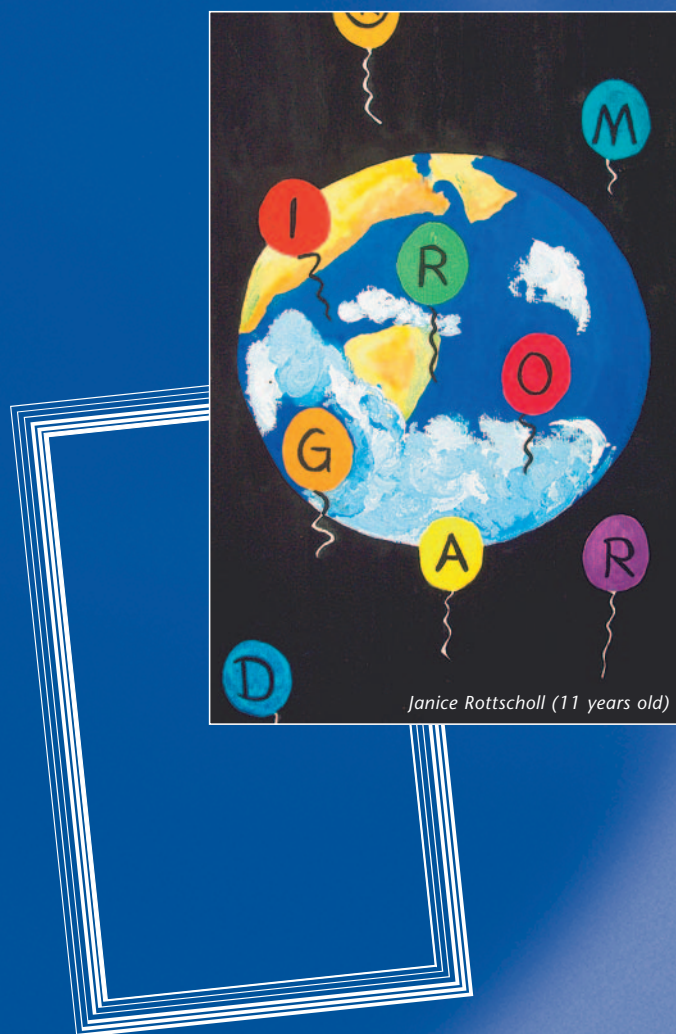




For your picture framing
only the best:
SCHOTT MIROGARD® – the original



The optical interference
antireflective glass from
SCHOTT:
virtually no reflections and
completely transparent

SCHOTT
glass made of ideas

MIROGARD®

There's only one MIROGARD® – the original by SCHOTT!

MIROGARD® is the byword for a completely transparent special glass with an anti-reflective coating on both surfaces. With its unique quality SCHOTT MIROGARD® has a worldwide reputation for guaranteeing the highest possible viewing enjoyment of art. This high-grade special glass is manufactured using the Sol-Gel process in the world's most advanced dip-coating plant.

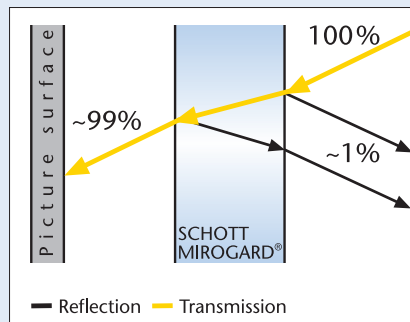
It is absolutely neutral in color and free from irritating reflections. In other words: when viewed in the normal way SCHOTT MIROGARD® glass is as good as invisible. It's no wonder, therefore, that the world's leading museums and galleries place their confidence in the proven quality of SCHOTT MIROGARD®



Sascha Fricke (12 years old)

Virtually no reflections

Conventional glass reflects about 8 percent of light. This results in an undesirable mirror effect. With SCHOTT's optical interference coated anti-reflective glass the reflection is reduced to about approx. 1 percent and this means that it is virtually eliminated.



