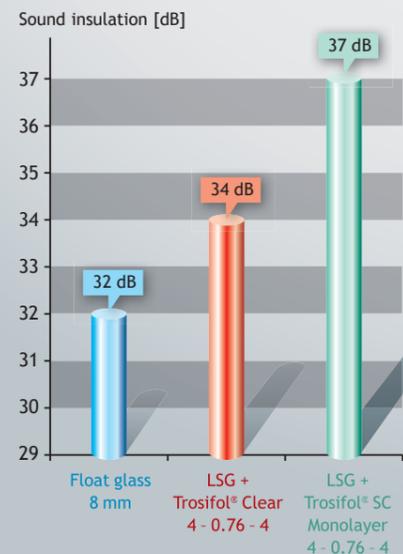
Not all products are available in all regions.

0.76 mm Monolayer products – Test results

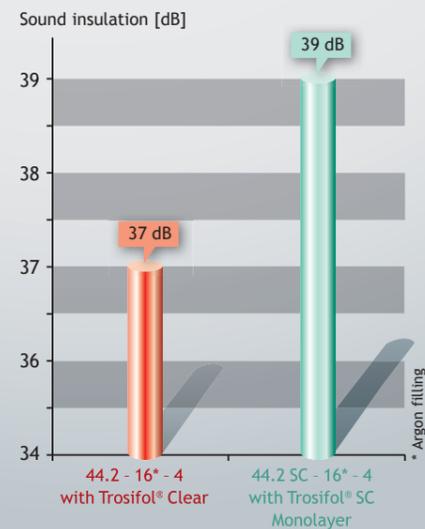
| Glass [mm] | Cavity air or argon [mm] | Glass [mm] | Cavity [mm] | Glass [mm] | R _w [dB] | C, C _{tr} [dB] | STC | OITC | | |
|------------|--------------------------|------------|-------------|------------------|---------------------|-------------------------|-----|---------|----|----|
| 3 SC Mono* | 0.76 | 3 | | | 35 | (-1/-4) | 35 | 30 | | |
| 4 SC Mono | 0.76 | 4 | | | 37 | (-1/-3) | 37 | 32 | | |
| 5 SC Mono | 0.76 | 5 | | | 38 | (0/-2) | 38 | 34 | | |
| 6 SC Mono | 0.76 | 6 | | | 39 | (0/-2) | 39 | 35 | | |
| 8 SC Mono | 0.76 | 8 | | | 41 | (-1/-3) | 41 | 37 | | |
| 10 SC Mono | 0.76 | 10 | | | 42 | (0/-3) | 42 | 38 | | |
| 12 SC Mono | 0.76 | 12 | | | 43 | (0/-3) | 43 | 39 | | |
| 4 SC Mono | 0.76 | 4 | 16 | 4 | 39 | (-1/-5) | 39 | 31 | | |
| 4 SC Mono | 0.76 | 4 | 16 | 6 | 41 | (-2/-6) | 41 | 33 | | |
| 4 SC Mono | 0.76 | 4 | 16 | 8 | 42 | (-3/-8) | 42 | 31 | | |
| 6 SC Mono | 0.76 | 6 | 16 | 8 | 43 | (-2/-6) | 43 | 34 | | |
| 4 SC Mono | 0.76 | 4 | 16 | 10 | 44 | (-2/-6) | 44 | 35 | | |
| 4 SC Mono | 0.76 | 4 | 16 | 6 SC Mono 0.76 6 | 47 | (-2/-6) | 48 | 37 | | |
| 4 SC Mono | 0.76 | 4 | 20 | 6 SC Mono 0.76 6 | 49 | (-2/-7) | 49 | 38 | | |
| 4 SC Mono | 0.76 | 4 | 12 | 4 | 12 | 6 | 41 | (-2/-6) | 41 | 32 |
| 4 SC Mono | 0.76 | 4 | 12 | 4 | 12 | 8 | 42 | (-2/-6) | 42 | 33 |
| 4 SC Mono | 0.76 | 4 | 12 | 6 | 12 | 4 SC Mono 0.76 6 | 47 | (-2/-7) | 47 | 38 |

