

TECHNICAL SHEET Setasand[®]

Cast acrylic sheets sanded on both surfaces

Technical-commercial information

Setasand[®] is a cast acrylic sheet with both surfaces sanded, developed by Madreperla SpA for applications which need a greater resistance to scratches and the property of not being easily marked by finger prints during the product's normal use.

The surface finish of the sheet, associated to the intrinsic characteristics of the hardness of the methacrylate give the product made with Setasand[®] extremely high scratchproof properties and therefore make it an alternative to matt-finished glass.

The surface of the sheet is also refractory to finger prints and reduces the deposit of dust thanks to the low electrostatic factor of the material.

Unlike other acrylic sheets with matt-finished/embossed surfaces, the sanded effect of Setasand[®] remains unchanged even after thermoforming with high stretch ratios. The post-machining of Setasand[®] sheets requires the same procedures and tools typical of normal cast sheets.

Main sectors of use of Setasand[®]

- interior design and furnishing accessories (vertical panelling, doors, tables, chairs)
- advertising and retail (Pop/POS, reception desk, totems, high range display units)
- lighting (diffuser screens, lamps)

Setasand[®] sheets are available in the following colours and formats:

Code	Colour	format thickness 2030 x 3050	format thickness 2020 x 3020	format thickness 2000 x 3000
21000	crystal	3 - 4 - 5	6 - 8 - 10 - 12 - 15	20
21005	glasslook	3 - 4 - 5	6 - 8 - 10	
22005	ice	3 - 5	6	
22009	anis	3 - 5	6 - 8 - 15	
22264	babyblue	3		
21264	sardinialook	3		
22265	acquaglass	3 - 5		
21072	nightblue	3 - 5	10	
21252	emerald	3		
22233	pinklook	3		
21232	fuchsia	3 - 5	10	
21032	firelook	3	10	
21212	sunflower	3 - 5	10	
21019	orangelook	3 - 5	10	
22240	iris	4	8	
21033	lavender	3	10	



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.

All the P.E. films used are suitable for laser cutting.

Warning : for sheets with sanded surface (Setasand®) the protection film is not thermo-formable.

Cuts to measure, square cuts and dimensional tolerances

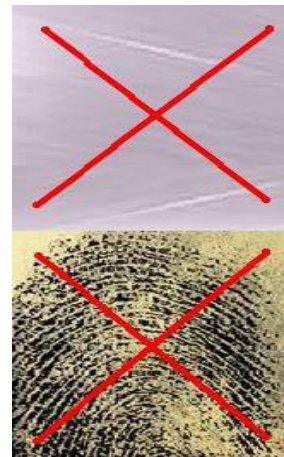
On request shapes can be supplied cut to measure: minimum surface 400 cm².

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 Setasand[®]

The following table reports the characteristic properties of standard Setasand[®] 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			
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 50	°C	>108
Deflection time (HDT)	ISO 75/A	°C	>102
Maximum running time		°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 approx.
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
Shrinkage after heating		%	2.5 max

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