MADREPERLA
cast acrylic sheets

SETA-LED ®

Commercial information:

Seta-LED® : is an optimized cast acrylic sheets, developed to adjust itself to the particularity of LED lighting that has different characteristics compared to the classic neon lighting.

LED is a concentrated light source, therefore the material shall maximize the diffusion, avoiding to:

- loose much in terms of light transmission of the light itself
- eliminate the so called spot effect

Seta-LED® characteristics:

- colors are formulated to meet the wavelenght of LED lighting.
- same tone of color when backlighted and when not backlighted
- high light diffusion
- a high diffusing power => no spot effect (typical of LED lighting)
- 7 standard colors – code 57000 with a double satin surface
- resistance to impacts: 8 to 10 times higher than glass
- Very high resistance to external agents and UV rays (30 years guarantee for clear and 10 years guarantee for colors).
- excellent workability:
  - thermoforming
  - bending
  - gluing
  - milling
- higher workability than extruded acrylic sheets

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Setacryl 2054:

Neon lighting:
Perfect for this light source

LED lighting:
It shows the typical spot effect

Setacryl 2056:

Neon lighting:
Perfect for this light source

LED lighting:
Change of the tone of the color, when backlighted - bluish

Seta-LED 17500:

LED lighting:
- no change of tone of the color.
- Perfect diffusion – no spot effetc

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SETA-LED ®

Technical conditions:

Our sheets are delivered in accordance to ISO 7823-1.

Cut-to-size sheets:

On request, we can supply cut-to-size sheets with minimum surface required 400cm2.

Tolerances on size:

The Tolerances are as follows:
- standard sizes: 0/+ 10mm.
- cut to size +/- 1mm/lm

Squared cutting:

On request we can supply squared cuttings.

Untrimmed sheets:

Our cast acrylic sheets can be supplied on request untrimmed. Minor defects may occur in the oversize. Only net dimensions will be charged to the customer. The untrimmed size of the sheets is roughly 40mm bigger then the trimmed one.

Color formulation:

Slight differences may occur in shade between different production batches of the same color, caused by different pigments batches, although every care has been put in production.
It is recommended not to use different production batches for the same fabrication.

Out of standard items:

Other thicknesses, dimensions and colors can be produced on request with minimum quantities.
The order is accepted for the smallest production batch.
We have a large number of color formulation ready, therefore don't hesitate to contact us for information.
Please check our document: production out of standard products.

Color intensity:

The color intensity and light transmission remains constant up to 20mm thickness

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Standard protection:

The side with printed logos identifies the side to be used as viewside.
The film is thermoformable for all Setacryl® sheets (glossy surface), but customers should perform a trial before use.
The film protecting Polarlite®, Satinlgas® and Setasand®, Stone®, Seta-LETTER® sheets (satin and frost surfaces) is not suitable for thermoforming.
All protection films are suitable for laser cutting.
In order to preserve the sheet from scratches, avoid sliding sheets across work surface debris. Dirt can penetrate the masking, scratching the sheet.

Storage:

The correct way to store acrylic sheets is to place them horizontally, on the supplied flat bulk skids, in a well ventilated, consistent temperature area. Avoid storing acrylic sheets where extreme variations in temperature may occur. Extreme temperature changes expand or contract the acrylic sheets.
Special vertical racks can be used to store the sheets vertically. The rack should allow the sheets to lean approximately 10° (gradient).

Cleaning:

Acrylic sheets can be cleaned using a mild soap solution or a specific plastic cleaner, combined with a lint free cloth.
To remove grease, oil, or tar use hexane or kerosene followed by a mild soap solution.
Avoid cleaners containing alcohol or ammonia.

Safety:

Acrylic is a combustible thermoplastic that will ignite when in contact with any source of ignition.
Unlike other polymers, does not produce toxic or corrosive gases and produces very little smoke.
Production of molten droplets is reduced compared to extruded sheets.
When storing acrylic sheets, be aware of the material properties.
Madreperla acrylic sheets classify:
• HB according to UL94
• E according to EN 13501

Thickness tolerances:
The sheets are produced upon ISO 7823-1.

Formula to calculate the thickness tolerance. The thickness can vary within the same sheet:

+/- (0,4 + (0,1 x s))
Where “s” is the nominal thickness in mm

Following the formula, the following thickness tolerances are accepted for cast acrylic sheets:

Thick. in mm	3 mm	4mm	5mm	6mm	8mm	10mm	12mm	15mm	18mm	20mm	25mm
	+/- 0,7	+/- 0,8	+/- 0,9	+/- 1	+/- 1,2	+/- 1,4	+/- 1,6	+/- 1,9	+/- 2,2	+/- 2,4	+/- 2,9

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