



PLEXIGLAS® The Signage Series

Superior Performance in any Light

PLEXIGLAS® Signage Series

PLEXIGLAS® is your perfect partner for signage and lighting applications. PLEXIGLAS® is available in a broad range of products to realize all types of eye-catching designs for superior signage with any light source.



Contents

PLEXIGLAS truLED® Offers maximum luminance and excellent light diffusion for LED applications.	4 - 5
PLEXIGLAS® Dual Color Colored appearance by day and vibrant white when backlit allow unique signage possibilities.	6 - 7
PLEXIGLAS® Sterling Metal look in a lightweight and fabrication friendly alternative.	8
PLEXIGLAS RESIST® Modified acrylic sheet product with much higher impact strength.	9
PLEXIGLAS® RADIANT Changes color at different viewing angles and creates its own lighting effects.	10
PLEXIGLAS® Satin Ice Exceptional light transmission and diffusing properties with a frosted, textured surface.	11
PLEXIGLAS® EndLighten Enables the construction of extremely slim, compact luminous panels with high light output.	12 - 13
PLEXIGLAS® The Signage Series Product Overview.	14 - 15

PLEXIGLAS truLED®



The PLEXIGLAS truLED® product range offers ideal properties especially for backlighting with LEDs, such as maximum transmission and optimum light diffusion. These properties allow brighter images and avoid undesired hot spots or fluctuations in luminance, even in ultraslim illuminated signs.

The light transmission of PLEXIGLAS truLED® is adjusted to the same wavelength ranges as those of red, green, yellow, blue or white LEDs. This combination of properties makes it possible to employ modern LED technology with maximum brightness.

The PLEXIGLAS truLED® standard range comprises five grades, each corresponding to a given LED color (red, green, yellow, blue, white). PLEXIGLAS truLED® can be also supplied in Corporate Identity Color grade (CI). This means that in incident light (daylight), the PLEXIGLAS truLED® sheet is comparable to a specified Corporate Identity Color, and ensures optimum luminance without hot spots or fluctuations when backlit with LEDs.

Following this principle, the PLEXIGLAS truLED® range is rounded off by eight popular Corporate Identity Colors. Upon request and subject to volume requirements, other CI colors can be provided or developed as necessary for your project.

Offers maximum luminance and excellent light diffusion for LED applications.



PLEXIGLAS® Dual Color



PLEXIGLAS® Dual Color is used in specialty signage to create a unique design and make your business stand out from the crowd. PLEXIGLAS® Dual Color has the appearance of a standard colored sheet during the daytime, without lighting. Illuminated at night, it becomes a bright, vibrant panel.

PLEXIGLAS® Dual Color is currently available in Black/White, Blue/White and Grey/White. The main principle color is actually translucent. This diffuses natural light and maintains its primary color appearance, but when illuminated, it appears white or in the color of the light source.



Colored appearance by day and vibrant white when backlit allow unique signage possibilities.

One effective use for PLEXIGLAS® Dual Color is to partition the light box, which makes it possible to illuminate different areas at different times.

Hidden information only becomes visible when the light source is switched on.

You can also employ different colored artificial light sources to create imaginative designs. While the color remains standard in daytime, the different backlighting possibilities make this product the perfect solution for innovative and eye-catching signage panels.

PLEXIGLAS® Dual Color can also help with the current issue of sign pollution. For businesses that wish to be highly visible only at night, PLEXIGLAS® Dual Color offers the ideal solution.



PLEXIGLAS® Sterling

PLEXIGLAS® Sterling has a metallic gloss surface on one side or both sides. It is a lightweight, fabrication-friendly alternative to metal with the durability and impact resistance of PLEXIGLAS® acrylic sheet.

PLEXIGLAS® Sterling is suitable for manufacturing signs, decorative items and luminous displays. On clear substrate material, luminous engraved graphics create a prestigious appearance and automatically catch the eye. PLEXIGLAS® Sterling sheets with a clear PLEXIGLAS® layer on one side create a very special deep-view effect.

Metal look in a lightweight and fabrication friendly alternative.



PLEXIGLAS RESIST®

Modified acrylic sheet product with much higher impact strength.

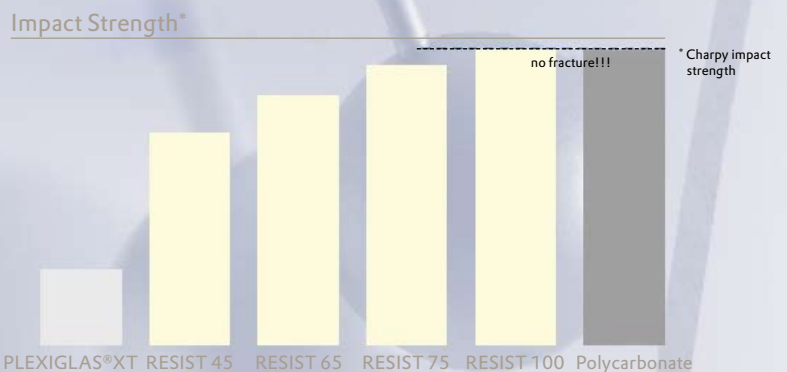
PLEXIGLAS RESIST® is a modified acrylic sheet product with much higher impact strength than standard acrylic. This quality translates into reduced breakage during production, shipping and installation. It combines the excellent product properties of PLEXIGLAS®, such as weather resistance, light transmission (91% for clear material) and easy fabrication, with strength similar to polycarbonate.