* SC Mono = Trosifol® SC Monolayer

Sound insulation with monolithic glass



Sound insulation with multiple insulating glass



0.50 mm Multilayer products – Test results

| Glass [mm] | Cavity air or argon [mm] | Glass [mm] | Cavity [mm] | Glass [mm] | R _w [dB] | C, C _{tr} [dB] | STC | OITC |
|--------------|--------------------------|------------|-------------|------------|---------------------|-------------------------|-----|------|
| 3 SC Multi** | 0.50 | 3 | | | 36 | (-1/-4) | 35 | 30 |
| 4 SC Multi | 0.50 | 4 | | | 37 | (0/-2) | 37 | 33 |
| 5 SC Multi | 0.50 | 5 | | | 39 | (-1/-3) | 38 | 35 |
| 6 SC Multi | 0.50 | 6 | | | 40 | (-1/-3) | 40 | 36 |
| 8 SC Multi | 0.50 | 8 | | | 41 | (0/-2) | 41 | 38 |

0.76 mm Multilayer products – Test results

| Glass [mm] | Cavity air or argon [mm] | Glass [mm] | Cavity [mm] | Glass [mm] | R _w [dB] | C, C _{tr} [dB] | STC | OITC | | |
|-------------|--------------------------|------------|-------------|-------------------|---------------------|-------------------------|-----|---------|----|----|
| 3 SC Multi | 0.76 | 3 | | | 36 | (-1/-4) | 36 | 30 * | | |
| 4 SC Multi | 0.76 | 4 | | | 37 | (0/-2) | 37 | 33 | | |
| 5 SC Multi | 0.76 | 5 | | | 38 | (-1/-3) | 38 | 33 * | | |
| 6 SC Multi | 0.76 | 6 | | | 40 | (-1/ 3) | 39 | 36 * | | |
| 8 SC Multi | 0.76 | 8 | | | 41 | (-1/-3) | 41 | 37 * | | |
| 10 SC Multi | 0.76 | 10 | | | 42 | (-1/-3) | 42 | 38 | | |
| 12 SC Multi | 0.76 | 12 | | | 43 | (-1/-3) | 43 | 39 | | |
| 3 SC Multi | 0.76 | 3 | 16 | 4 | 36 | (-2/-6) | 36 | 28 | | |
| 3 SC Multi | 0.76 | 3 | 16 | 6 | 40 | (-2/-6) | 40 | 31 | | |
| 3 SC Multi | 0.76 | 3 | 16 | 8 | 42 | (-3/-7) | 42 | 32 | | |
| 4 SC Multi | 0.76 | 4 | 16 | 4 | 39 | (-3/-7) | 37 | 30 * | | |
| 4 SC Multi | 0.76 | 4 | 16 | 6 | 41 | (-2/-6) | 41 | 33 * | | |
| 4 SC Multi | 0.76 | 4 | 16 | 8 | 42 | (-3/-8) | 42 | 31 * | | |
| 6 SC Multi | 0.76 | 6 | 16 | 8 | 43 | (-2/-6) | 43 | 34 | | |
| 4 SC Multi | 0.76 | 4 | 16 | 10 | 44 | (-2/-6) | 44 | 36 | | |
| 4 SC Multi | 0.76 | 4 | 20 | 10 | 46 | (-2/-6) | 46 | 37 | | |
| 6 SC Multi | 0.76 | 6 | 16 | 10 | 44 | (-1/-5) | 44 | 36 | | |
| 4 SC Multi | 0.76 | 4 | 16 | 6 SC Multi 0.76 6 | 48 | (-2/-7) | 48 | 38 * | | |
| 4 SC Multi | 0.76 | 4 | 20 | 6 SC Multi 0.76 6 | 49 | (-2/-7) | 49 | 38 * | | |
| 8 SC Multi | 0.76 | 6 | 16 | 6 SC Multi 0.76 6 | 51 | (-2/-6) | 51 | 42 | | |
| 8 SC Multi | 0.76 | 8 | 16 | 6 SC Multi 0.76 6 | 51 | (-1/-6) | 51 | 42 | | |
| 8 SC Multi | 0.76 | 8 | 24 | 4 SC Multi 0.76 6 | 52 | (-2/-6) | 51 | 44 * | | |
| 4 SC Multi | 0.76 | 4 | 12 | 4 | 12 | 6 | 42 | (-3/-8) | 41 | 30 |
| 4 SC Multi | 0.76 | 4 | 14 | 4 | 14 | 6 | 43 | (-2/-7) | 44 | 33 |
| 4 SC Multi | 0.76 | 4 | 12 | 4 | 12 | 8 | 43 | (-2/-7) | 43 | 33 |
| 4 SC Multi | 0.76 | 4 | 16 | 4 | 16 | 8 | 45 | (-3/-7) | 45 | 34 |
| 5 SC Multi | 0.76 | 5 | 12 | 6 | 12 | 8 | 44 | (-2/-7) | 44 | 35 |
| 6 SC Multi | 0.76 | 6 | 12 | 6 | 12 | 8 | 45 | (-1/-5) | 46 | 37 |
| 6 SC Multi | 0.76 | 6 | 14 | 6 | 14 | 8 | 46 | (-2/-6) | 46 | 38 |
| 4 SC Multi | 0.76 | 4 | 12 | 4 | 12 | 4 SC Multi 0.76 4 | 46 | (-2/-7) | 47 | 35 |
| 4 SC Multi | 0.76 | 4 | 12 | 4 | 12 | 4 SC Multi 0.76 6 | 47 | (-2/-7) | 47 | 37 |
| 6 SC Multi | 0.76 | 6 | 12 | 4 | 12 | 4 SC Multi 0.76 4 | 49 | (-1/-7) | 50 | 39 |
| 6 SC Multi | 0.76 | 6 | 14 | 4 | 14 | 4 SC Multi 0.76 4 | 50 | (-2/-7) | 51 | 40 |