Highest transparency

Normal glass has a light transmission of only 91 percent. With SCHOTT MIROGARD® the figure is 99 percent. In other words MIROGARD® is as good as invisible.

The result: The brilliance of colors in works of art is reproduced without losing any of their original quality.

UV-radiation protection

All types of SCHOTT MIROGARD® glass reduce UV-radiation by absorption and/or reflection. Depending on the level of protection required various different versions of the product are available.

SCHOTT MIROGARD Protect®

MIROGARD Protect® is a laminated safety glass that absorbs 99 percent of harmful UV-radiation. In addition MIROGARD Protect® protects the work of art against vandalism and damage caused by splintering in the event of the glass being broken.



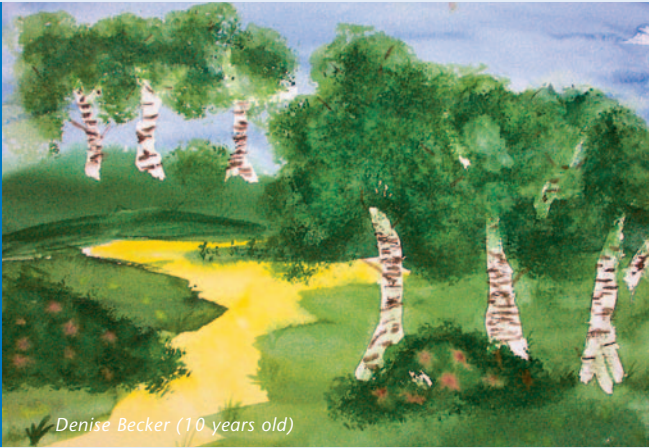
Björn Samse (9 years old)



Reinhild Goes (5 years old)



Madeleine Martel (6 years old)



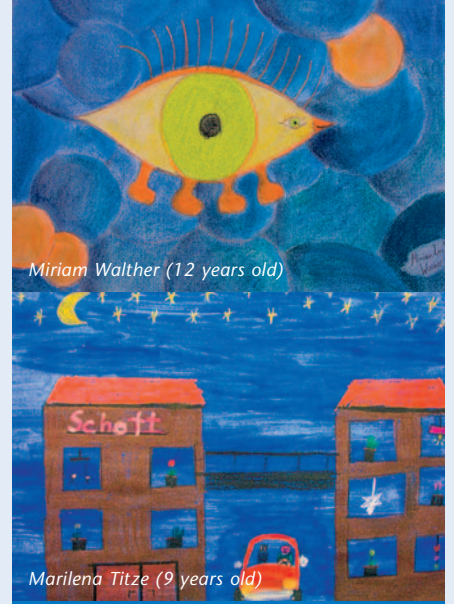
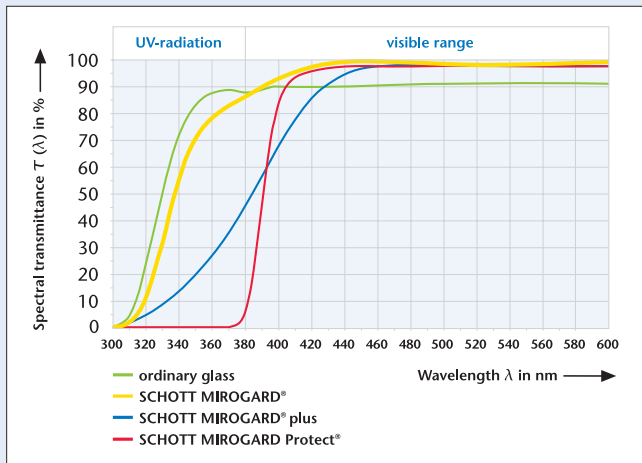
Denise Becker (10 years old)



Marco Occhionero (6 years old)

SCHOTT MIROGARD® plus
If there is no requirement to provide splinter protection but increased UV protection is still important, then MIROGARD® plus is the ideal solution. MIROGARD® plus is only 2 mm thick but it combines in a unique way protection against UV-radiation and outstanding anti-reflective properties with unaltered color rendering.

