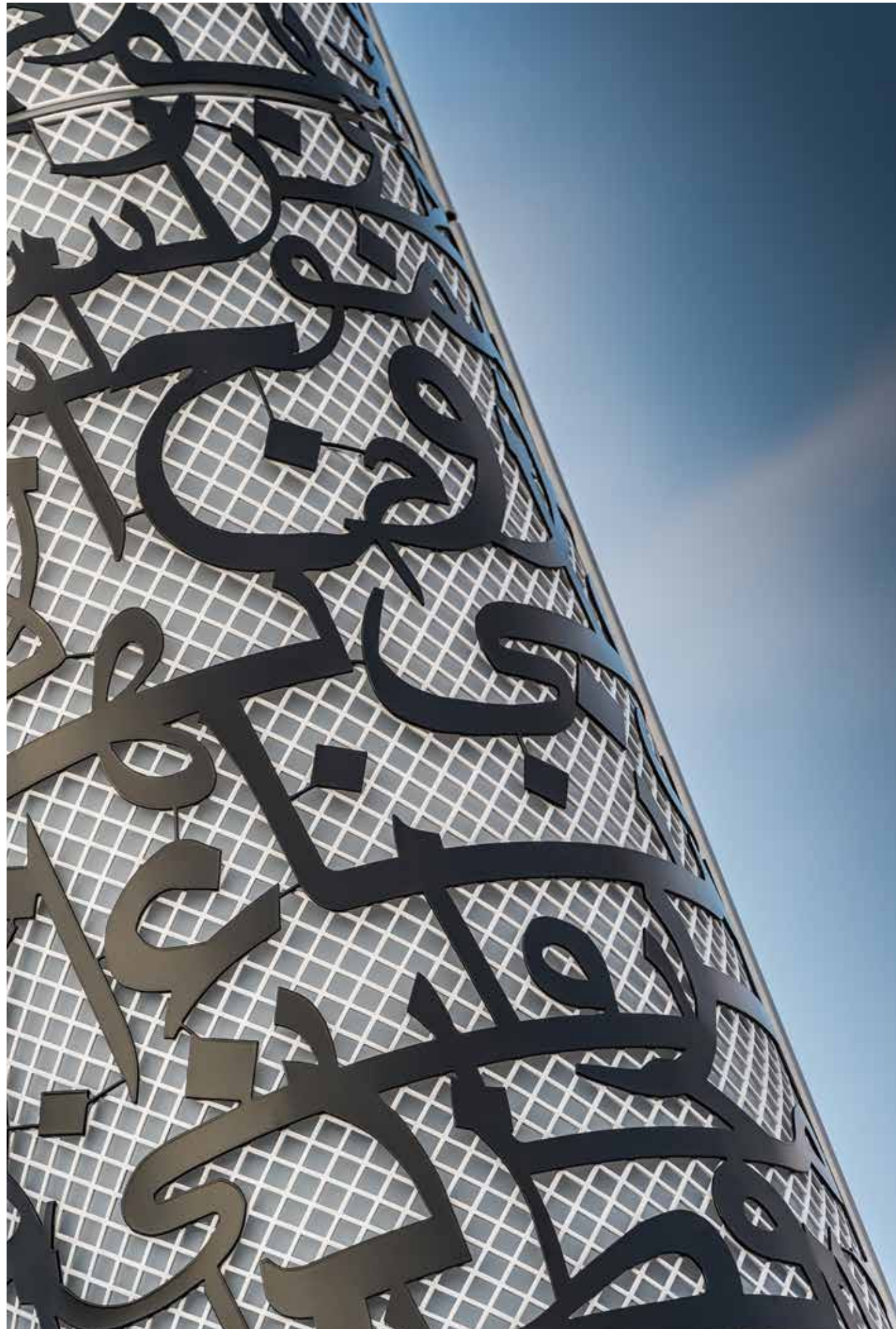




## PRODUCT GUIDE

SIGNAGE, CONSTRUCTION AND EVEN FURNITURE. SO VERSATILE.





## CONTENT

<b>CRYLUX®</b>	<b>04 – 11</b>
■ At a glance	04
■ Technical Data Sheet	07
■ Sustainability	08
<b>CRYLUX® ACRYLIC SHEET</b>	<b>12 – 15</b>
■ CRYLUX® Clear Transparent	15
■ CRYLUX® Opaque	15
■ CRYLUX® Opal	15
■ CRYLUX® Translucent colours	15
■ CRYLUX® Transparent colours	15
<b>CRYLUX® &amp; COLOURS</b>	<b>16 – 23</b>
■ CRYLUX® Argenta	18
■ CRYLUX® Neon	20
■ CRYLUX® Design	22
<b>CRYLUX® &amp; LIGHT</b>	<b>24 – 35</b>
■ CRYLUX® Lumina	26
■ CRYLUX® Vision	28
■ CRYLUX® Optima	30
■ CRYLUX® Fluoedge	32
■ CRYLUX® Night & Day	34
<b>CRYLUX® &amp; PROTECT</b>	<b>36 – 43</b>
■ CRYLUX® Beauté	38
■ CRYLUX® Anti-Bacteria	40
■ CRYLUX® UVP / UVT	42
<b>CRYLUX® APPLICATIONS</b>	<b>44 – 47</b>





## CRYLUX®

When looks really matter, acrylic glass (PMMA) is the perfect choice due to its high transparency, durability and UV stability.

CRYLUX® is an acrylic sheet material which comes into its own when visual impact is key. It is made of cast polymethyl methacrylate (PMMA) and is perfect for a range of purposes: for corporate signage, shopfitting, the building industry or individual pieces of furniture. The product's perfect transparency is ideal for display applications and visual communication as it comes not only in clear transparent but also in lively, vibrant colour shades. Thanks to easy processing options using most standard processing techniques, it offers great scope for appealing design aesthetics.

CRYLUX® is available in standard thicknesses from 2 to 40 mm. In addition to an extensive range of standard colours, CRYLUX® is also available in a variety of special products (CRYLUX® & COLOURS, CRYLUX® & LIGHT, CRYLUX® & PROTECT). On request, we can even develop colours for your specific project.

Sustainable involvement and environmental protection have always been amongst the essential corporate objectives at 3A Composites. The minimisation of risks for man and environment as well as the reduction of environmental pollution through careful and efficient utilisation of resources is part of the corporate philosophy.

At our CRYLUX® production site in Montcada, Spain (certified in accordance with the DIN EN ISO 9001 Quality Management System), we have implemented a wide range of environmental measures over the past ten years and have succeeded in reducing the consumption of gas by 27%, of electricity by 40% and of water by 70%. These cuts in consumption result in CO<sub>2</sub> emissions being reduced by 37% per tonne of acrylic glass manufactured. In addition, we are investing in sustainable technology strategies and site-specific measures on a continual basis. The installation of solar panels in 2022 will ensure that we meet at least 25% of our own energy needs, and in so doing, save at least 140 tonnes of CO<sub>2</sub> annually. In comparison with glass, CRYLUX® acrylic sheets weigh only half as much. Due to these weight savings, transport costs are lower and less carbon dioxide is emitted.

CRYLUX® sheets fulfill the specifications for CAST acrylic sheets defined in UNE EN ISO 7823-1 and do not contain any toxic materials or heavy metals, which may cause environmental damage or health risks. CRYLUX® production process is granted with environmental authorization following IPPC guidelines (Directive 2008/1/EC), that ensures a total environmental consciousness and minimizes impact.

Read more about our commitment to sustainability starting on page 8.

[CRYLUX® – CAST ACRYLIC IN LIVELY, VIBRANT COLOURS.](#)

# CRYLUX®

CAST ACRYLIC IN LIVELY, VIBRANT COLOURS.