Signage manufacturers worldwide choose PLEXIGLAS RESIST® because it represents savings in fabrication costs. They face less breakage, even when cutting difficult letters, scrap is minimized and fabrication cycles are quicker than with other materials.

PLEXIGLAS RESIST® also offers a better solution to the problem of vandalism, and its exceptional weather resistance make it the perfect choice for large outdoor applications that are built to last.



PLEXIGLAS RESIST®: Customized impact strength and toughness



PLEXIGLAS® RADIANT

PLEXIGLAS® RADIANT is a brand new grade of acrylic sheet. It combines semi-transparency with a mirror-like property thanks to a special coating on its surface. This state-of-the-art sheet changes color depending on the viewing angle; it produces reflections using ambient light and shines in all the colors of the rainbow. It is the ideal material to catch everyone's eye.

PLEXIGLAS® RADIANT is already being used in numerous applications in combination with light, such as signage, lamps and lighting units, POP displays, interior design etc. When PLEXIGLAS® RADIANT is backlit, its mirror-like effect is reduced but the color-change effect is intensified.

The use of a light-diffusing material (e.g. PLEXIGLAS® XT white transparent or PLEXIGLAS® EndLighten) will help to achieve this effect.

PLEXIGLAS® RADIANT can be fabricated like any other standard grade of PLEXIGLAS® XT, bearing in mind a few special points.

PLEXIGLAS® RADIANT has a surface coating on one side that is responsible for the lighting effect. Therefore, correct positioning of the coated surface is essential in order to obtain perfect fabrication results with PLEXIGLAS® RADIANT.

Changes color at different viewing angles and creates its own lighting effects.



PLEXIGLAS® Satin Ice

PLEXIGLAS® Satin Ice contains special diffuser beads that give the material its satin/frosted surface and intensive translucency. These properties offer unique application potential, making the material particularly suitable for all types of lighting and design elements, e.g. for lamp shades, luminaire covers, backlighting etc. Other applications are store

fixtures, tradeshow booths and furniture, as well as high-quality POP displays.

PLEXIGLAS® Satin Ice is available as solid sheets and tubes.

Exceptional light transmission and diffusing properties with a frosted, textured surface.



PLEXIGLAS® EndLighten

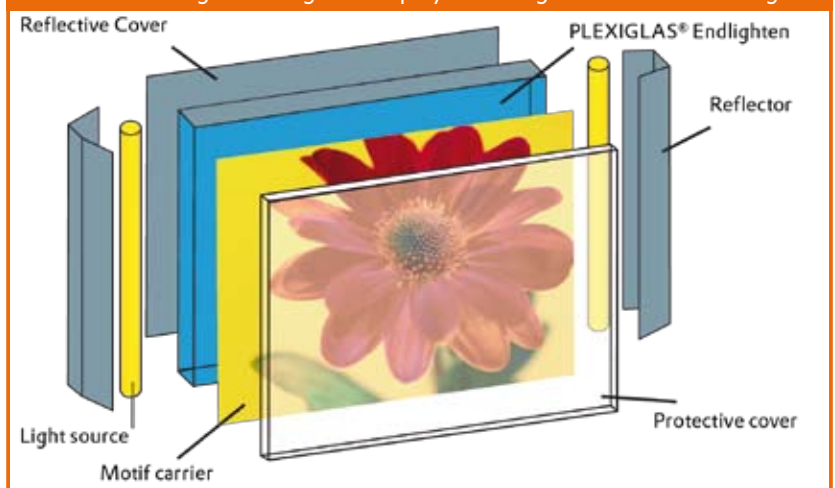
PLEXIGLAS® EndLighten is a transparent, light-diffusing acrylic (PMMA) specially designed for edge-lit applications. Formulated with special colorless diffuser particles, PLEXIGLAS® EndLighten sheets transmit light through their edges and redirect it to the surface. This provides bright and extremely uniform illumination, even in up to 2 m panel size.

PLEXIGLAS® EndLighten makes it possible to construct particularly flat, single or double-sided, uniformly bright displays, light boxes, and much more. This technology eliminates the need for deep backlit sign cabinets. Now, fluorescent lamps can be installed in the sides, allowing elegant and ultraslim panels. Flexible and modern designs can also be achieved with LEDs, adding their benefits of long service life, multiple colors and low maintenance costs to your application.

Enables the construction of extremely slim, compact luminous panels with high light output.



