

TECHNICAL INFORMATION C3/0308

vitroflex® TRANSLUCENT features

Vitroflex TRANSLUCENT is the methacrylate cast sheet produced with colours that let in the light but not the image.

PROPERTIES

- The greater range of translucent colours on the market.
- The TRANSLUCENT range goes from the white with different opacities, to the widest variety of colours with light transmission level adapted to the requirements of each application.
- Brightest colours on the market and maximum resistance to aging.
- Suitable for outdoor use.
- Colour opacity in all thicknesses is maintained, allowing mixing pieces of the same colour in different thicknesses.
- It is easily machined.
- It can be polished to give a total brightness.
- It can be slightly cold bent.
- It can be thermoformed.
- Lighter than other materials.
- High impact resistance.
- Low thermal conductivity.

APPLICATIONS

- Decorative pieces (gift, florist, catering, etc.)
- Skylights.
- Protections of industrial machines.
- Signage.
- Light diffusers.
- Railings, screens and divisions.

- Furniture.
- Façade panels.
- Wall cladding with the possibility of backlighting.

OPERATION

- It can be stuck, bended, thermoformed, perforated, polished, milled, etc. just as the standard quality Vitroflex.
- 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.
- Colours:
 - Our entire range of colours available can own this property under minimum order manufacturing.
- 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.

OTHER AVAILABLE INFORMATION

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

Vitroflex TRANSLUCENT

TECHNICAL FEATURES ISO 7823-1²

Physical properties			
Relative density - Volumetric mass (A Method)	1,19	g/cm ³	ISO 1183
Water absorption (Method 1)	0,3	%	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)	5	%	ISO 527
Impact strength. Charpy method	17	KJ/m ²	ISO 179/2D
Rockwell hardness (M Scale)	100		ISO 2039/2
Bending strength	100	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	105-120	°C	ISO 306
Bending temperature under load (A Method, 1,8 MPa)	105	°C	ISO 75
Dimension variation at elevated temperatures (shrinkage)	2,3	%	Annex
Optical properties			
Light transmittance a) Total light transmission at 380-780 nm b) Light transmission at 420 nm c) Light transmission at 420 nm after 1000 hours in the xenon lamp	It depends on the colour (see the colour sheet)	%	ISO 2857
HAZE turbidity value	Does not apply	%	EN 2155-9
Refractive index n° (A Method)	Does not apply	-	ISO/R 489

² The values of this table refer to the sample of Vitroflex MCI100NN0030. Typical values are not intended for the design.

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