## CHARACTERISTICS

- Optical transparency (93% light transmission for transparent sheets)
- High impact resistance
- Lighter than glass of the equivalent thickness
- UV-resistant
- Good thermal stability
- Low water absorption
- Easy to handle
- Perfect transparency for displays
- Broad thickness range (2 to 40 mm)
- Wide range of standard and special colours

## APPLICATIONS

- Displays (POS/POP)
- Signage | Lettering
- Corporate Identity
- Shop design | Shop window decoration
- Interior design | Furniture
- Partitions | Cladding
- Exhibition design and construction
- Model making
- Lighting | Light boxes
- Illuminated letters
- Glazing
- Food contact approved

## PROCESSING

- Digital printing
- Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing



GENERAL			
Property	Method	Unit	CRYLUX®
Density	ISO 1183-1	g/cm <sup>3</sup>	1.19
Water absorption 24h/23°C	ISO 62 Method 1	%	0.2
Rockwell Hardness	ISO 2039-2	M-Scale	105
MECHANICAL			
Property	Method	Unit	CRYLUX®
Tensile strength	ISO 527-2	MPa	75
Elongation at break	ISO 527-2	%	6
Tensile modulus	ISO 527-2	MPa	3300
Flexural strength	ISO 178	MPa	125
Flexural modulus	ISO 178	MPa	3000
Impact strength Charpy unnotched	ISO 179-1	kJ/m <sup>2</sup>	18
Impact strength Charpy notched	ISO 179-1	kJ/m <sup>2</sup>	2
OPTICAL			
Property	Method	Unit	CRYLUX®
Light transmission	ISO 13468-1	%	93
Refractive index	ISO 489	n <sub>D</sub> <sup>20</sup>	1.492
THERMAL			
Property	Method	Unit	CRYLUX®
Vicat temperature (B 50)*	ISO 306	°C	110
Heat deflection temperature (A)	ISO 75-2	°C	105
Specific heat capacity	ISO 3146-C-60°C	J/gK	2.16
Linear thermal expansion α	ISO 11359-2	mm/m °C	0.07
Thermal conductivity	DIN 52612	W/mK	0.19
Service temperature continuous use		°C	80
Max. temperature short term use		°C	90
Degradation temperature		°C	>280
Sheet forming temperature range		°C	140 – 190
ELECTRICAL			
Property	Method	Unit	CRYLUX®
Surface resistivity	IEC 60093	Ω	>10 <sup>14</sup>
Volume resistivity	IEC 60093	Ω x m	>10 <sup>15</sup>
Electrical strength	IEC 60243-1	kV/mm	10
Dielectric strength	IEC 60243-1	kV/mm	30
Dielectrical dissipation factor 50 Hz	DIN 53483-2		0.06
Dielectrical dissipation factor 1 KHz	DIN 53483-2		0.04
Dielectrical dissipation factor 1 MHz	DIN 53483-2		0.02
Relative permittivity 50 Hz	DIN 53483-2		2.7
Relative permittivity 1 KHz	DIN 53483-2		3.1
Relative permittivity 1 MHz	DIN 53483-2		2.7

\* = Pre-treatment: 16 h at 80°C

Note: These technical data of our products are typical ones; the actually measured values are subject to production variations.

# SUSTAINABILITY

MISSION: TOGETHER. RESPONSIBLE.

Sustainability is at the core of everything we do. Our corporate ecological commitment is summed up by the **MISSION: TOGETHER. RESPONSIBLE.** As we also apply and comply with this mission in regard to our products, we have created a classification system. The five different categories in our **FIVE-DOT-MISSION** system indicate the factors with the greatest impact on sustainability. Our intention is to offer our partners guidance with their purchasing decision-making and to provide a transparent system. A system which focuses on the use of materials, the CO<sub>2</sub> content, the product life cycle and, of course, recycling, a topic of particular relevance for our products. Our FIVE-DOT-MISSION makes an assessment of a product on the basis of five categories and awards points per category, the product is then assigned to one of the five coloured DOTs. By this means we achieve a transparent, quick valuation logic which we can also use to gauge product innovation and improvement at 3A Composites.

## THE FIVE-DOT CATEGORIES ARE:

**1. BIOBASED CONTENT**  
Depending on the product, different raw materials are used to manufacture our panels. In this case, we look at the percentage of renewable raw materials used in our products. Our aim is to increase the percentage whenever possible and appropriate.

**2. RECYCLED CONTENT**  
The industry selects recycled raw materials for use in the manufacture of new products which also fulfil requirements such as fire ratings, processing prerequisites and customer expectations in terms of functionality and appearance. This category is where we gauge the proportion of high quality recycled raw material in our products' total material input.

**3. FOSSIL CO<sub>2</sub> BOUND IN THE MATERIAL**  
This category shows the weight of fossil CO<sub>2</sub> embedded in our panels. Differences here are principally due to the raw material type and origin, the density, the composition and the proportion of recycled content.

**4. PRODUCT LIFE CYCLE**  
The plastic sheets and composite panels we produce are used by our customers for a longer period of time. In contrast to products used in the short term, these longer-term alternatives make an active contribution to saving resources. In this category we show our panels' average service life. Material properties result in disparities, so life cycles range from <1 year to even >30 years.

**5. RECYCLABILITY**  
One of the most important aspects of sustainability is contributing to environmental protection by saving valuable raw materials and avoiding waste. Unlike the second category "recycled content", in this assessment category, we show options for recycling the panels after they have been in use. There are already, for instance, established recycling loops for paper and metals. At some production sites, the material can already be returned, so that material for new panels can be created from it. As a company, we came to the conclusion that thermal recycling does not seem sustainable enough, so it is not included in our FIVE-DOT classification. Instead, we are actively working with partner companies to establish a closed-loop, sustainable and future-oriented recycling economy.

As many as 3 points can be achieved in each of the categories presented, totalling a maximum of 15 points. According to the total number of points achieved (1-15), the FIVE-DOT classification is conducted using the following colour gradation.



Transparency is important to us! We will review the product assessment annually to see in which areas the product can be improved. We have set ourselves the goal of achieving the majority of our sales with products which achieve a rating of ≥ 7 points in the FIVE-DOT classification by 2030.

Join us on our sustainable mission!

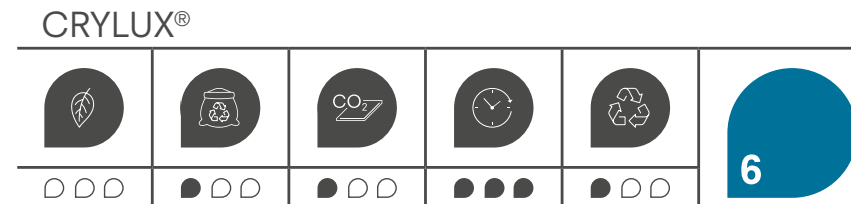




# SUSTAINABILITY

## CRYLUX® FIVE-DOT-MISSION

CRYLUX®, cast acrylic in lively, vibrant colours, has been assessed in line with the criteria described above. The product currently achieves a FIVE-DOT classification with a total of 6 points.



**RECYCLED CONTENT**  
 The current production of our CRYLUX® cast acrylic sheets already contains a proportion of recycled MMA material. The majority of this material is waste from the manufacturing process which can be completely recycled by means of pyrolysis to provide raw material (MMA) for new acrylic sheets. Furthermore, all raw materials used in making our CRYLUX® sheets also comply with the requirements of the most recent version of the European Union Chemicals Regulation (REACH). In particular, CRYLUX® sheets do not contain any of the substances listed in the current version of the ECHA Candidate List of Substances of Very High Concern (SVHC). PMMA does not contain any toxic substances or heavy metals which may cause environmental damage or pose risks to health.

**FOSSIL CO<sub>2</sub> BOUND IN THE MATERIAL**  
 Owing to the MMA used as a raw material in the manufacturing process, CRYLUX® contains fossil carbon. However, thanks to its lower density, CRYLUX® PMMA contains less fossil carbon per m<sup>2</sup> than other transparent plastics. As well as the lower density, another factor to note is that, compared with other plastics, the polymer molecule contains a lower percentage of carbon atoms.

**PRODUCT LIFE CYCLE**  
 Acrylic glass (PMMA) is a robust, highly transparent and extremely durable material featuring excellent UV stability and resistance to weathering and ageing. We guarantee a service life of ten years for the CRYLUX® product family. The sheets are protected against the harmful effects of ultra violet rays and there are no significant changes with regard to optical or mechanical properties. When processed, used, and cared for in an appropriate manner, the life cycle of our sheets can be considerably longer than ten years. An extended service life also leads to saving resources as fewer replacements are required. Our CRYLUX® sheets are used in a wide variety of interior and exterior applications where priorities include durability, UV stability and, above all, transparency (93% light transparency for colourless sheets). CRYLUX® is a product offering sustainable, long-term use and excellent product performance.

**RECYCLABILITY**  
 CRYLUX® sheets can be converted back into their original raw material, methyl methacrylate (MMA), using various recycling processes. Most modern recycling processes convert PMMA sheets or waste from production processes into a MMA liquid monomer using chemical recycling (depolymerisation). The recovered MMA can then be reused to create a new product from an existing one. Renowned chemical companies are currently undertaking intensive research into improved depolymerisation technologies to achieve a more efficient and sustainable means of recovering the precious raw material MMA, which is used in manufacturing CRYLUX® acrylic sheets. These developments support efforts made by the market to increase the rate of PMMA recycling in Europe.





