

TECHNICAL SHEET Satinglas® Cast acrylic sheets matt-finished on both sides

Technical-commercial information

Satinglas® is an acrylic sheet matt-finished on both sides produced by Madreperla: the satin-finish treatment on the surfaces of the sheet give a velvety, elegant feel and appearance.

The standard range includes 25 colours and is able to satisfy any project design requirement in the typical sectors where **Satinglas®** is used, such as, for example

- furnishing for interiors and furnishing accessories
- POP/POS
- totems and light signs

The physical-chemical properties and the post-machining procedures (cutting, drilling, thermoforming) of **Satinglas®** are those typical of the Setacryl® acrylic sheet.

As far as gluing is concerned, glue for acrylic sheets can be used, bearing in mind that contact with the adhesive usually spoils the matt finish.

The sheets we supply are produced in observance of the requirements of standard UNI EN ISO 7823-1

(Polymethyl methacrylate sheets – types, dimensions and characteristics – cast sheets) where this is applicable. By request sheets with stricter requirements than the above-mentioned standard are produced. For details, contact our technical-commercial offices.

Standard colours and thicknesses are reported in our delivery program. Other thicknesses and colours can be produced on request and with a minimum quantity.



Standard protection

The film printed with the logo indicates the side to be used. The film is thermo-formable onto the products with a glossy surface, even if it is the responsibility of the user to check that the film is compatible with its usage. All the P.E. films used are suitable for laser cutting.

*Warning : for sheets with matt surface (**Polarlite**[®] and **Satinglas**[®]) the protection film is **not thermo-formable**.*

Cuts to measure, square cuts and dimensional tolerances

On request shapes can be supplied cut to measure: minimum surface 400 cm².

The sheets are supplied with the following tolerances: standard sheet 0/+10 mm – formats cut to measure +/-1mm/ml. Square cuts can be supplied on request.

Untrimmed sheets can be supplied on request. The sheets are supplied with invoicing net of surplus allowance. Small surface defects can be found in the allowance. The size of the untrimmed sheet is, approximately, 4 cm more than the trimmed size.

Colour formulation

Our laboratories are available to develop new colours or personalised duplicating with a minimum quantity as indicated in the specific technical sheet (“Minimum quantity of productions on request”)



TECHNICAL SHEET Satinglas® Physical-chemical properties.

The following table reports the characteristic properties of standard **Setacryl® Food Contact** sheets; coloured opaline sheets have different physical-chemical properties (in addition to optic ones, obviously) depending on the type.

	Method	Unit of measurement	Values
Physical Properties			
Density	ISO 1183	g/cm ³	1.19
Water absorption after 24 h	ISO R 62/DIN53495	%	0.3
Optic Properties			
Transmittance (on colourless material)	ISO 4892-1 DIN 5036	%	92
Haze (on colourless material)	ASTM D 1003	%	< 0.5
Refraction index (on colourless material)	ISO 4892/DIN 53491	°C	1.49
Mechanical Properties			
Coefficient of elasticity due to pulling stress 23°C	ISO 527-2/1 B/1	MPa	3300
Ultimate elongation 23°C	ISO 527-2/1 B/5	%	5
Tensile strength 23°C	ISO 527-2/1 B/5	MPa	76
Flexing resistance	ISO 178	MPa	110
Compression resistance	ISO 604	MPa	110
IZOD impact resistance with notch	ISO 180/ 1 A	kJ/m ²	1.4
Charpy impact resistance without notch	ISO 179/ 1	kJ/m ²	13
Abrasion resistance	ISO 14782	%	0.5 to 1
Maximum allowed tension		MPa	5-7
Minimum cold curvature radius		mm	330 x thickness
Thermal Properties			
Softening time (Vicat)	ISO R 306 Method A	°C	>108
Deflection time (HDT)	50	°C	>102
Maximum running time	ISO 75/A	°C	80
Linear Expansion Coefficient	VDE 0304/1		7
Thermal conductivity	DIN 52612	W/m°C	0.17
Fire Behaviour			
Self-ignition temperature	DIN 51794	°C	430 c.a.
Fire Behaviour	NF P 9250		M4
Other Properties			
Poisson Coefficient	ISO 527 -1		0.39
Thermoforming Parameters			
Thermoforming Interval		°C	140-190
Heating furnace temperature		°C	130-180
Maximum heating temperature		°C	200

This information is given as a guide and does not represent the technical specifications of the materials and therefore does not imply any responsibility on the part of MADREPERLA SpA