* Internally calculated according ASTM 1332-10a based on the originally measurement results
 ** SC Multi = Trosifol® SC Multilayer

BRILLIANT COLORS



Photo: © Peera_stockfoto/shutterstock.com

DECORATIVE HIGHLIGHTS

Decorative Interlayers

- Interior and exterior applications thanks to outstanding color fastness
- Opaque Diamond White
- Opaque Brilliant Black
- Different degrees of translucency in the white color range

DECORATIVE ADDITIONAL INFORMATION

Applications & Recommendations

- For total opacity, we recommend Trosifol® Brilliant Black and Trosifol® Diamond White.
- With strong colors, high color intensity is achieved with just a single film in the glass module, making further layers unnecessary.
- To achieve the same effects as body tinted glass, we recommend the tinted colors.

Decorative Interlayers – Physical properties

| Product | Adhesion | Film thickness [mm] | Color Code | Light transmittance* [%] | UV transmittance* [%] | Solar absorption* [%] |
|------------------------------------|------------|---------------------|------------|--------------------------|-----------------------|-----------------------|
| Trosifol® Color | | | | | | |
| ● Trosifol® Red | medium | 0.38 | R30 | 23 | < 1 | 44 |
| ● Trosifol® Light Green | medium | 0.38 | G80 | 81 | < 1 | 25 |
| ● Trosifol® Sky Blue | medium | 0.38 | B54 | 60 | < 1 | 32 |
| ● Trosifol® Medium Blue | medium | 0.38 | B37 | 36 | < 1 | 45 |
| ● Trosifol® Violet | medium | 0.38 | V30 | 31 | < 1 | 39 |
| Trosifol® Tints | | | | | | |
| ● Trosifol® Light Blue-green | medium | 0.38 | 84073 | 71 | < 1 | 29 |
| ● Trosifol® Ocean Blue | medium | 0.38 | 74071 | 73 | < 1 | 26 |
| ● Trosifol® Bronze | medium | 0.76 | 36038 | 36 | < 1 | 55 |
| ● Trosifol® Medium Bronze | medium | 0.38 | 31052 | 55 | < 1 | 42 |
| ● Trosifol® Light Brown | medium | 0.38 | S4055 | 54 | < 1 | 44 |
| ● Trosifol® Medium Brown | medium | 0.38 | S6028 | 22 | < 1 | 69 |
| ● Trosifol® Grey | medium | 0.38 ¹ | 66044 | 42 | < 1 | 47 |
| ● Trosifol® Asahi Grey | medium | 0.38 | 65042 | 38 | < 1 | 51 |
| ● Trosifol® Solar Grey | medium | 0.76 | 1654400 | 42 | < 1 | - |
| Trosifol® Black & White | | | | | | |
| ● Trosifol® Brilliant Black | high | 0.76 | S00 | 0 | < 1 | 96 |
| ● Trosifol® Diamond White | high | 0.76 | W00 | 0 | < 1 | 95 |
| ● Trosifol® Shining White | high | 0.38 | W17 | 21 | < 1 | 73 |
| ● Trosifol® Translucent White | medium/low | 0.76 ² | W3065 | 70 | < 1 | 36 |