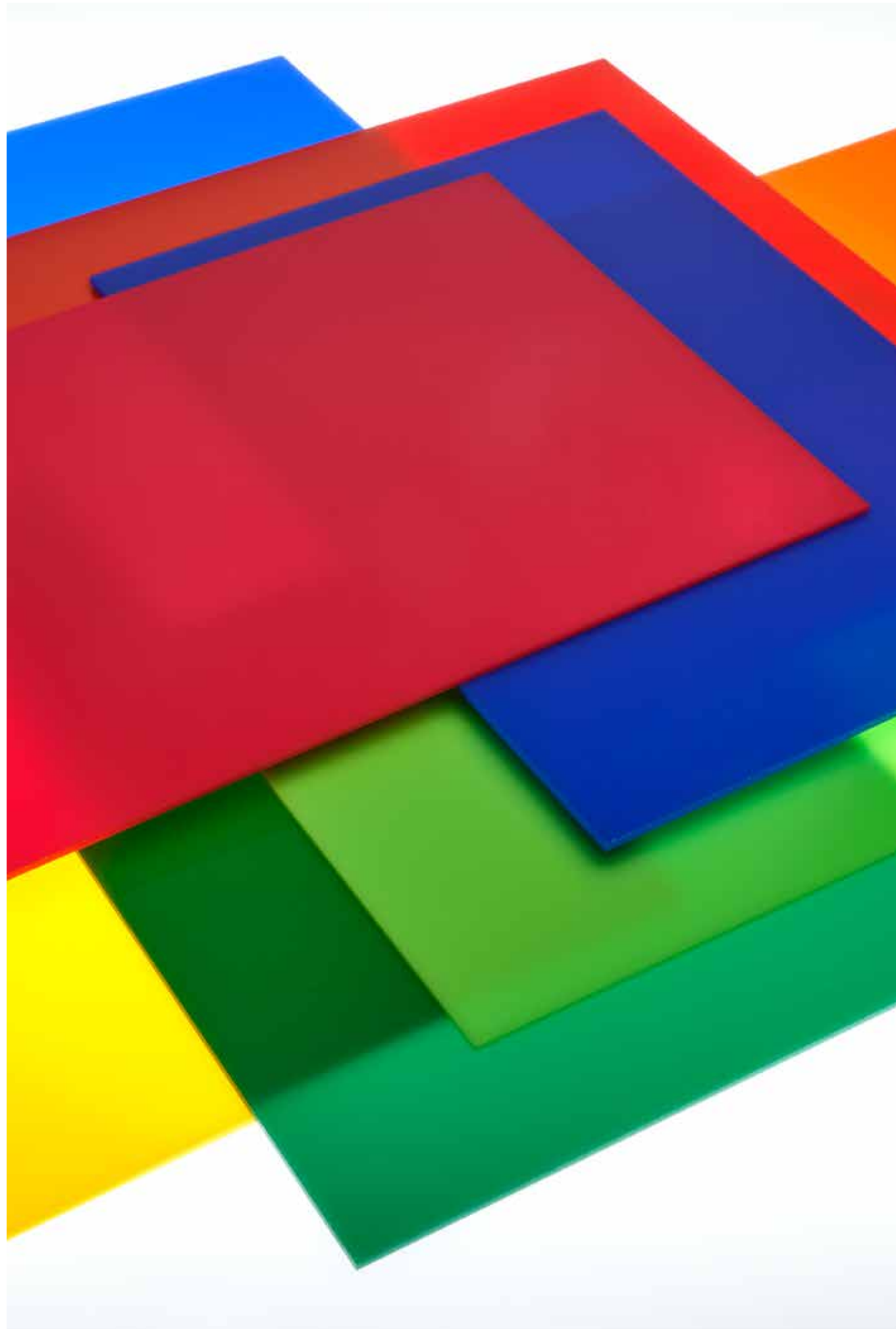
## CRYLUX® ACRYLIC SHEET

The product line CRYLUX® ACRYLIC SHEET includes the entire colour spectrum of clear transparent, opaque, opal as well as translucent and transparent colours. In addition to this comprehensive range of standard colours, we have the possibility to provide a wide variety of specific customized colours in our own colour lab. Available in colour options e.g. RAL or PANTONE colour systems or your custom colour.




The ACRYLIC SHEET product range is characterized as follows:

- **CRYLUX® Clear transparent** – the original clear CRYLUX® acrylic sheet impresses with a light transmission of 93%. It is available in thicknesses from 2 – 40 mm and in different versions.
- **CRYLUX® Opaque** – Range of white, black and grey opaque acrylic sheets.
- **CRYLUX® Opal** – Opal colours in a variety of light transmission options.
- **CRYLUX® Translucent colours** – From bright yellows to saturated greens and reds to vibrant blues, the choice of colours offers creative possibilities.
- **CRYLUX® Transparent colours** – The transparent colours of CRYLUX® uses natural light to bring them to life.




The CRYLUX® ACRYLIC SHEET range offers architects and designers a wide range of design options – there are no limits to creativity.









## CLEAR TRANSPARENT

 <b>Clear 1000</b> FLS LT 93 %	 <b>Clear 1000</b> MAT LT 91 %	 <b>Clear 1000</b> UVT LT 93 %
---	---	---









## OPAQUE

 <b>White 3014</b> OPAQUE LT 5 %	 <b>Black 3945</b> OPAQUE LT <1 %
 <b>Grey 3924</b> OPAQUE LT <1 %	












## OPAL

 <b>Ice White 2000</b> OPAL LT 74 %	 <b>Ice White 2013</b> OPAL LT 68 %	 <b>White 4000</b> OPAL LT 41 %
 <b>White 4005</b> OPAL LT 37 %	 <b>White 4018</b> OPAL LT 52 %	 <b>White 4029</b> OPAL LT 30 %

## TRANSLUCENT COLOURS

 <b>Yellow 4201</b> FLS LT 22 %	 <b>Orange 4317</b> FLS LT 17 %	 <b>Green 4503</b> FLS LT 3 %	 <b>Green 4517</b> FLS LT 11 %	 <b>Red 4606</b> FLS LT 15 %
 <b>Red 4629</b> FLS LT 10 %	 <b>Ice Blue 2819</b> FLS LT 11 %	 <b>Blue 4814</b> FLS LT 12 %		

