



**PLEXIGLAS®**  
for Furniture, Exhibition  
and Shopfitting

**PLEXIGLAS®** 



Setting the scene for experiences and emotions	3
A specialized material that is reliable and durable	4
<b>PLEXIGLAS®</b>	
creative variety of colors	6
enormous freedom of design	10
functional surfaces	12
sophisticated effects	14
emotional ambience	16
transparent presentations	17
Products, properties and applications	18

# Setting the scene for experiences and emotions

People from around the world come together, at trade shows and in shopping malls. New and attractive venues offer a novel experience to large numbers of people, even in the internet age. Trade shows and stores provide what the World Wide Web cannot – atmosphere, emotion, class. A successful tradeshow appearance promotes a company's image and boosts business.

Creative professionals who build exhibition booths and store fixtures consistently translate a company's self-perception and product image into a third dimension. They create pared-down, attention-grabbing pictures and catchy messages. They give presentations an immediately recognizable structure. They fashion shapes that become unmistakable brands, which have an immediate and lasting impact and are highly attractive. This applies around the globe. From Europe to Asia and the Americas the trading community meets up at international locations. Boundaries to product presentation have ceased to exist. A material such as PLEXIGLAS® also helps designers to transcend imaginative boundaries and strengthen a company's corporate identity.

PLEXIGLAS® gives inspiration for trying and successfully producing innovative designs. The material's variety of shapes and colors and intelligent functionalities, added to its ease of fabrication, offer unlimited freedom of design, for example in furniture-making. Combined with light, the many different grades of PLEXIGLAS® offer new options for staging out-of-the-ordinary presentations. For creating one-of-a-kind designs that stand out from the competition, and providing a communicative ambience for contacts and customers at trade shows. PLEXIGLAS® is the right partner for creative professionals when it comes to meeting all these challenges.

We at Evonik are among the world's leading suppliers of PMMA and acrylic products, invented 1933 by Dr. Otto Röhm and his team. The products we market under the PLEXIGLAS® brand (and under the ACRYLITE® brand in the Americas), as well as our know-how, are available everywhere, either directly via our global distribution network, via regional distributors or qualified fabricators.

**Come and be inspired!**



## A specialized material that is reliable and durable

PLEXIGLAS® is one of the world's highest-quality and most versatile plastics, and is also one of the most environmentally friendly. It can be manufactured with many different functional characteristics and surfaces: highly light-transmitting, light-diffusing, light-focusing, sight-screening, heat-reflective, heat-shielding, heat-resistant, heat-insulating, noise-reflecting and scratch-resistant.

It weighs about half as much as glass, with eleven times its impact strength. In addition, the material can take rough handling and is easy to machine. PLEXIGLAS® can be cold-curved or durably thermoformed to provide new, surprising effects and shapes that give free rein to the imagination combined with the wide range of available colors. And what is more, PLEXIGLAS® XT meets the requirements for food-contact applications.

PLEXIGLAS® also remains just as transparent as on day one, even several years later. Our clear-transparent PLEXIGLAS® sheet materials come with a 30-year non-yellowing guarantee. We give a 10-year guarantee of colorfastness for



colored products. Because PLEXIGLAS® remains virtually unchanged, it does not have to be replaced in time like other plastics. Added to that, PLEXIGLAS® can be completely recycled, either by chemical conversion to its starting materials, or by direct reuse. These aspects, together with environmentally sound production, contribute to the material's sustainability.

To ensure this sustainability, we have performed an extensive life cycle assessment of the material from cradle to grave.

From production to recycling, the different environmental impacts of PLEXIGLAS®, including its greenhouse gas reduction effect due to the material's longevity, were determined and confirmed in this Life Cycle Assessment (LCA) in accordance with DIN ISO 14040ff. PLEXIGLAS® also makes an essential contribution to reducing the burden on the environment during manufacture. According to recent calculations, the carbon dioxide equivalent is 3.8 kg CO<sub>2</sub> per kg of molding compound.

