

TECHNICAL SHEET[®]

Solid Surface acrylic sheets – 100% recyclable

Setapan[®] is the new range of acrylic sheets with a high molecular weight, developed by Madreperla for the furnishing and interior design sector; they are *totally recyclable* and are an *environmentally friendly* alternative to the lacquered panels used in the sector.

Setapan[®] sheets can be used to make doors for kitchen units or cupboards, tables, desks, reception desks, shelves, bar/restaurant counters, flat units and surfaces for bathrooms or sanitary facilities.

It's a mass coloured material, brilliant on both sides and perfectly planar.

In fact Setapan[®] is a new material with a specific formulation which enhances the intrinsic properties of methacrylates such as colour stability, abrasion resistance and scratchproof properties.

The improved resistance to chemical aggression, water absorption and abrasion, also guarantee a longer life for the product in usage conditions and make cleaning operations with detergents and maintenance in general safe. The Setapan[®] surface does not deteriorate due to even prolonged contact with coffee, wine, milk, fruit juice, alcohol. It can be easily cleaned with a cotton cloth and water or by using classic non – abrasive detergents for the most resistant dirt. If the surface is slightly damaged, it can be restored with a simple polishing operation (see technical sheet, sanding and polishing procedure).

Panels made with Setapan[®] can be cut, milled and drilled with normal tools: the edges can also undergo typical carpentry processes, such as, for example, turning.

In the case of laser cutting, especially on thick sheets and applications with an exposed edge, we recommend careful tuning of the process since the high pigmentation could cause variations in colour on edges, in the event of strong heating.

Setapan[®] sheets are available with polished surfaces in the standard colours of the range (see following page) with thickness of 18 mm; sheets can be produced with personalised colours with one or both surfaces with an anti-reflection, matt finish and in the thickness of the standard Setacryl[®] range; in this way thin furnishing accessories can be produced in the same colour.

Setapan[®] sheets can be coupled with panels in other materials to enhance their surface and the aesthetic appearance in general.

Setapan[®]

- solvent free
- totally recyclable, non-toxic
- matchless colour stability
- resistant to UV rays
- possibility of thin sheets on request to produce furnishing accessories (frames,...)
- personalisable colours
- glossy or anti-reflex matt finish
- non porous; does not absorb stains of beverages, oils, detergents and it is easy to clean
- high resistant to scratches and abrasion
- does not peel
- thermoformable
- cold curvable (min. radius 330 times its thickness)
- cutting, drilling and milling operations with normal wood-working tools
- machining and finishes of edges like wood
- can be glued onto other supports
- easy to repair



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.

The production schedule for the various types of sheets is summarised in the following tables and contains only the standard manufacturing products. Other thicknesses, sizes or colours can be produced on request and with a minimum quantity indicated in the specific technical sheet (" Minimum quantity of productions on request").

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-finished surface (Polarlite® and Satinglas®) the protection film is not thermo-formable.

All sheets has to be stored flat and at room temperature.

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")



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The following table reports the characteristic properties of standard Setapan[®] 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
Mechanical Properties			
Tensile strength 23°C	ISO 527-2/1 B/5	MPa	76
Flexing resistance	ISO 178	MPa	110
Maximum allowed tension		MPa	5-7
Minimum cold curvature radius		mm	330 x thickness
Thermal Properties			
Deflection time (HDT)	ISO 75/A	°C	>102
Maximum running time		°C	80
Linear Expansion Coefficient	VDE 0304/1		7
Fire Behaviour			
Fire Behaviour	NF P 9250 DIN 4102		M4 B2
Thermoforming Parameters			
Thermoforming Interval		°C	140-190
Heating furnace temperature		°C	130-180
Maximum heating temperature		°C	200
Shrinkage after heating		%	2.5 max
Superficial characteristics			
Abrasion resistance	internal method		good
Scratch resistance	DIN 688161T4		satisfied
Chemical resistance			
Red and white wine, coffee, tea, olive oil, vinegar, ethanol	DIN 68861		unchanged

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



MADREPERLA S.p.A

Setapan® sheets are available in the following colours:

Code	Colour
25102	white neve
25103	cream
25200	grey nuvola
25201	Fango
25202	Ardesia
25300	Banana
25303	orange
25304	red cherry
25305	Bordeaux
25306	Lilla
25400	Talpa
25401	Cappuccino
25500	Green kiwi
25700	night

