

TECHNICAL DATA

POLYCARBONATE TUBES

Polycarbonate tubes have a high resistance to impact and are very light. Almost unbreakable, they also offer great firmness when facing high temperatures, always maintaining exceptional surface and transparency with high optical quality. They are also resistant to atmospheric agents.

ADVANTAGES POLYCARBONATE TUBES

- High resistance to breakage.
- Infinity of interior finishes, with multiple visual effects.
- Easy handling.
- Edges can be polished.
- Resistant to atmospheric changes.
- High optical quality.

TYPES AND FORMATS

With a multitude of finishes polycarbonate tubes are presented in different transparent options, opals and textures, as thicknesses and diameters of all kinds.

APPLICATION AREAS

- Machinery.
- Window dressing.
- Industry.
- Exhibitors.
- Interior design.
- Illumination.
- Furniture.
- Advertising.
- Household.
- Packaging.
- Parks.
- Architecture.
- Facades.

TECHNICAL SPECIFICATIONS – POLYCARBONATE TUBES

Properties	Value	Units	Standard
Physical properties			
Density	1,20	g/cm ³	ISO 1183
Water absorption 24h 23°C, 50% RH	0,15	%	ISO 62
Mechanical properties			
Tensile strength	60	MPa	ISO 527
Traction elasticity module	2300	MPa	ISO 527
Elongation at break	6 (110)	%	ISO 527
Impact strength. Charpy method	NB		
Rockwell hardness	M70	R-scale	ISO 2039-2
Flexural strength	2300	MPa	ISO 178
Electrical properties			
Specific resistance	10 ¹⁶	Chm	IEC60093
Volume resistance	10 ¹⁵	Ohm.cm	IEC60093
Dielectric constant			
a) 50HZ	3		IEC60250
b) 1 MHz	2,9		IEC60250
Thermal properties			
Linear thermal expansion coefficient (0 ... 50 °C)	68-10 ⁻⁵	1/°C	VDE0304/1
Thermal conductivity	0,20	W/m°C	DIN52612
Conformation temperature (in the oven)	~195	°C	
Demolition temperature	>120	°C	
Maximum temperature in continuous service	110	°C	
VICAT softening temperature B método	150	°C	DIN53460
Bending temperature under charge (Method A, 1.8 MPa)	135	°C	DIN53461
Dimensional stability under heat acc. to the Martens method	125	°C	DIN53458
Optical properties			
Total light transmission	88	%	DIN5036
Índex de refracción l	1586		DIN53491
Fire properties			
Construction (EU)	E		ISO13501-1
Lighting and transparency	HB		UL94
Water Behavior			
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.