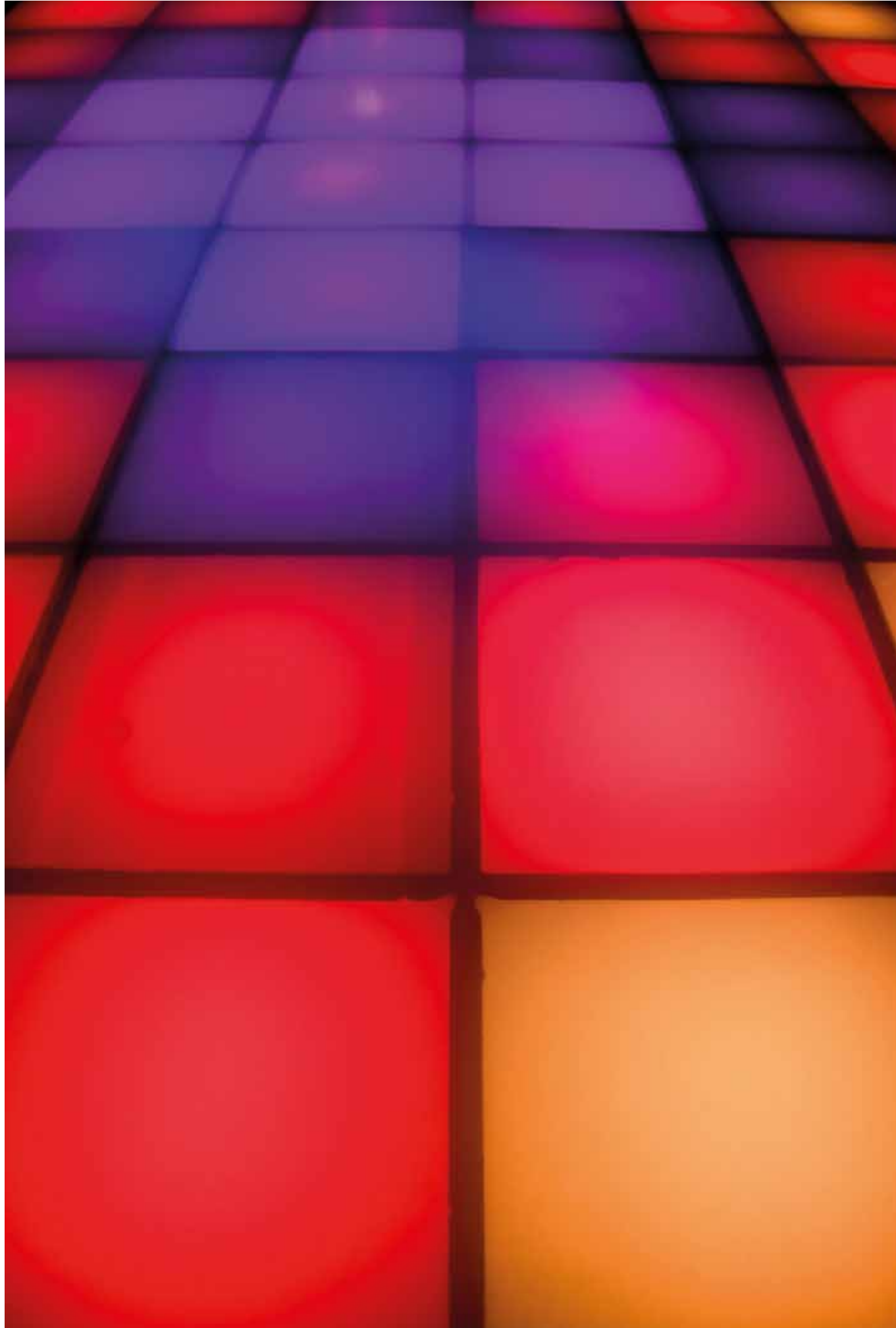
## TRANSPARENT COLOURS

 <b>Yellow 1201</b> FLS LT 61 %	 <b>Orange 1303</b> FLS LT 40 %	 <b>Brown 1433</b> FLS LT 57 %	 <b>Green 1504</b> FLS LT 28 %	 <b>Red 1617</b> FLS LT 19 %
 <b>Blue 1819</b> FLS LT 22 %	 <b>Blue 1861</b> FLS LT 51 %	 <b>Blue 1875</b> FLS LT 72 %	 <b>Grey 1917</b> FLS LT 18 %	 <b>Grey 1961</b> FLS LT 43 %
 <b>Brown 1443</b> FLS LT 14 %				

FLS = double-sided glossy, ARD = double-sided matt, MAT = single-sided matt, UVT = partially transparent to UV light, OPAQUE = non-transparent, OPAL = semi-transparent  
LT = Light transmission (Figures apply to 3 mm sheet thickness only.)

For our CRYLUX® colours we guarantee a constantly high quality of colour and colour consistency. The colours printed may vary from the original. To ensure exact colour matching please ask for a colour sample. To secure colour consistency, the material for each project should be placed on one order.



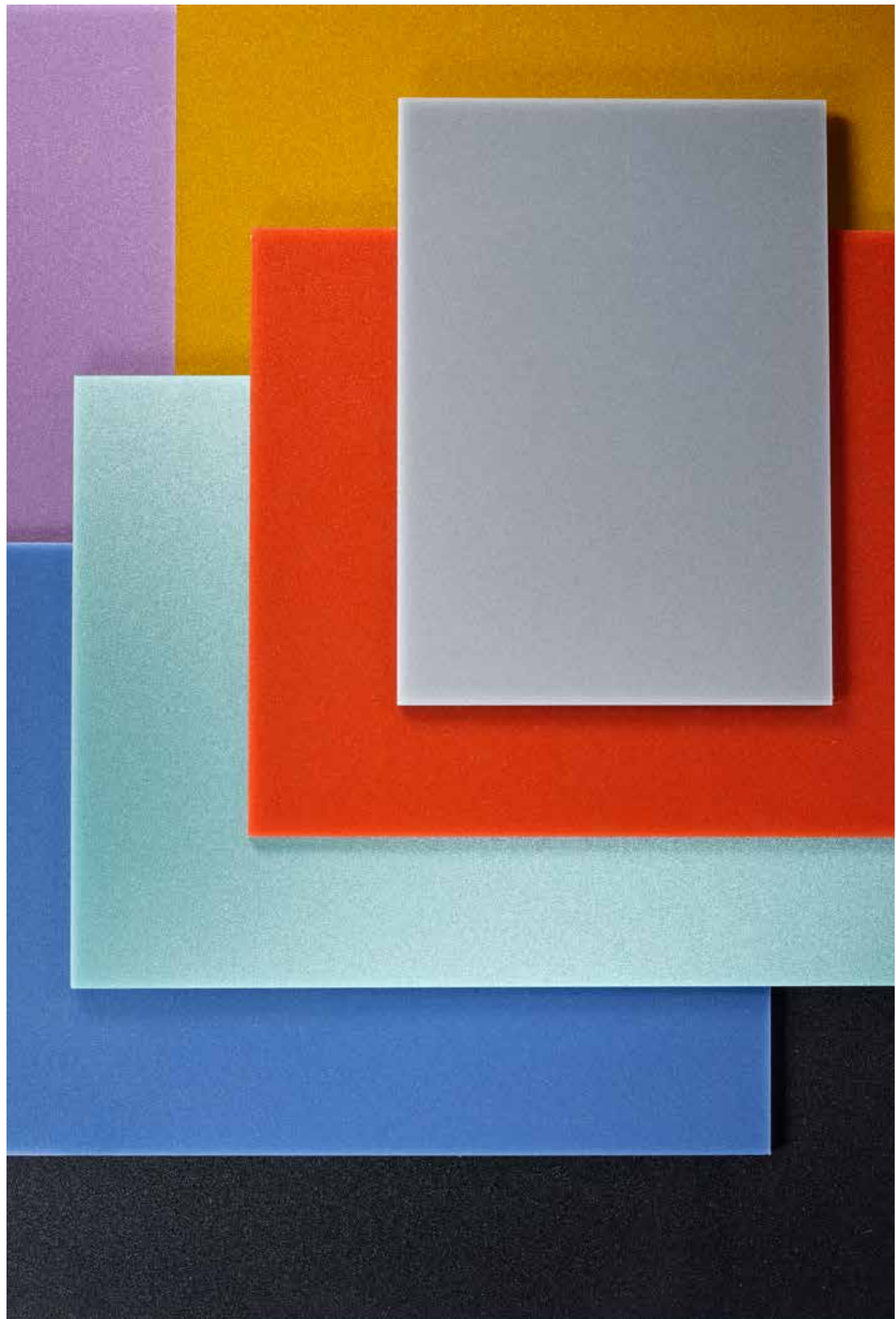


## CRYLUX® & COLOURS

The product line CRYLUX® & COLOURS offers a wide range of different surfaces and colours for sophisticated design applications, which attract attention and thereby create a feeling of spaciousness.

Special features, such as the light transmission, high brilliancy, low weight or the good processing characteristics offer a lot of scope for creativity.

The application field of CRYLUX® & COLOURS includes booth construction, interior design, promotion, high-quality shop fitting, furniture and luxurious POS/POP displays, among others.



# CRYLUX<sup>®</sup> ARGENTA

SPARKLING COLOURED FRONT SIDE AND METALLIC, SILVER OPAQUE REVERSE SIDE.

Special colours and characteristics ensure that the product range CRYLUX<sup>®</sup> Argenta stands out from other material with a unique sparkling look, creating a fascinating depth effect that guarantees your attention.

The two different surfaces offer many creative solutions in the visual area: The front side is sparkling coloured and is characterised by a gloss and depth effect, while the metallic silver reverse side is equipped with an opaque appearance.

CRYLUX<sup>®</sup> Argenta is specially suitable for the high end sector by implementing innovative interior design concepts using its various manufacturing and surface processing methods, including thermoforming.

### CHARACTERISTICS








- Two different surfaces:
  - Front side (sparkling coloured with a gloss depth effect)
  - Reverse side (metallic silver, opaque appearance)
- Unique sparkling look
- Fascinating depth effect
- Special visual characteristics
- Easy to handle

### APPLICATIONS

- Displays (POS/POP)
- Corporate Identity
- Shop design | Shop window decoration
- Interior design | Furniture
- Partitions | Cladding
- Exhibition design and construction
- Model making
- Lighting | Light boxes

