

Polycarbonate



Technical Information:

Information to be used as a guide only. It corresponds with our current knowledge and indicates possible applications. We cannot guarantee suitability for a specific application. Unless otherwise stated these values represent averages taken from injection moulded samples.

Properties	Unit	Test Method DIN ASTM	Result
MECHANICAL	-	-	-
Density	g/cm ³	53479	1.20
Tensile strength at yield	MPa	53455	65
Tensile strength at break	MPa	53455	-
Elongation at Break	%	53455	60-100
Modulus of elasticity in tension	MPa	53457	2200
Modulus of elasticity in flexure	MPa	53457	-
Ball indentation hardness	MPa	53456	100
Impact strength (Charpy)	KJ/m ²	53453	No break
Creep rupture strength after 1000 hours with static load	MPa	-	48
Time yield limit for 1% elongation after 1000 hours	MPa	-	18
Coefficient of friction against hardened and ground steel p+0,05 N/mm ² , v=0,6 m/s	-	-	0.52
Wear conditions as above	µm/km	-	22
THERMAL	-	-	-
Crystalline melting point	°C	53736	-
Glass transition temperature	°C	53736	145
Heat distortion temperature method A	°C	ISO 75	135
Heat distortion temperature method B	°C	ISO 75	140
Max. service temperature short term	°C	-	120
Max. service temperature long term	°C	-	120
Coefficient of thermal conductivity	W/(m K)	-	0.19
Specific heat	J/(g K)	-	1.2
Coefficient of thermal expansion	10 ⁻⁵ /K	-	6-7
ELECTRICAL	-	-	-
Dielectric constant at 10 (5) Hz	-	53483	3
Dielectric loss factor at 10(5) Hz	-	53483	0.006
Specific Volume Resistance	Ωcm	53482	10 (17)
Surface Resistance	Ω	53482	10 (15)
Dielectric strength 1mm	kV/mm	53481	27
Tracking resistance	-	53480	KA1
MISCELLANEOUS	-	-	-

Moisture Absorption: Equilibrium in standard atmosphere (23°C / 50% relative humidity)	%	53714	0.2
Water absorption at saturation at 23°C	%	53495	0.36
Resistance to hot water, washing soda	-	-	Not resistant
Flamability	-	UL 94	V2
Resistance to weathering	-	-	Not resistant

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