

TECHNICAL SHEET Seta-LETTER[®] Cast mono-matt-finished acrylic sheets

Technical-commercial information

Seta-LETTER[®] is the new mono-matt acrylic sheet produced by Madreperla, designed to facilitate the personalisation of advertising logos and messages. The letters and the logo can easily be laser cut or milled, offering a very wide range of customers the possibility of choosing:

- their favourite colour from the vast standard range provided by Madreperla
- a glossy or matt surface
- the required font
- the possibility of producing the company logo in the same way

Therefore, it is possible to obtain, simply and at a low cost, strong personalisations and characterisations, guaranteeing an exclusive and high level look.

Seta-LETTER[®] makes it possible to produce prestigious installations, using the characteristics typical of acrylic (shininess, bright colours, easy to work resistance to UV rays, a long life).

Seta-LETTER[®] is produced in the standard thickness of 8mm, to show off the product in 3D: in fact, compared with a composite panel in coupled aluminium, for example, the product made in **Seta-LETTER[®]** is truly three-dimensional.

For the brands, the colour which identifies the Corporate Identity can be reproduced exactly with a minimum order of just 15 sheets (90 m²).



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 Seta-LETTER[®] Physical-chemical properties.

The following table reports the characteristic properties of standard **Seta LETTER[®]** 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			
	ISO R 306 Method A		
Softening time (Vicat)	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 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
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