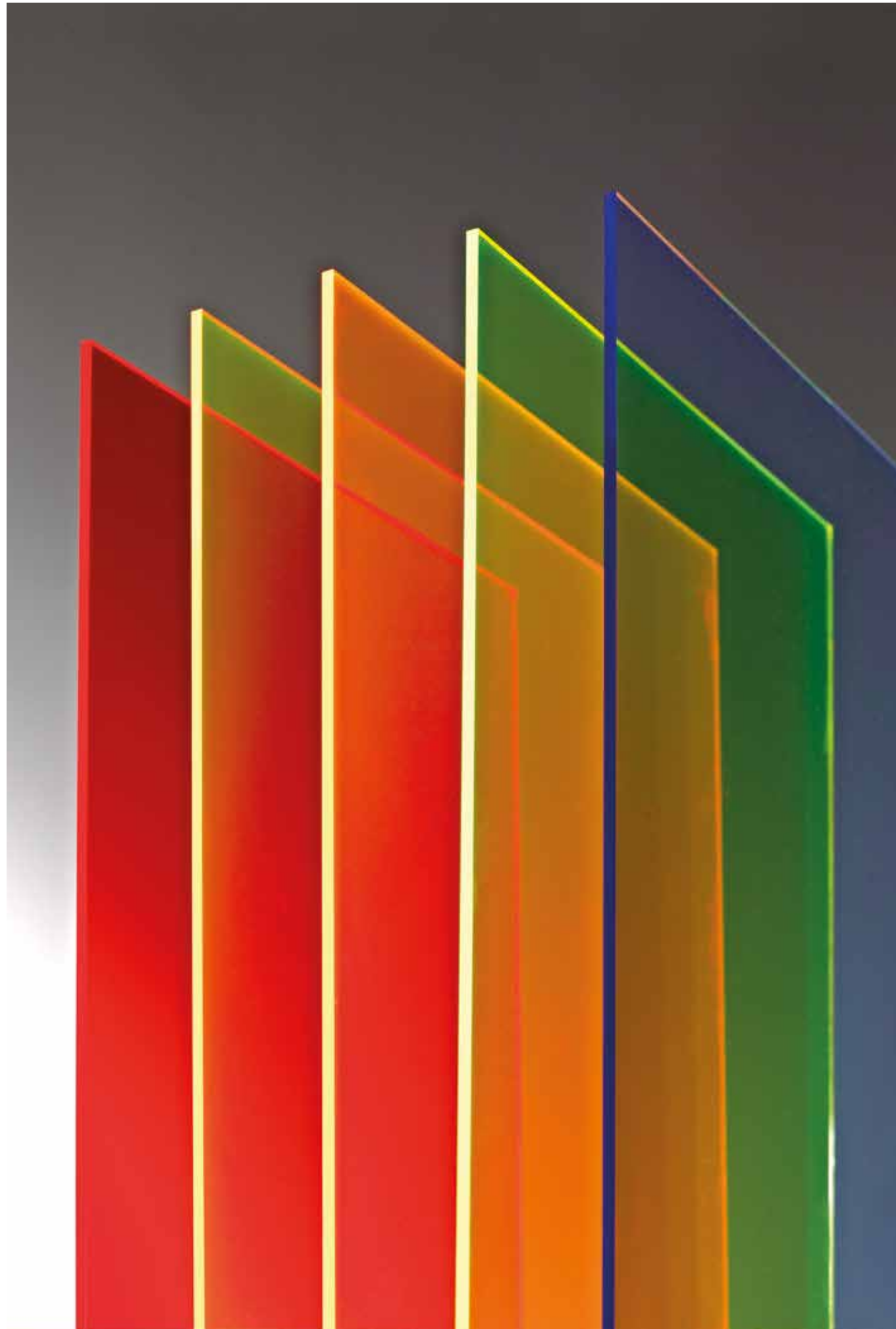
### PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

 <b>Grey 6010</b> SIL LT 1%	 <b>Gold 6210</b> SIL LT 1%	 <b>Red 6610</b> SIL LT 1%	 <b>Green 6510</b> SIL LT 1%	 <b>Violet 6710</b> SIL LT 1%
 <b>Blue 6810</b> SIL LT 1%	 <b>Black 6910</b> SIL LT 1%			

SIL = Argenta  
 LT = Light transmission (Figures apply to 3 mm sheet thickness only. Light transmission up to an average of 30 to 35% (depending on colour reference) can be gained by thermoforming the material.) Due to inner composition and production process, material has a certain particle orientation. This results in a colour, which has different colour shades depending on visual angle.





# CRYLUX® NEON

EYE-CATCHING, FLUORESCENT COLOURS.

The product range CRYLUX® Neon is characterised by the high brightness, combined with an excellent light transmission and low weight. By trendy strong colours, each application is put in perspective through the necessary dash of liveliness.

Five fluorescent colours are available: a refreshing yellow, a bright orange, a vibrant green, a bold red and an invigorating blue. With these colours inspiring creativity and conveying a feeling of optimism, they will particularly appeal to everyone from designers and architects, through to product display builders and exhibition stand designers.

## CHARACTERISTICS






- Eye-catching, fluorescent colours
- Intensive color brilliance
- Good impact strength
- Low weight
- Excellent light transmission

## PROCESSING

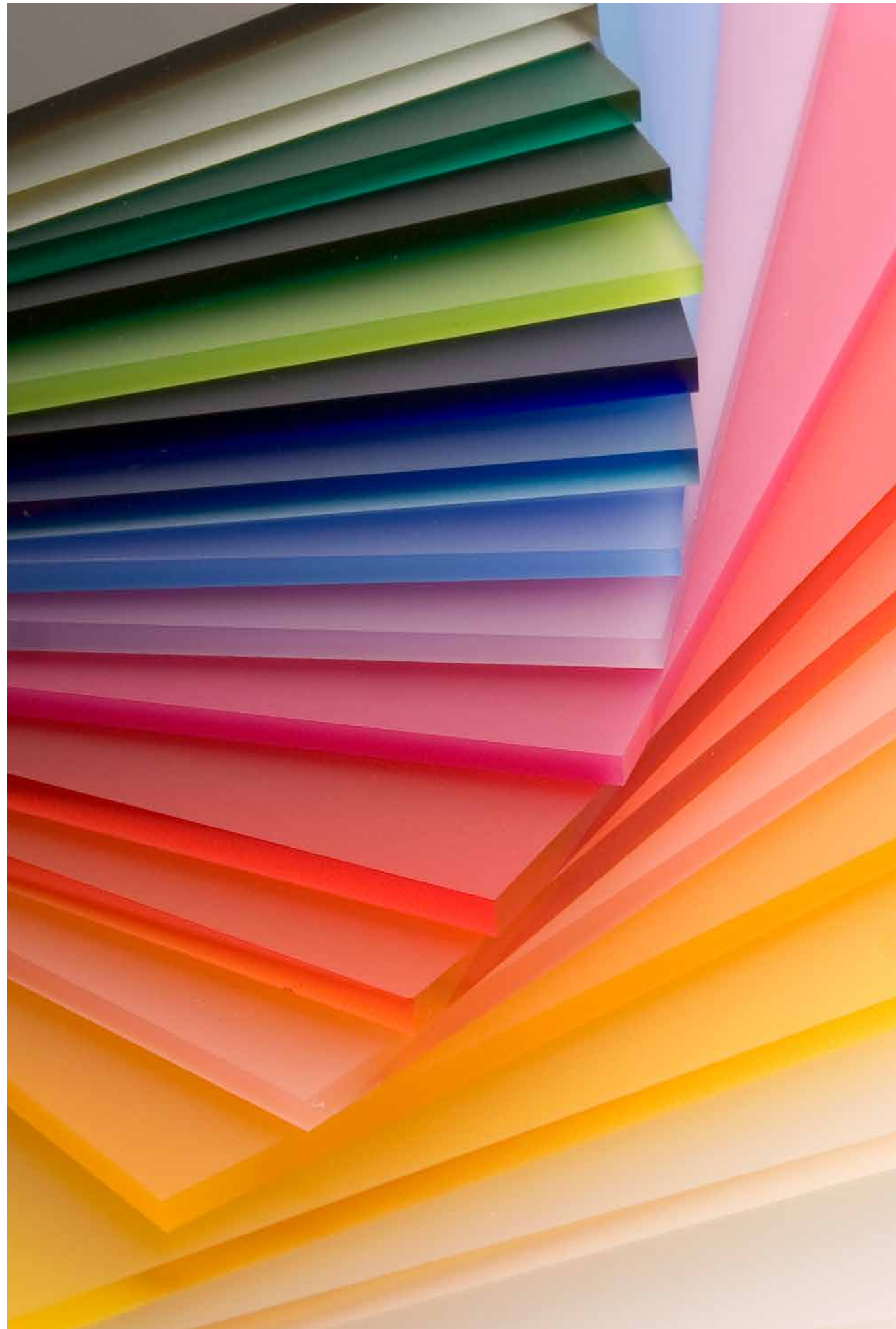
- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

## APPLICATIONS

- Displays (POS/POP)
- Corporate Identity
- Shop design | Shop window decoration
- Interior design | Furniture
- Partitions | Cladding
- Exhibition design and construction
- Model making
- Lighting | Light boxes

 <b>*Yellow 1271</b> FLS LT 69%	 <b>*Orange 1371</b> FLS LT 56%	 <b>*Green 1571</b> FLS LT 37%	 <b>*Red 1641</b> FLS LT 76%	 <b>*Blue 1871</b> FLS LT 75%
--	--	---	---	--

\* = For indoor applications  
 FLS = double-sided glossy  
 LT = Light transmission (Figures apply to 3 mm sheet thickness only.)



# CRYLUX® DESIGN

SINGLE- OR DOUBLE-SIDED MATT SURFACES IN MANY EYE-CATCHING AND VIBRANT COLOURS.

Thanks to the non-glare surfaces of CRYLUX® Design the light dispersion is intensified, its matt surfaces increase the dispersion effect additionally. The lustrous satin-like texture – with its warm shading – won't stain, or be contaminated through fingerprints.

The texture of CRYLUX® Design is even retained after processes such as thermoforming and hot bending, ensuring that the finished article remains true to the original concept.

