

TECHNICAL DATA

ACRYLIC TUBES

Acrylic is a material of high transparency and ten times bigger resistance to impact than glass, with a great lightness. It has an excellent transparency and very easy handling, allowing simple processes of cutting, milling and polishing. Acrylic does not give off toxic combustion gases. It is a product that remains unchanged over time while maintaining its properties, transparency and brightness.

ADVANTAGES ACRYLIC TUBES

- They can be cast or extrusion acrylic..
- High resistance to breakage.
- Reliefs and visual effects inside. If manufactured by extrusion, you can create many interior finishes.
- Easy handling.
- Edges can be polished.
- Resistant to atmospheric changes.
- High optical quality.

TYPES AND FORMATS

With a multitude of finishes are presented in different transparent options, opals and textures as well as thicknesses and diameters of all kinds. Also available in matte or smooth finis and colors.

APPLICATION AREAS

- Window dressing.
- Industry.
- Exhibitors (P.L.V.)
- Points of sale.
- Interior design.
- Illumination.
- Furniture.
- Advertising.
- Household.
- Packaging.
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TECHNICAL SPECIFICATIONS – ACRYLIC TUBES

Properties	Value	Units	Standard
Physical properties			
Density	1.18	g/cm ³	DIN53479
Mechanical properties			
Impact strength (small sample for standard test)	12	KJ/m ²	DIN53453
Impact strength at cut (small sample for standard test)	2	KJ/m ²	DIN53453
Tensile strength (1/1 sample test 3, V = 5 mm / min.)	72	N/mm ²	DIN53455
Elongation at break (1/1 test sample 3, V = 5 mm / min.)	4.5	%	DIN53455
Flexural strength (test sample 80x10x4 mm.)	105	N/mm ²	DIN53452
Compression creep tension	103	N/mm ²	DIN53454
Traction elasticity module	3300	N/mm ²	DIN53457
Dynamic cutting module in c. c. 10 Hz	1700	N/mm ²	DIN53445
Hardness Brinell H	190	N/mm ²	DIN53456
Electrical properties			
Volume resistance	>10 ¹⁵	Ohm-cm	DIN53482
Resistance surface	5-10 ¹³	Ohm	DIN53482
Dielectric resistance (test tube 1 mm thickness)	30	kW/mm	DIN53481
Dielectric constant			
50 Hz	3.6		DIN53483
0,1 MHz	2.7		
Dissipation factor:			
50 Hz	0.06		DIN53480
0,1 MHz	0.02		
Thermal properties			
Linear thermal expansion coefficient (0 ... 50 ° C)	70-10 ⁻⁶	1/°C	VDE0304/1
Thermal conductivity	0.19	W/m°C	DIN52612
U-Value thickness:			
3 mm.	5.6		
5 mm.	5.3	W/m°C	DIN4701
10mm.	4.4		
Softening temperature (oven temperature)	150	°C	
Bending temperature	>80	°C	
Maximum continuous service temperature	70	°C	
VICAT softening temperature B method	102	°C	DIN53460
Heat distortion temperature ISO 75, deviation of 1.80 N / mm	90	°C	DIN53461
Dimensional stability under heat Martens method	85	°C	DIN53458
Flammability ratio	HB	-	UL94
Optical properties			
Total light transmission	92	%	DIN5036
Fire properties			
Construction (EU)	E	-	EN13501-1
Lighting and transparency	HB	-	UL94
Water behaviour			
Water behavior water absorption in weight after 24 hours of immersion	0.3	%	DIN 53495

The properties described here are typical values of the material. Polimer Tecnic is not responsible for the materials of a specific consignment to exactly match the given values, being able to carry out tests of that heading. The above information is based on our experience and is given in good faith. Due to some installation and processing factors that are beyond our knowledge and control, no guarantee is given regarding such information.