Sectional drawing of an edge-lit display featuring PLEXIGLAS® EndLighten



- The lit edges of PLEXIGLAS® EndLighten sheet should be polished in order to achieve a smooth surface for enhanced light entry.
- The use of reflectors at the edges will help to guide the light towards the sheet without it being wasted.
- Edges that are not lit should be covered with a reflective adhesive tape to prevent light leaving the sheet unused.
- Luminous displays can be installed with one or two radiant surfaces. If only one side is intended to emit light, a highly reflective cover should be provided on the back.
- The information carrier (poster) should not be glued or laminated to the PLEXIGLAS® EndLighten surface.

PLEXIGLAS® EndLighten sheet is provided in three grades depending on the size of the panel to be illuminated: L, XL and XXL. Please refer to the table at the end of this brochure for the recommended lamp spacing for each type.



PLEXIGLAS® The Signage Series

Product Overview

Product	New Code	Color	Light Transmission (T_{D65})	Thickness	Standard Sheet Size
PLEXIGLAS® truLED®	WH14		53%	3* to 25 mm	3050 x 2030 mm
	WH72		35%		
	1H19		46%		
	1H74		30%		
	1H70		22%		
	3H26		15%		
	3H68		8%		
	3H15		6%		
	2H41		10%		
	5H28		13%		
	5H60		7%		
	6H18		20%		
	6H71		16%		
PLEXIGLAS® EndLighten	0N001 L	Colorless	91%	6 and 8 mm	3050** x 2050 mm
	0N002 XL	Colorless	91%	8 and 10 mm	
	0N003 XXL	Colorless	91%	10 mm	
PLEXIGLAS® Dual Color	7H25		12%	3 to 20 mm	3050 x 2030 mm
	9H04SC		16%	3 to 20 mm	
	7H01SC		24%	3 to 20 mm	
	5H04		32%	3 to 20 mm	
PLEXIGLAS® Satin Ice	0D010 DF	Colorless	82%	Sheets: 2, 3, 4, 5, 6, 8, 10 Tubes: Outside diameter 50, 60, 70, 80, 90, 100, 150, 200	3050 x 2050 mm Wall thickness 3 mm
PLEXIGLAS RESIST®	ORA45	Colorless	91%	2, 3, 4, 5, 6, 8, 10, 12, 15	3050 x 2050 mm
	ORA65	Colorless	91%		
	ORA75	Colorless	91%		
	ORA00	Colorless	91%		
	WRN65		42%		
	WRN75		43%		
PLEXIGLAS® RADIANT	0A008		13%	3 mm	2440 x 1220
PLEXIGLAS® Sterling	2M801 C1		22%	2, 3, 4, 5, 6	3050 x 2050 mm
	2M802 C2		0%		
	7M801 C1		27%		
	7M802 C2		0%		

* Thicknesses marked in bold are stock items

** Variable lengths available upon request

*** Colorless



Comments	Reference Literature
Backlight white LED Backlight white LED, CI color comparable to PLEXIGLAS® GS 072 Backlight yellow LED Backlight yellow LED, CI color comparable to PLEXIGLAS® GS 374 Backlight yellow LED, CI color comparable to PLEXIGLAS® GS 370 Backlight red LED Backlight red LED, CI color comparable to PLEXIGLAS GS® 568 Backlight red LED, CI color comparable to PLEXIGLAS GS® 505 Backlight red LED, CI color comparable to PLEXIGLAS GS® 410 Backlight blue LED Backlight blue LED, CI color comparable to PLEXIGLAS GS® 601 Backlight green LED Backlight green LED, CI color comparable to PLEXIGLAS GS® 710	
Recommended lamp spacing for illumination on both sides 300 - 600 mm Recommended lamp spacing for illumination on both sides 600 - 1300 mm Recommended lamp spacing for illumination on both sides 1300 - 2000 mm The recommended lamp spacing is halved in the case of illumination on one side only	Ref. No. 232-19
Day color black, white when backlit - Gloss surface - Satin surface on request Day color black, white when backlit - Satin surface - Gloss surface on request Day color grey, white when backlit - Satin surface - Gloss surface on request Day color blue, white when backlit - Gloss surface or satin surface on request	
Special light diffusion properties in a satin textured surface	Ref. No. 411-24
Impact modified for increased strength, resists breakage during fabrication, shipping and installation	Ref. No. 432-6
Changes colors at different viewing angles	Ref. No. 432-7
Gold metal look, deep-view effect Gold metal look, black core Silver metal look, deep-view effect Silver metal look, black core	

® = registered trademark

PLEXIGLAS,
PLEXIGLAS truLED and
PLEXIGLAS RESIST
are registered trademarks of
Evonik Röhm GmbH, Darmstadt, Germany.

Certified to DIN EN ISO 9001 (Quality)
and DIN EN ISO 14001 (Environment)

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Ref. No. 411-25 June 2009
10/0609/09720 (en)



Business Unit
Performance Polymers

Evonik Röhm GmbH
Kirschenallee
64293 Darmstadt
Germany
info@plexiglas.net
www.plexiglas.net
www.evonik.com

Evonik. Power to create.