## CHARACTERISTICS



























- Warm shading
- Stain-resistant
- Wide range of colours
- Satin-like texture
- Reduces fingerprints and attracts less dust
- Softens harsh colours
- Good processing and thermoforming characteristics
- Resistant to many chemical products
- Non-glare surfaces intensify light dispersion
- Dispersion effect is increased by the matt surfaces

## APPLICATIONS

- Displays (POS/POP)
- Corporate Identity
- Shop design | Shop window decoration
- Interior design | Furniture
- Partitions | Cladding
- Exhibition design and construction
- Model making
- Lighting | Light boxes

## PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

 <b>Arctic Mist 1000</b> ARD LT 89 %	 <b>Iceland White 2008</b> ARD LT 78 %	 <b>Antarctic White 2000</b> ARD LT 75 %	 <b>Everglade Green 1512</b> ARD LT 86 %	 <b>Evian Blue 1875</b> ARD LT 78 %	 <b>Tahiti Blue 1809</b> ARD LT 26 %	 <b>Cape Town Yellow 1212</b> ARD LT 62 %
 <b>Seville Orange 1307</b> ARD LT 47 %	 <b>Bordeaux Red 1600</b> ARD LT 45 %	 <b>China Rose 2614</b> ARD LT 48 %	 <b>Glacier Green 1560</b> ARD LT 32 %	 <b>Bali Green 1549</b> ARD LT 9 %	 <b>Havana Brown 1438</b> ARD LT 23 %	
 <b>1000</b> MAT LT 90 %	 <b>Opaque White 3014</b> MAT LT <5 %	 <b>Opaque Black 3945</b> MAT LT <1 %	 <b>Village Green 2512</b> MAT LT 44 %	 <b>Nordic Blue 2811</b> MAT LT 50 %	 <b>Parma Violet 2701</b> MAT LT 55 %	 <b>Petra Rose 2608</b> MAT LT 24 %
 <b>Mexican Orange 2305</b> MAT LT 43 %	 <b>Cypress Green 1571</b> FLUORESCENT LT 81 %	 <b>Bavarian Green 1572</b> FLUORESCENT LT 73 %	 <b>California Yellow 1271</b> FLUORESCENT LT 75 %	 <b>Lisbon Orange 1371</b> FLUORESCENT LT 62 %	 <b>Cancun Pink 1671</b> FLUORESCENT LT 74 %	

ARD = double-sided matt, MAT = single-sided matt, LT = Light transmission (Figures apply to 3 mm sheet thickness only.)





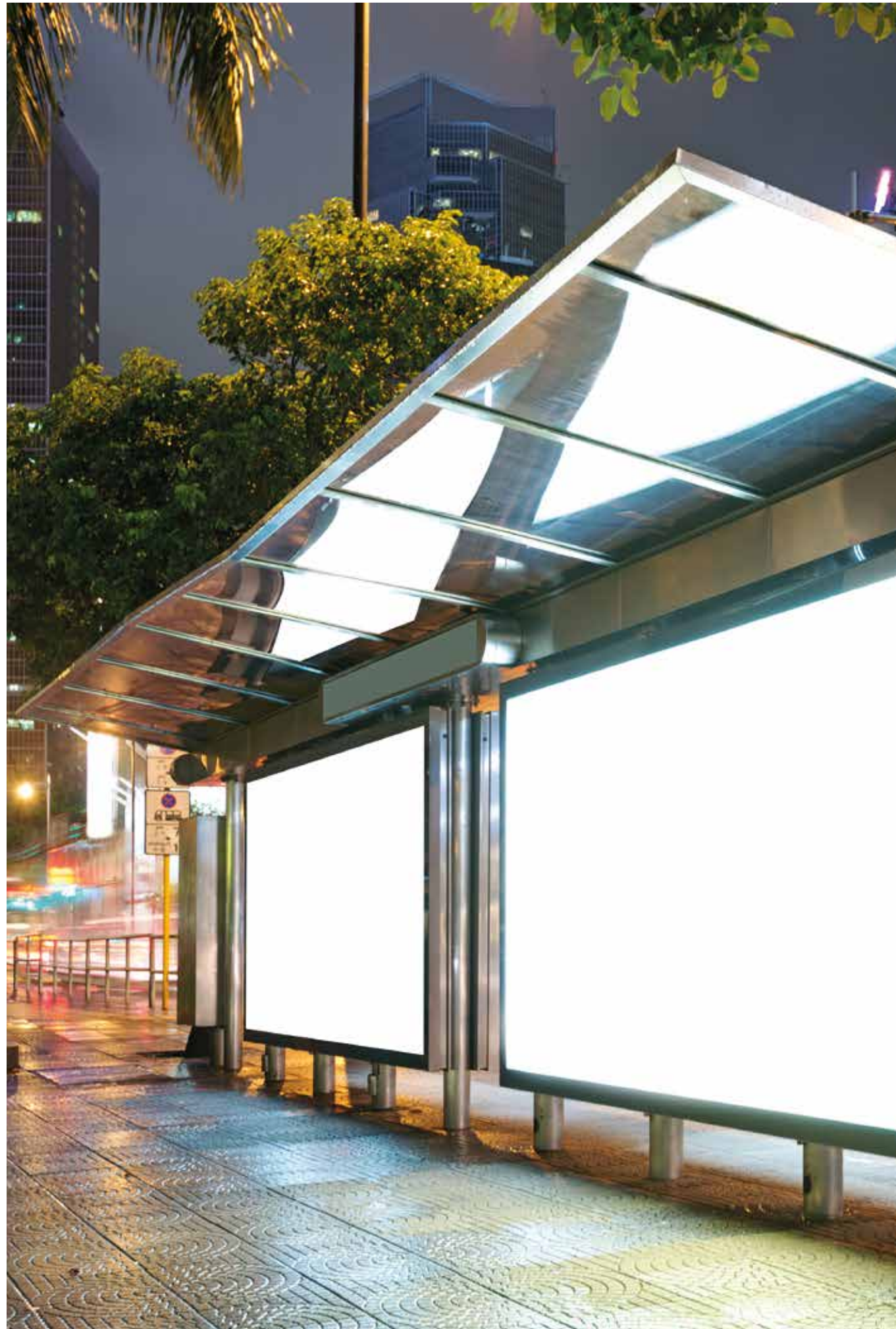
## CRYLUX® & LIGHT

The product line CRYLUX® & LIGHT is the optimal tool for the field of visual communication. The materials can stand and shine alone or they can be the perfect support to highlight your brand and make it stand out from the crowd.

Innovative characteristics, such as an uniform light diffusion and exact projection techniques, underline the excellent conditions for the development of new designs.

In the fields of decoration, lighting and advertising the product line CRYLUX® & LIGHT can be used particularly with the excellent combination of LED technology and to create stand-alone corporate letters with individual lighting.





# CRYLUX® LUMINA

## UNIQUE LIGHT DIFFUSION CHARACTERISTICS.

The innovative properties allow for an even distribution of light-ideal for the development of new designs in decoration, lighting and advertising. Once the light source is applied to the edges of the sheet, a uniformed light across the whole surface, and outwards, is generated.

CRYLUX® Lumina is specially suitable for ultra-slim lighting frames (light-boxes) which incorporate LED lighting, such as urban displays, bus shelters and poster mounts. The dimensions of the final frames can be reduced and the light output can be maximised.

### CHARACTERISTICS

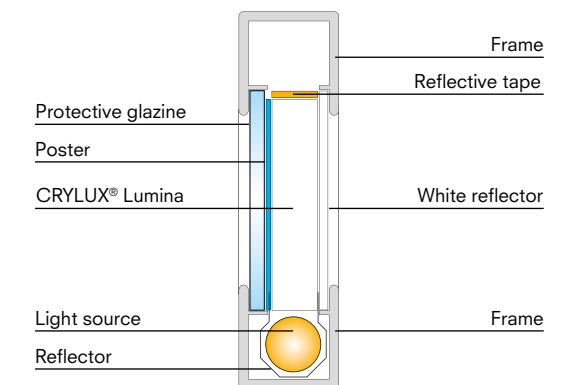
- Unique light diffusion characteristics  
(Light is installed at the edges and distributed evenly through the sheet surface)
- Avoids disturbing shadows by back lights or LED hotspots
- Easy maintenance
- Suitable for use with any light source:  
Fluorescent tubes, LEDs, cold cathode tubes, optical fibres

### APPLICATIONS

- Displays (POS/POP)
- Lighting | Light boxes

### PROCESSING

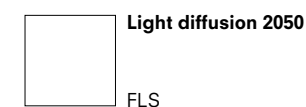
- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing



### FRAME CONFIGURATION

In order to obtain the best lighting performance using CRYLUX® Lumina, remember the following guidelines:

- Edges should be flat-cut and polished (preferably diamond polished).
- Non-illuminated edges should be protected by a reflective adhesive tape (mirror or white reflector).
- Light sources should be as close as possible to the edge of the sheet. Any accessory designed to focus light into the sheet, will enhance the material's properties.
- A white reflector behind CRYLUX® Lumina will increase surface illumination.



