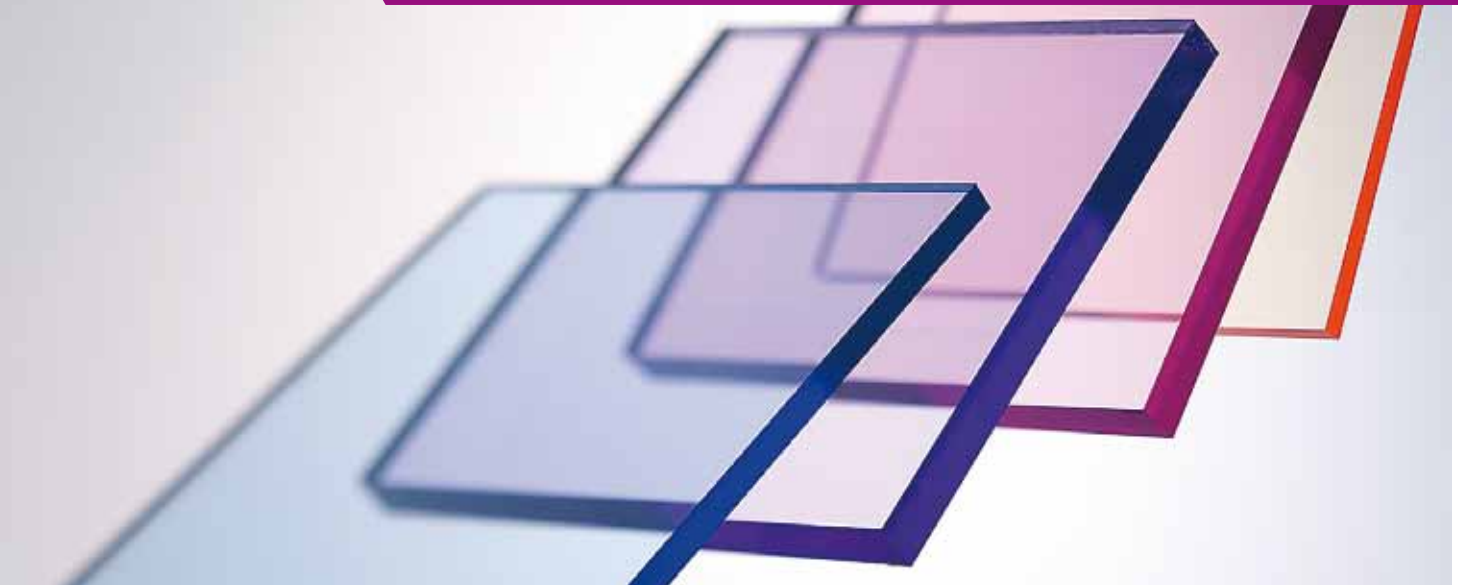


# PLEXIGLAS SUNACTIVE® GS

For a Better Feeling



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For a Better Feeling

## A perfect tan and a feeling of wellbeing are two important sales factors for tanning beds.

To enable you to convincingly state both arguments in favor of your tanning beds and tanning tubes, we now offer you PLEXIGLAS SUNACTIVE® GS as a range of crystal-clear and colored sheets.

PLEXIGLAS SUNACTIVE® GS is available with immediate effect in an invigorating shade of purple, a stimulating shade of red, a warming shade of orange and a relaxing shade of blue.

The new colored PLEXIGLAS SUNACTIVE® grades thus offer the ideal conditions for comfort and relaxation:

- The new colors put your customers in the right mood to unwind. In addition to the pure, clinical and rather cool effect of crystalclear sheets, you can now offer warm atmospheric colors.
- You can choose between different surfaces – high-gloss, crystal-clear surfaces or velvety, light-diffusing and mood-enhancing grades.
- Whatever the surface you choose, PLEXIGLAS SUNACTIVE® always feels warm, is hygienic and pleasant to the touch.
- Decisive factors for wellbeing are the shape of the bed, the canopy and the tanning tubes. PLEXIGLAS SUNACTIVE® offers virtually unlimited formability, enabling all kinds of relaxing shapes.

## Use these arguments to your advantage.

It goes without saying that the new colored grades of PLEXIGLAS SUNACTIVE® also offer all the familiar benefits of this material. They show high transmission in the visible part of the radiation spectrum and the part that is responsible for tanning.

They are easy to clean with suitable agents, can be polished and are break-resistant in the correct thickness.

