

Polycarbonate

Polycarbonate is used in industrial applications to divide between spaces without impairing visibility. This material is shatter-proof and impact resistant.

Part numbers

ST-PN-004-0001

Finish

Gloss (with protective film)

Colors Available

Clear



Material Specifications

		Test Method	Specifications	
THERMAL	VICAT temperature (method B 50)	306	°C	145
	Heat Deflection Temperature HDT /A	R75	°C	135
	Specific heat absorption capacity	11357-4	J/gK	1.17
	Coefficient of linear thermal expansion	11359	mm/m °C	0.065
	thermal conductivity	22007-1	W/mK	0.2
	decomposition temperature	-	°C	>280
	continuous use temperature	-	°C	115
	Max. temperature load for short-term use	-	°C	135
	Temperature range for hot working	-	°C	180-210
	temperature range	-	°C	-40 + 135
MECHANICAL	Tensile strength, Yield	527-2	MPa	60
	Tensile modulus of elasticity	527-2	MPa	2200
	Elongation at yield	527-2	%	80
	Flexural strength	178	MPa	>90
	Flexural modulus of elasticity	178	MPa	2000
	Charpy Impact Strength Notched	179-1	kJ/m2	>13
	Charpy Impact Strength Unnotched	179-1	kJ/m2	No Break
	Izod Impact Strength notched	180	kJ/m2	>10
Ball Indentation Hardness	2039-1	MPa	110	
ELECTRICAL	Dielectric constant at 50 Hz	53483-2	-	3
	surface resistance	53482	Ohm	1.00E+16
	Volume resistivity	53482	Ohm-cm	1.00E+16
	Dissipation Factor @ 50 Hz	53483	-	8.00E-04
	Dielectric Strength	53481	kV/mm	>30
OTHER	Density	1183	g/cm3	1.2
	Water Vapor Permeability	12572	mg/m h Pa	3.80E-05
	Light Transmission (3mm)	13468-1	%	86
	Refractive index	489	nD20	1.585
	Solar energy transmittance (g value)	DIN 410	%	3mm – 81,7 10mm – 78,5