FLS = double-sided glossy





# CRYLUX® VISION

FOR DISPLAYING MESSAGES IN AUDIO-VISUAL PRESENTATIONS.

In a world of fast-moving images and information, CRYLUX® Vision is specified for tailor-made presentations and allows your product and your brand to stand out from the mass.

The three types in the range, CRYLUX® Vision Front, CRYLUX® Vision Rear and CRYLUX® Vision Through cover all viewing requirements for the ultimate presentation on screen.

## CHARACTERISTICS

- CRYLUX® Vision Front: white, opaque, rigid screen to be used in frontal projections.
- CRYLUX® Vision Rear: neutral grey-coloured sheet specially developed for rear projection and due to its special transmission values, images can be seen on both sides of the screen simultaneously. In rear projection applications, bright and clear images completely eliminate the 'hot spots' often seen with conventional projection screens.
- CRYLUX® Vision Through: almost transparent sheet that allows the projection of images, and also a clear view through the sheet in zones where no image is projected.
- Rigid screen construction eliminates the risk of image distortion that can occur with textile screens.
- Matt surfaces avoid disturbing light reflection.

## APPLICATIONS

- Displays (POS/POP)
- Exhibition design and construction
- Model making

## PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

## INSTALLATION GUIDELINES

As a rule of thumb, the following indications should be considered when installing a projection screen:






- Viewing distance from the projector to the screen depends on the screen size and the projector itself.

As illustrative values:

- Screen size = 50" / Viewing distance = 1.5 – 2.0 m, Screen size = 100" / Viewing distance = 2.6 – 4.5 m, Screen size = 120" / Viewing distance = 2.6 – 5.0 m

- Viewers' line of vision should be 1/3 of the height from the bottom of the screen.

These are only suggestions; space considerations will determine actual distances.

 <b>Vision Front 3014</b> MAT	 <b>Vision Front 3014</b> ARD	 <b>Vision Rear 2950</b> ARD	 <b>Vision Rear 2950</b> MAT	 <b>Vision Through 2051</b> FLS
---	---	--	--	---

FLS = double-sided glossy, ARD = double-sided matt, MAT = single-sided matt



# CRYLUX<sup>®</sup> OPTIMA

SPECIALLY DESIGNED TO BE USED WITH LED BACKLIGHTING.

Light transmission of these colours has been adjusted to the wavelength of the light-emitting diode (LED), minimising the number of LED lights needed to achieve the desired light intensity.

CRYLUX<sup>®</sup> Optima also has high light diffusion properties, providing a perfect light spread through the sheet, avoiding any distracting shadows from the LED lights which are placed behind.

The sheets are ideal for applications in the advertising and sign industries, to put your designs in perspective.

## CHARACTERISTICS

- Smooth or matt surface
- Specially designed to be used with LED backlighting
- Light transmission of these colours has been adjusted to the desired wavelength of the LEDs
- To achieve the light intensity, only a small number of LEDs is required
- Excellent light diffusion properties
- Perfect light spread through the sheet
- Avoiding distracting shadows from the LED lights which are placed behind

## APPLICATIONS

- Displays (POS/POP)
- Signage | Lettering
- Shop design | Shop window decoration
- Interior design | Furniture
- Lighting | Light boxes

## PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

<p><b>White 2021</b></p> <p>LED LT 59 %</p>	<p><b>Yellow 2250</b></p> <p>LED LT 51 %</p>	<p><b>Orange 2251</b></p> <p>LED LT 62 %</p>	<p><b>Orange-Amber 2350</b></p> <p>LED LT 62 %</p>
<p><b>Super-Red 2651</b></p> <p>LED LT 58 %</p>	<p><b>True-Green 2550</b></p> <p>LED LT 36 %</p>	<p><b>Blue 2851</b></p> <p>LED LT 51 %</p>	

LT = Light transmission (Figures apply to 3 mm sheet thickness only and referred to emitting wavelength.)





# CRYLUX® FLUOEDGE

LIGHT COLOURED SHEETS WITH FLUORESCENT EDGES.

CRYLUX® Fluoedge is the range of transparent sheets with fluorescent edges. While the surface of the sheet appears to be clear, the edges are coloured to allow special effects with or without light.

Specially designed for the manufacture of furniture, table tops and shelves, the range of vivid edges allows it all for imagination and design.

## CHARACTERISTICS







- Transparent, almost clear surface
- Vivid, coloured edges

## PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

## APPLICATIONS

- Displays (POS/POP)
- Shop design | Shop window decoration
- Interior design | Furniture
- Model making

 <p><b>Banana Yellow 1260</b> TRANSPARENT LT 86 %</p>	 <p><b>Fiery Orange 1360</b> TRANSPARENT LT 82 %</p>	 <p><b>Schocking Pink 1660</b> TRANSPARENT LT 85 %</p>	 <p><b>Wildflower Violet 1760</b> TRANSPARENT LT 85 %</p>
 <p><b>Lime Green 1580</b> TRANSPARENT LT 87 %</p>	 <p><b>Electric Blue 1860</b> TRANSPARENT LT 84 %</p>		

LT = Light transmission (Figures apply to 3 mm sheet thickness only.)



# CRYLUX® NIGHT & DAY

IMPRESSIVE RESULTS – BY DAY AS WELL AS BY NIGHT.

Colour change using the same sheet is possible with CRYLUX® Night & Day.

The sheets are ideal to produce corporate signs in indoor or outdoor applications. Let it stand without light during the day, and it will be a dark sign or corporate letter on top of a roof or in the middle of a façade.

When it is back illuminated at night it will become into an outstanding white letter that is visible to all.

## CHARACTERISTICS

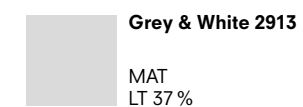
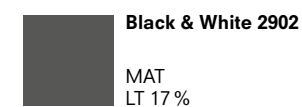
- Changes colour from dark (without back-lighting) to white (with back-lighting)
- Top side is anti-glare and allows even light diffusion through the sheet
- Allows powerful lighting without generating hotspots

## APPLICATIONS

- Signage | Lettering
- Corporate identity
- Lighting

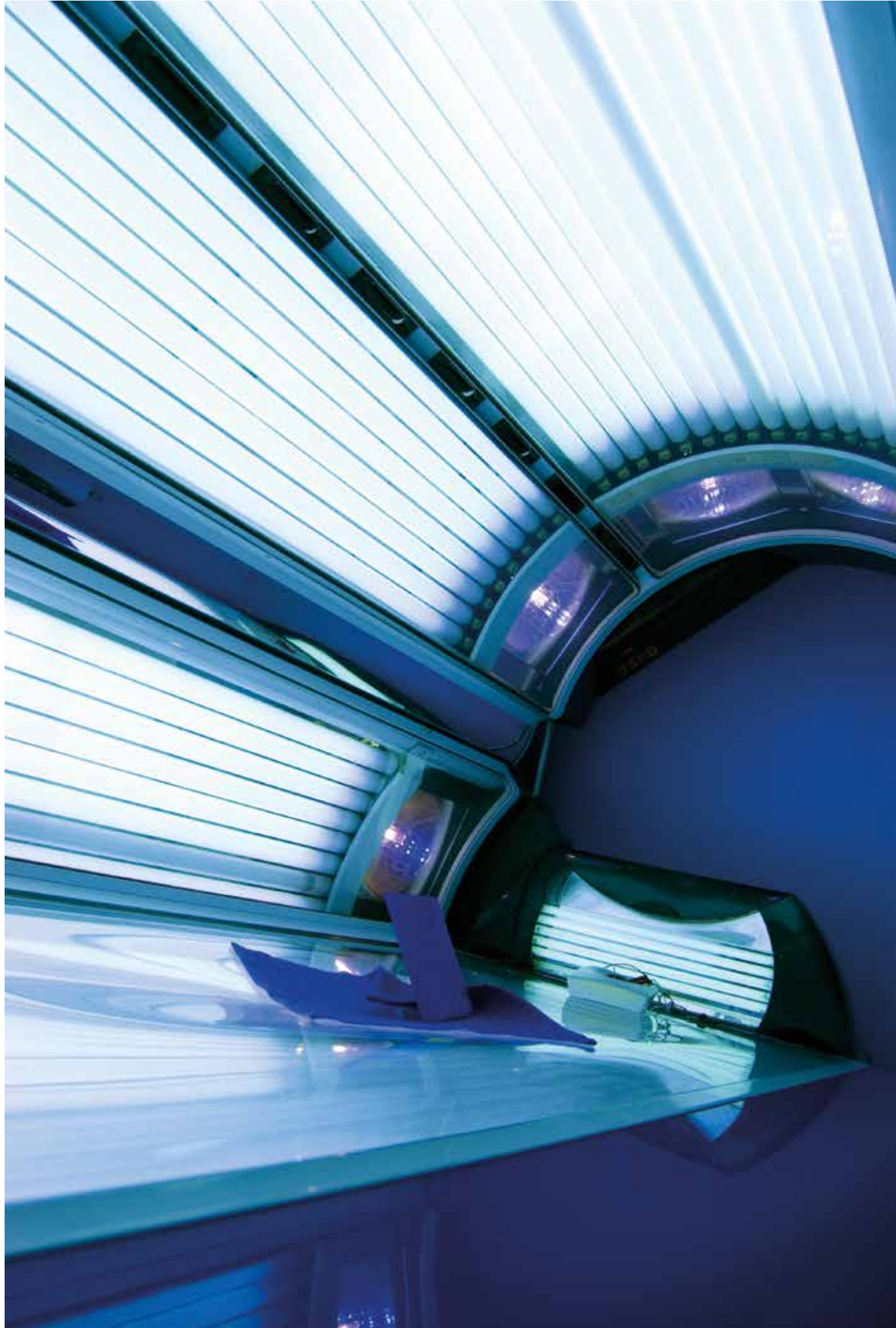
## PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing



MAT = single-sided matt  
 LT = Light transmission (Figures apply to 3 mm sheet thickness only.)