| ● Trosifol® Sand White | medium | 0.38 | W4071 | 78 | < 1 | 27 |
| ● Trosifol® Coconut White | medium | 0.38 | 5131500 | 16 | < 1 | 77 |

¹ Product also available as 0.76 mm version with comparable optics and enhanced safety features

² Product also available as 0.38 mm version with comparable optics

Decorative Interlayers – Dimensions

| Product | Film thickness [mm] | Roll widths [mm] | Roll length refrigerated [m] | Roll length PE interleaf [m] |
|------------------------------------|---------------------|--------------------|------------------------------|------------------------------|
| Trosifol® Color | | | | |
| ● Trosifol® Red | 0.38 | 1000/1600/2250 | - | 30/210 |
| ● Trosifol® Light Green | 0.38 | 1000/1600/2250 | - | 30/210 |
| ● Trosifol® Sky Blue | 0.38 | 1000/1600/2250 | - | 30/210 |
| ● Trosifol® Medium Blue | 0.38 | 1000/1600/2250 | - | 30/210 |
| ● Trosifol® Violet | 0.38 | 1000/1600/2250 | - | 30/210 |
| Trosifol® Tints | | | | |
| ● Trosifol® Light Blue-green | 0.38 | 0.76* ¹ | 600-3210 | 400/500 200/250 |
| ● Trosifol® Ocean Blue | 0.38 | | 600-3210 | 400 |
| ● Trosifol® Bronze | 0.76 | | 600-3210 | 200 |
| ● Trosifol® Medium Bronze | 0.38 | | 600-3210 | 400 |
| ● Trosifol® Light Brown | 0.38 | | 600-3210 | 400 |
| ● Trosifol® Medium Brown | 0.38 | | 600-3210 | 400 |
| ● Trosifol® Grey | 0.38 | 0.76 | 600-3210 | 400/500 200/250 |
| ● Trosifol® Asahi Grey | 0.38 | | 600-3210 | 400 |
| ● Trosifol® Solar Grey | 0.38 | | | |
| Trosifol® Black & White | | | | |
| ● Trosifol® Brilliant Black | 0.76 | | 1000/1600/2250 | - |
| ● Trosifol® Diamond White | 0.76 | | 1000/1600/2250 | - |
| ● Trosifol® Shining White | 0.38 | | 1000/1600/2250 | - |
| ● Trosifol® Translucent White | 0.38 | 0.76 | 600-3210* ² | 400/1000 250/500 |
| ● Trosifol® Sand White | 0.38 | | 600-3210* ² | 400 |
| ● Trosifol® Coconut White | 0.38 | | 600-2350* ² | 50/250 |

The Trosifol® Color samples are merely intended as illustration and inadequately represent the real colors. Custom colors are available on request. * All data measured in accordance with EN 410 (2011) / ISO 9050 on laminated safety glass with 4 mm - 0.38 PVB - 4 mm float glass. All Trosifol® Color types meet the requirements of EN ISO 12543. If used in exterior applications or combined with radiation sources, the energy absorption of the glass combination must be borne in mind.