PLEXIGLAS® is non-toxic in the event of fire. It forms no acutely toxic gases and burns with almost no smoke. Escape and rescue routes thus remain clearly visible. This is an important issue in exhibition booth and store fixture construction, where the focus is on the client.

PLEXIGLAS® exists in many forms, as solid sheet, multi-skin and corrugated sheets, blocks, tubes, rods and molding compounds. Important to know in exhibition booth and store fixture construction: depending on the grade, the products are available in lengths up to 12 meters.

PLEXIGLAS® is fascinating with its elegance, brilliance and color. It makes every item of furniture, tradeshow message, design or sales object the center of attention.



PLEXIGLAS®  
**creative variety of colors**



PLEXIGLAS®  
PLEXIGLAS® Heatstop  
PLEXIGLAS® Hi-Gloss  
PLEXIGLAS® LED  
PLEXIGLAS® Reflections  
PLEXIGLAS® Satinice  
PLEXIGLAS® Textures

As a starting material, PLEXIGLAS® is completely colorless. That is exactly where its fascination lies. It can be colored into a magical variety of hues. This can be reinforced by using the interplay of light and different surfaces, from high-gloss with a deep view décor, matte satin or textured, giving rise to unique effects. Displays, wall decorations, cabinet doors, wardrobes, shelves, lamps, partitions or presentation elements become real eye-catching attractions that draw customers into stores and stop trade show visitors in their tracks.

PLEXIGLAS® allows planners and designers to let their imagination run wild. The special production process used for PLEXIGLAS® Hi-Gloss enables a variety of playful ideas. Clear-transparent PLEXIGLAS® sheets are permanently fused with colored sheets, providing a noble appearance with a deep-view effect. Items created in this way are guaranteed to be show-stoppers. Fluorescent PLEXIGLAS® unites transparency with dazzlingly brilliant edges. More and more trend colors are being added to the range. Their pronounced luminosity draws attention to product displays, in shop fittings, in interior designs or at the point of sale.

At trade shows and in store fixture construction, PLEXIGLAS® creates high-class brand ambiances that can be precisely tailored to corporate identity colors, collections or trends, from logos to complete store designs or exhibition booths, through to decorative elements. The material helps to build corporate identity in terms of shape and color. The unique look can be reproduced at every branch around the world, thanks to our global production and distribution network.

Furniture made of PLEXIGLAS® can be used flexibly. It retains its harmonious, classy overall impression and underlines the successful design of shops, bars, lounges and exclusive private dwellings. Its brilliance, modern textures and effects create a desire to play with materials and shapes. Why not try out something new? The lightfastness, wide range of colors and functionalities displayed by PLEXIGLAS® inspire inventiveness, not just among furniture makers.







PLEXIGLAS®  
**enormous freedom of design**



PLEXIGLAS®  
PLEXIGLAS® Hi-Gloss  
PLEXIGLAS® LED  
PLEXIGLAS® Mineral  
PLEXIGLAS® Optical  
PLEXIGLAS® Reflections  
PLEXIGLAS® Satinice

Work goes on up to the last minute, refining the tiniest details. Before the trade show opens, there are plenty of requests for changes. Customers often change their minds. That's nothing new to planners, designers, exhibition booth builders and event managers – or fabricators. It's a good thing for them to have a material that is as easy to form and machine as PLEXIGLAS®.

Thermoforming gives furniture makers the scope to realize unusual design ideas, for tables, chairs, shelves and showcases. Because PLEXIGLAS® weighs half as much as glass and has eleven times the impact strength, it withstands rough handling, allowing exhibition booths to survive the cut and thrust of trade show activity without damage.

ACRIFIX® specialty bonding agents are ideal for the correct bonding of PLEXIGLAS® pieces. The adhesive can be color-matched to the material, making the joint invisible to viewers. This provides a perfect impression, as designers and experienced fabricators expect.