SCHOTT MIROGARD®
MIROGARD® is recommended for picture framing where the main emphasis is on excellent anti-reflective properties in combination with unaltered color rendering and where standard UV protection is of reduced importance.



Miriam Walther (12 years old)

Marilena Titze (9 years old)

Young Artists Instead of Old Masters

Until now, we've been making use of the works of Old Masters, such as Rembrandt's "The Man with the Golden Helmet" in our advertising. However, we recently invited the children of our employees in Grünenplan to participate in the painting competition "Kids Paint for MIROGARD®" as part of our new advertising campaign. What a great success this was! A total of 46 "works of art" were submitted and some of these were absolutely stunning. A 5 member jury was then given the difficult task of selecting the very best entries. The photographs published in our brochure show the 3 respective award-winning paintings submitted by the age groups 3-6, 7-10 and 11-14 years old.

SCHOTT MIROGARD® compared

	Ordinary glass	SCHOTT MIROGARD®	SCHOTT MIROGARD® plus	SCHOTT MIROGARD Protect®
Reflectance	approx. 8%	approx. 0.9%	approx. 1.1%	approx. 0.9%
Transmittance	approx. 91%	approx. 99%	approx. 98%	approx. 98%
Perceived color rendering	limited	outstanding, unaltered	outstanding, unaltered	outstanding, unaltered
Splinter protection	no	no	no	yes
Mechanical protection effect	low	low	low	medium to high
UV-protection (300nm to 380nm)	approx. 44%	approx. 48%	approx. 84%	approx. 99%
Glass thickness	2 mm to 8 mm	2 mm to 8 mm	2 mm	4 mm to 8 mm

Product range

SCHOTT MIROGARD®/SCHOTT MIROGARD® plus*

Thickness	Tolerance of thickness	Sizes (gross size with dipping edge)	Sizes (net size without dipping edge)	Standard case contents		
				in m ²	in Pieces	in kg gross
2.0*	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 50	23	approx. 330
2.0*	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	890 x 1250	890 x 1220	approx. 50	46	approx. 310
2.0*	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	890 x 1250	890 x 1220	approx. 54	10 individual packages containing 5 sheets, each approx. 29 kg	approx. 335
3.0	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 40	18	approx. 370
4.0	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 30	14	approx. 420
6.0	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 26	12	approx. 490
8.0	± 0.2	1900 x 1250	1770 x 1220	approx. 26	12	approx. 390

Versions and sizes deviating from above on request, weight of the glass: 2.5 kg/m² for 1 mm glass thickness

* SCHOTT MIROGARD® plus is supplied 2 mm thick

SCHOTT MIROGARD Protect®

Type	Thickness	Tolerance on thickness	Sizes (gross size with dipping edge)	Sizes (net size without dipping edge)	Standard case contents		
					in m ²	in Pieces	in kg gross
4/2	4.4	$\begin{matrix} 0 \\ -0.4 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 15	7	approx. 260
6/2	6.4	$\begin{matrix} 0 \\ -0.4 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 15	7	approx. 310
8/2	8.4	$\begin{matrix} 0 \\ -0.4 \end{matrix}$	1900 x 1250	1770 x 1220	approx. 13	6	approx. 325

Weight of the glass: 2.5 kg/m² for 1 mm glass thickness

MIROGARD® can be cleaned with any commercial window cleaning agent or with untreated cloths using a mixture of water and methylated spirit (1:1).

If commercially available glass cleaners are used, please ensure that these are not abrasive or likely to cause scratching.

Advanced Materials
SCHOTT AG
 Hüttenstraße 1
 31073 Grünenplan
 Germany

Tel: +49 (0) 51 87/771-421
 Fax: +49 (0) 51 87/771-550
 stephan.pfaff@schott.com
 www.schott.com/advanced_materials

SCHOTT
 glass made of ideas