

Vitroflex FLUO and SOFT FLUO is a methacrylate cast sheet in fluorescent colours.

PROPERTIES

- The FLUO range stands out because of its bright colours. The edges have a very intense colour that seems to have a light sheet of its own.
- On the contrary, SOFT FLUO colours are almost colourless and only the edges are slightly coloured. When illuminated with ultraviolet radiation (black light), their edges turn blue.
- High optical quality, transparent and without distortion.
- The brightest colours in the market with the maximum resistance to ageing.
- It can be easily mechanized.
- It can be slightly cold bended.
- It can be thermoformed.
- Lighter than other materials.
- High impact resistance.
- Low thermal conductivity.
- The UV light that gets to the surface is turned into visible light, and most of it is emitted by the edges, making edges emit light.
- The embossed surface light up like the edges, allowing a high contrast engraving on the surface.
- Very good light conduction over the entire surface by edge illumination only.



APPLICATIONS

- Decorative pieces (gifts, flower shops, hotels, etc.)
- Security elements that require an adequate visualization.
- Furniture.
- Signage with lateral lighting and engraving on the surface.
- Point of sale advertising.

OPERATION

- It can be stuck, bended, thermoformed, perforated, polished, milled, etc. just as the standard quality Vitroflex.
- The smaller the piece is, the smaller the reception surface, and therefore the edge is less shiny.
- The protective film can be kept during the entire production line, including the thermoformed.¹

MAINTENANCE

- As its surface is compact and not porous, it can be easily cleaned using a gentle soap solution (neutral pH) with warm water and a nonabrasive cloth. The use of aggressive detergents with non-neutral pH can reduce the service life.
- If an adequate disinfection is required, it is advisable to refer to the table of chemical resistance of Vitroflex, test a piece with no value, and preferably use the manufacturer recommended products only.
- The use of glass washers with alcohol or other similar products may negatively affect the properties and reduce the service life.
- In case the surface has small scratches due to the daily use, they can be removed using a specific polish for car bodies that is used manually. If deep scratches appear or if it is necessary to polish large surfaces, it is advisable to use an orbital eccentric polishing machine.

¹ It is advisable to run previous tests because heating temperatures and timing should be adjusted in order to get optimum results.

RANGE

- Size:
 - They are manufactured according to the European standard of 3050 x 2050 mm.
 - Custom-cut sizes can be supplied.

- Colours²:
 - FLUO
 - COLOURLESS MCI060FN
 - YELLOW MCA020FN
 - RED MCR030FN
 - MATT RED MCR030FM
 - BLUE MCZ056FN
 - GREEN MCV040FN
 - MATT GREEN MCV040FM

 - SOFT FLUO
 - YELLOW MCA331FN
 - BROWN MCA2583FN
 - PINK MCR035FN
 - VIOLET MCF062FN
 - BLUE MCZ248FN
 - GREEN MCV398FN

- Thickness:
 - The standard thickness is 3 mm.
 - It can be produced with any requested thickness.
 - When thickness increases, the colour intensity of the edges is reduced, maintaining the colour shade on the surface. If you wish to keep the colour intensity of the edges, you must specify this when ordering.

QUALITY

- In compliance with the rule ISO 7823/1 applicable to methacrylate cast sheets.
- All pieces are controlled.
- Use of high quality shining pigments with maximum resistance to ageing.

² Other colours can be provided at request.

OTHER AVAILABLE INFORMATION

- Table of resistance for various chemical products.
- "Safety Data Sheet" for operation.
- Technical specifications of colours.

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TECHNICAL FEATURES ISO 7823-1³

Physical properties

Relative density - Volumetric mass (A Method)	1,19	g/cm ³	ISO 1183
Water absorption (Method 1)	0,18	%	ISO 62

Mechanical properties

Tensile strength (Type 1 Test, B speed)	72	MPa	ISO 527
Traction elasticity module (Type 1 Test, B speed)	3000	MPa	ISO 527
Elongation at break (Type 1 Test, B speed)	11	%	ISO 527
Impact strength. Charpy method	>13	KJ/m ²	ISO 179/2D
Rockwell hardness (M Scale)	100		ISO 2039/2
Bending strength	124	MPa	ISO 178

Electrical properties

Specific resistance	>10 ¹⁵	Ohm	DIN 53458
Volume resistance	>10 ¹⁵	Ohm.cm	DIN 53458
Dielectric constant a) 50 Hz b) 0,1 Hz	3,6 2,8		DIN 53483

Thermal properties

Coefficient of linear expansion	70,6.10 ⁻⁶	K ⁻¹	EN 2155-12
VICAT softening temperature	110	°C	ISO 306
Bending temperature under load (A Method, 1,8 MPa)	101	°C	ISO 75
Dimension variation at elevated temperatures (shrinkage)	2,3	%	Appendix

³ The values of this table refer to the sample of Vitroflex MCI100NN0030. Typical values are not intended for the design.

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