Since PLEXIGLAS® is easy to fabricate, it opens the door to inspiration and creativity. The variety of shapes and colors can be used to produce multi-colored motifs. The product can be fabricated, by laser-cutting, routing or sawing. Engravings on displays or information signs add additional, eye-catching touches that guide customers and visitors in the right direction.



PLEXIGLAS®  
**functional surfaces**



PLEXIGLAS®  
PLEXIGLAS® Hi-Gloss  
PLEXIGLAS® Mineral  
PLEXIGLAS® Optical  
PLEXIGLAS® Reflections  
PLEXIGLAS® Satinice  
PLEXIGLAS® Textures

PLEXIGLAS® surfaces come in smooth high-gloss, satin, matte or textured grades offering the right choice for a wide variety of needs and applications. Furniture and P-O-P fixtures made of PLEXIGLAS® give stores a special atmosphere and make visitors feel welcome.

As well as the brilliant, shimmering colors, it is the hard-wearing, easy-care and warm-to-the-touch surfaces of objects created with PLEXIGLAS® that make for a feel-good experience. The velvety surface of PLEXIGLAS® Satinice cries out to be touched: PLEXIGLAS® Hi-Gloss provides a luminous depth effect for your most attractive design possibilities. Wherever it is important to create a pleasant atmosphere for the public, promote communication and understanding or provide an ambience of eye-catching designs, PLEXIGLAS® provides surface options to make this possible.

The material and its look are trendy and high-class. The hard-wearing surfaces retain their noble appearance even in places where they are subjected to rough treatment, such as points of sale. The many surfaces, together with the range of textures, give light designers limitless possibilities for showing off their lighting products.

Finger marks and other traces of wear stand little chance of adhering to satin PLEXIGLAS®. PLEXIGLAS® has the highest surface hardness of all thermoplastics. There are also grades with a scratch resistant coating for surfaces exposed to substantial wear and tear.



PLEXIGLAS®  
**sophisticated effects**



PLEXIGLAS®  
PLEXIGLAS® Hi-Gloss  
PLEXIGLAS® LED  
PLEXIGLAS® Reflections  
PLEXIGLAS® Textures

Decor is a field where the imagination can soar. Even small touches can create a big impression. The variety offered by PLEXIGLAS® lets creative professionals give shape to their ideas for trade show booths and store fixtures. PLEXIGLAS® Hi-Gloss with a metallic sheen provides perfect solutions for stylish presentations of luxury and exclusive products, whether in perfume or jewelry stores.

Gold and silver with a deep view effect makes for a brilliant presentation that speaks to the emotions and draws admiring glances at precisely the point where sales decisions are made. Eye-catching engravings add additional allure. Surfaces with an upgraded effect work amazingly well in trade show booths, stores and furniture. The sophisticated use of PLEXIGLAS® with a mirror or a décor surface gives product presentations a touch of grandeur. The interplay of décor or color with light holds a fascination for almost everyone. PLEXIGLAS® is the material of choice for achieving such effects.

A special grade of PLEXIGLAS® with a radiant-effect allows builders of exhibition booths and store fixtures to create a unique rainbow impression. The material displays a scintillating play of color even in ambient light, because it glows in different hues depending on the viewing and lighting angle. Passersby perceive a change of color as they walk past. The material covers almost the entire color spectrum. This creates a rainbow effect at the tradeshow booth or in the shopping mall. It is a first-class way of drawing attention.



- PLEXIGLAS®
- PLEXIGLAS® LED
- PLEXIGLAS® Optical
- PLEXIGLAS® Reflections
- PLEXIGLAS® Satinice
- PLEXIGLAS® Textures

# PLEXIGLAS® emotional ambience

Catching attention and creating an impression are key goals at tradeshow booths and in stores. PLEXIGLAS® is the suitable material since its versatility gives rise to a never-ending series of new ideas.