## CRYLUX® & PROTECT

The product range CRYLUX® & PROTECT provides optimal conditions for upgrading the materials and making them suitable for applications in extreme environments or for use in places where stringent hygiene standards must be met.

Applications vary from laboratories, gyms, spas, sanitary facilities or cosmetic displays. Thanks to the special features of the UV radiation protection and the UV filter CRYLUX® & PROTECT is perfectly suitable for use particularly in museums and solariums.

The final product can be customised to every need, in terms of colour (from transparent to opaque) and surface finish (different smooth or matt surfaces).



# CRYLUX® BEAUTÉ

## ACRYLIC SHEETS WITH INCREASED CHEMICAL RESISTANCE.

CRYLUX® Beauté is specially designed to have a better chemical resistance and is therefore ideal for enhancing and protecting cosmetic displays and medical applications.

The product range shows improved performance in terms of inner stress after going through various manipulation techniques such as laser cutting, flame polishing, hot bending, drilling, milling and screen printing.

When it comes to your design – any colour, from transparent to opaque, and with the added choice of a smooth or matt finish – CRYLUX® Beauté will preserve it for years to come.

### CHARACTERISTICS

- More resistant to chemicals, solvents, alcohols
- Wide range of colour references – from transparent to opaque
- Smooth or matt surface
- Resistant to UV rays
- Colourless additive (can be added to any colour)

### APPLICATIONS

- Displays (POS/POP)
- Shop design | Shop window decoration
- Partitions | Cladding

### PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

CRYLUX® Beauté can be produced in any color and in any thickness, depending on the product range.





# CRYLUX® ANTI-BACTERIA

WITH ANTI-MICROBIAL AND FUNGICIDE PROTECTION.

Thanks to the anti-microbial and fungicide protection, CRYLUX® Anti-Bacteria is the ideal material for places, where extreme hygienic conditions are required.

With a special additive which blocks the development of micro-organisms, CRYLUX® Anti-Bacteria increases the level of hygiene in specific areas, eliminates the development of odours and dark stains.

Thermoforming is yet another strength of this product range. Thanks to the low migration with temperature, the material can be thermoformed without modifying its anti-microbial properties.

## CHARACTERISTICS

- Protects against and inhibits growth of active fungi, algae and bacteria – meaning no odours or dark surface stains
- Evaluated in a biological laboratory using the standard ISO 846:1997
- Water insoluble, therefore unaffected by prolonged washing
- Colourless additive (can be added to any colour)
- Mechanical properties are not modified compared to sanitary material
- Not suitable for application in direct contact with foodstuff
- High chemical resistance and thermoformability
- Low migration with temperature

## APPLICATIONS

- Partitions | Cladding

## PROCESSING

- Digital printing | Screen printing
- Laminating
- Painting | Spray painting | Lacquering
- Contour milling
- Laser cutting
- Water jet cutting
- Sawing
- Punching
- Gluing
- Drilling
- Riveting
- Screwing
- Thread cutting
- Folding (V-groove) | Cold bending
- Hot bending
- Thermoforming
- Engraving
- Polishing

CRYLUX® Anti-Bacteria can be produced in any color and in any thickness, depending on the product range.



## CRYLUX® UVP

FOR APPLICATIONS IN EXTREME UV EXPOSURE.

CRYLUX® UVP (extra ultraviolet protection) is highly protected against UV radiation. Not only does CRYLUX® UVP show higher absorption, but this effect is longer lasting than for the standard.

Therefore, this product is especially suitable for outdoor applications, for final parts that are long and directly exposed to sunrays (e.g. marine applications) or for colours and images that require special protection. Due to the complete absorption of UV-A rays, the fading of colours in paintings and images can be prevented (e.g. in museums).



## CRYLUX® UVT

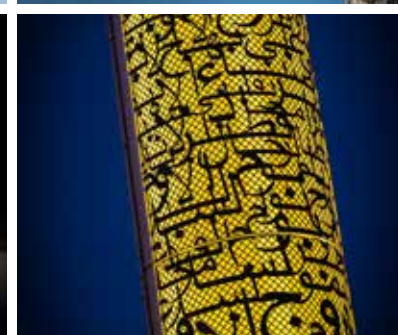
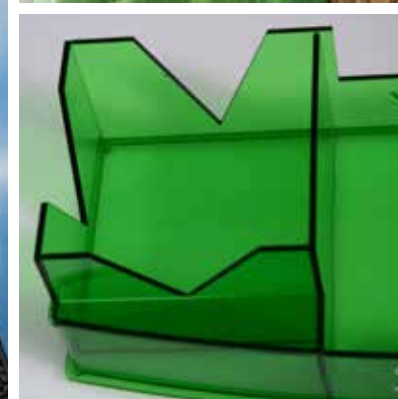
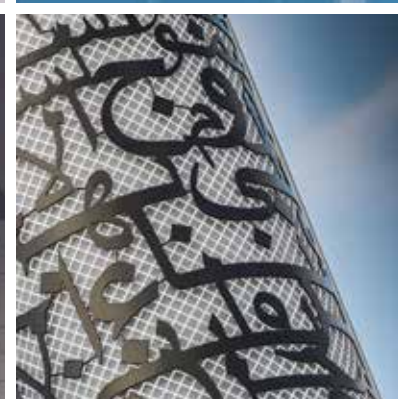
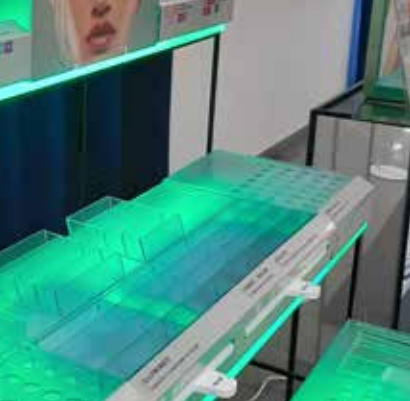
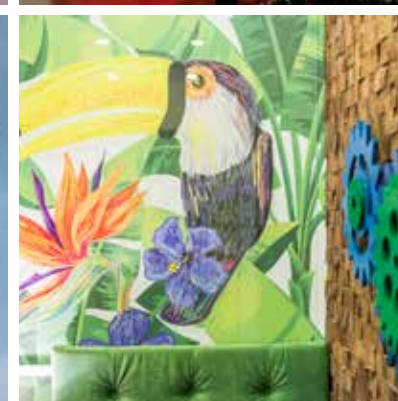
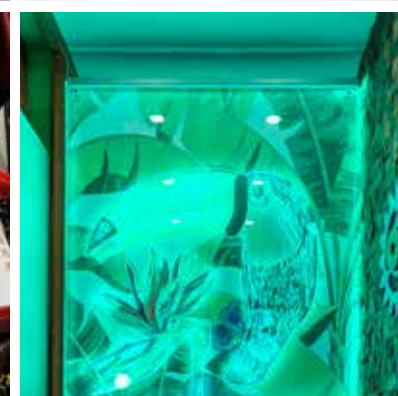
THE PERFECT FILTER FOR UV LIGHT.

CRYLUX® UVT is transparent to UV-A radiation (UV-transmitted) and partially to UV-B radiation. For applications like sunbeds/ solariums, the sheets must let part of the UV radiation through. CRYLUX® UVT does, but it is opaque to the high energy UV radiation thus prevents fast material degradation.









GET INSPIRED:  
WWW.DISPLAY.  
3ACOMPOSITES.COM  
/INSPIRATION



CRYLUX® distributed by



Part of the  
 GRIMCO Family



Polycasa N.V.  
Van Doornelaan 2A  
2440 Geel, Belgium  
[www.display.3AComposites.com](http://www.display.3AComposites.com)  
A member of 3A Composites