*1 Product also available as 0.76 mm version with comparable optics and enhanced safety features
*2 Maximum roll width refrigerated 2300 mm

Not all products are available in all regions.

SPECIALITIES



Specialized Interlayers

- Autoclave-free processing with Trosifol® HR
- High surface roughness for better deairing with Trosifol® HR
- 0% UV transmittance up to 400 mm with UV Extra Protect
- Trosifol® XT: Special PVB hurricane grade with UltraClear appearance
- Maximum UV transmittance for SentryGlas® Natural UV and Trosifol® Natural UV
- Spallshield® CPET is a hard coated PET film

Applications & Recommendations

- Trosifol® Natural UV and SentryGlas® Natural UV feature high UV transmittance with applications in greenhouses, zoos and the health sector.
- Complete UV protection Trosifol® UV Extra Protect for museums, shop windows and libraries, for example.
- High surface roughness of Trosifol® HR for better deairing.
- Spallshield® CPET hard-coated PET film helps to stop the showering of small glass particles.
- All hurricane products require system testing and approval.

Specialized Interlayers – Physical properties

| Type | Adhesion | Film thickness [mm] | Color | Light transmittance* [%] | UV transmittance* [%] |
|----------------------------|------------|---------------------|------------|--------------------------|-----------------------|
| Trosifol® HR | high | 0.76 | UltraClear | 88 | < 1 |
| Trosifol® UV Extra Protect | high | 0.76 | Clear | 90 | 0.0 |
| Trosifol® Natural UV*1 | high | 0.76 | UltraClear | 89 | 48 |
| Trosifol® XT | med. -high | 2.28 | UltraClear | 88 | < 1 |
| SentryGlas® Natural UV*1 | high | 0.89 | UltraClear | 89 | 46 |
| SentryGlas® Natural UV*1 | high | 1.52 | UltraClear | 88 | 40 |
| Spallshield® CPET | | 0.18 | Clear | 91 | 0.50 |

Specialized Interlayers – Dimensions

| Type | Film thickness [mm] | Roll widths [mm] | Roll widths [in] | Roll length PE interleaved [m] |
|----------------------------|---------------------|--------------------------|------------------|--------------------------------|
| Trosifol® HR | 0.76 | 600-3210*3 | 24-126*3 | 200 |
| Trosifol® UV Extra Protect | 0.76 | 1000/1600/2250/2600/3210 | 40/63/88/102/126 | 50 |
| Trosifol® Natural UV | 0.76 | 1000/1600/2250/2600/3210 | 40/63/88/102/126 | 200 |
| Trosifol® XT | 2.28 | 1530/1830/2440 | 60/72/96 | 95 |
| SentryGlas® Natural UV | 0.89 | 1220/1530/1830 | 48/60/72 | 50/200 |
| SentryGlas® Natural UV | 1.52*2 | - | - | - |
| Spallshield® CPET | 0.18 | 1520 | 60 | 50/250* |

* LSG with 2 x 4 mm Floatglass according EN 410 / ISO 9050

*1 Values calculated using Lawrence Berkeley National Laboratory Optics5 and Windows5 software.

*2 SentryGlas® Natural UV 1.52 is only available in sheets. Same sizes as standard SG sheets.

*3 is a made to stock product; Standard stock sizes / [mm]: 1000/1300/1600/2000/2250/2600/3210

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

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