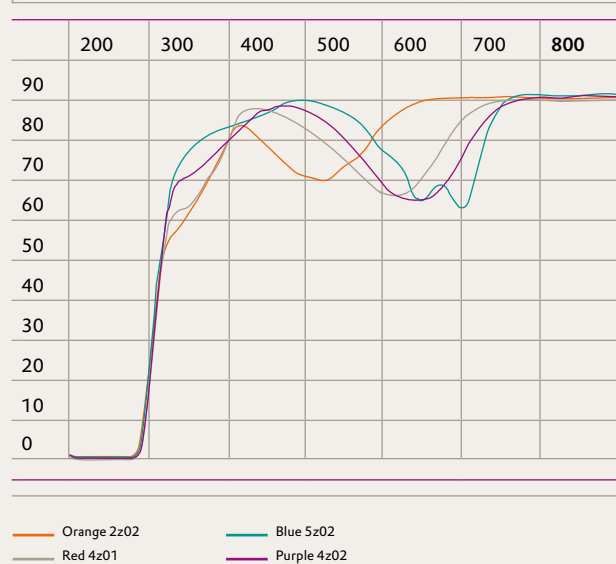


## The Product and Its Benefits

PLEXIGLAS SUNACTIVE® GS is a grade of cast acrylic (polymethyl methacrylate, PMMA) specially developed for tanning beds, with high UV transmission and extreme resistance to UV light. PLEXIGLAS SUNACTIVE® GS has a poreless, perfectly smooth or satin surface. It is hygienic and always feels pleasantly warm to the touch, making it the ideal choice both for cosmetic and therapeutic UV equipment. The material is particularly resistant to changing climatic conditions, i.e. perfectly suited for use in hot and humid environments. PLEXIGLAS SUNACTIVE® GS has low weight combined with high mechanical strength.

## Spectral Transmittance of Colored PLEXIGLAS SUNACTIVE® GS

Grades in 8 mm Thickness





Quelle: Ergoline

**Table of Typical Values**

Properties	PLEXIGLAS SUNACTIVE® GS, 3 mm thickness				Unit of Measurement	Test Standard
	Orange 2z02	Red 4z01	Purple 4z02	Blue 5z02		
<b>Mechanical</b>						
Density	1.19	1.19	1.19	1.19	g/cm <sup>3</sup>	ISO 1183
Elongation at break	≥ 5	≥ 5	≥ 5	≥ 5	%	ISO 527
Tensile strength	≥ 60	≥ 60	≥ 60	≥ 60	MPa	ISO 527
Flexural strength	≥ 87	≥ 87	≥ 87	≥ 87	MPa	ISO 178
Elastic modulus	≥ 2500	≥ 2500	≥ 2500	≥ 2500	MPa	ISO 527
<b>Thermal</b>						
Coefficient of linear thermal expansion (for 0 to 50 °C)	7 · 10 <sup>-5</sup>	7 · 10 <sup>-5</sup>	7 · 10 <sup>-5</sup>	7 · 10 <sup>-5</sup>	1/K	ISO 53752-A
Thermal conductivity	0.19	0.19	0.19	0.19	W/mK	DIN 52612
Vicat softening temperature	100	100	100	100	°C	ISO 306/B 50
Fire rating	B2, normally flammable	B2, normally flammable	B2, normally flammable	B2, normally flammable	–	DIN 4102
	Class 3	Class 3	Class 3	Class 3	–	BS 476, Part 7
	M4	M4	M4	M4	–	NF P 92501/-5
	HB	HB	HB	HB	–	UL 94
<b>Optical (3 mm thickness)</b>						
Transmission in the UV range 315 to 380 nm	≥ 65	≥ 65	≥ 70	≥ 70	%	DIN 5036, Part 3

## Properties

The major physical values (at 23 °C/50% RH) are summarized in the table.

## Fabrication

PLEXIGLAS SUNACTIVE® GS can be sawn, drilled, milled, sanded and polished with all tools suitable for acrylic.

PLEXIGLAS SUNACTIVE® GS parts with a smooth surface can be repolished in the event of scratching.

For this purpose, use suitable polishing pastes or waxes and a soft cloth (glove-lining fabric) or buffing wheel.

The thermoforming temperature is between 130° and 160°C. If the masking film is left on during forming, marks may be produced on the formed part. The finished part can be upgraded by annealing.

To prevent chemical and other stress during use of tanning beds, finished parts made from PLEXIGLAS SUNACTIVE® GS should be annealed after fabrication. This relieves the stress that occurs in the material during processing, and considerably reduces the risk of stress cracking.

Annealing is performed in an air-circulation oven for 2 to 4 hours (depending on thickness), followed by gradual cooling. Please ask our Technical Support department for advice.

## Physical Forms

Solid sheets of colored PLEXIGLAS SUNACTIVE® GS are supplied:

Orange 2z02  
Red 4z01  
Purple 4z02  
Blue 5z02

with two high-gloss or satin surfaces

in sizes of 3120 x 2120 and 3050 x 2030 mm  
in thicknesses of 3, 4, 5, 6 and 8 mm.

Both sheet surfaces are masked with a recyclable PE film that protects them from soiling and scratching during storage, transport and fabrication.

## Hints on Application

PLEXIGLAS SUNACTIVE® GS is easy to clean. However, please make sure to use only those cleaning agents that do not damage acrylic. For the same reason, cosmetics such as body oils, lotions or creams should not be used before or during tanning that involves body contact with the tanning bed part made from PLEXIGLAS SUNACTIVE® GS. Please point this out in your instructions for use.

The mechanical load to be expected during use should be borne in mind when developing formed parts, particularly new designs. We advise you to consult our technical support staff.

Sales and Technical Support:

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Certified to DIN EN ISO 9001 (quality)  
and DIN EN ISO 4001 (environment)

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