PLEXIGLAS® enables creative professionals to design the desired atmosphere and lighting environment for every purpose, from unobtrusive background lighting to spotlighting or area lighting. The material can be back-lit at the rear wall of the booth, above the point of sale, in a cozy lounge or in displays and advertising signs. Its transparency and brilliance come to the fore together with its colors and different surfaces.

They speak to the emotions and create the desired mood. The material gives designers the chance to bring their inspiration to life by investing it with shape, light and color.

Whether for a uniformly back-lit surface without disturbing hot spots, or a wall or ceiling panel that is evenly lit via the edges, PLEXIGLAS® LED offers the suitable and energy-saving solution, especially in combination with white or colored LEDs.

*The Lighting Technology brochure contains more possible applications, e.g. for luminaires and illuminated advertising.*



PLEXIGLAS®  
PLEXIGLAS® Optical  
PLEXIGLAS® LED

# PLEXIGLAS® transparent presentations

PLEXIGLAS® makes every item the center of attention through its elegance, brilliance and true color rendition. Creative professionals can rely on the material to bring their ideas to life using its various forms, as solid and multi-skin sheets, blocks, tubes, rods and molding compounds.

PLEXIGLAS® is highly transparent and is available with a scratch resistant surface. Product or display presentations can be made to look rich and enchanting with proper lighting.

Showcases and picture glazing made with PLEXIGLAS® neatly fulfill two more requirements: they offer insight but prevent access. Additionally, the material protects against UV light or halogen lighting so items inside display cases and in shop windows do not fade or become yellow. Neither the exhibit nor the material loses its attraction. Creative professionals and customers can enjoy the unique design and high-quality craftsmanship for a long time to come.

<b>PLEXIGLAS®</b>	PMMA sheets, tubes and rods as basic products with unbeatable resistance to UV light and weathering, combined with durability. The products are either clear and brilliant or available in a large number of opaque, translucent, transparent and fluorescent colors. Additionally a UV-resistant grade is available.	•
<b>PLEXIGLAS® Heatstop</b>	These heat-reflecting PMMA solid and multi-skin sheets offer greater energy efficiency by cutting air conditioning costs. The different color effects make the products especially attractive.	•
<b>PLEXIGLAS® Hi-Gloss</b>	A noble appearance and special deep-view effect are the characteristics of these high-gloss solid sheets, which are available in various colors and with up-to-the-minute décors.	•
<b>PLEXIGLAS® LED</b>	The new dimension of light: specialty PMMA sheets for efficient lighting applications combined with LEDs. Specialty products for edge lighting and backlighting offer maximum light transmission without disturbing hot spots, as well as attractive color play effects.	•
<b>PLEXIGLAS® Mineral</b>	This high-quality, mineral-filled material based on PMMA has the appearance of natural stone. The sheets are solid, completely smooth and homogeneous. They can be formed and are available in many different colors.	
<b>PLEXIGLAS® Optical</b>	PMMA sheets with optical functionalities, high light guidance and distribution provide a uniformly bright and perfectly sharp picture, especially in display applications and for rear projection. Additionally a hard coated, almost UV-resistant grade with excellent resistance to abrasion and chemicals is available.	•
<b>PLEXIGLAS® Reflections</b>	Attractively mirror-coated and reflective solid sheets with a metallic, glossy, matte or rainbow-colored surface.	•
<b>PLEXIGLAS® Satinice</b>	This material's velvet surfaces are robust, pleasant to the touch and discretely light-diffusing. Sheets and tubes are available with a matte satin surface on one or both sides, or with diffuser beads evenly distributed throughout the material, in various colors.	•
<b>PLEXIGLAS® Textures</b>	Solid sheets with a variety of classical and modern surface textures, combined with trendy colors or a rainbow effect.	•

# Products, properties and applications

Wall decoration wall design	Ceiling decoration ceiling design	Ambient lighting	Decoration stuff	Furniture	Signage
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® = registered trademark

PLEXIGLAS is a registered trademark of Evonik Röhm GmbH, Darmstadt, Germany

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

Evonik Industries is a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

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**Evonik. Power to create.**