

performanceplastics

2500 W X0

Polycarbonate, Easy flow, self-extinguishing UL94 V0

PROPERTIES

Mechanical Properties

	Condition	Standard	Unit	Value
Izod notched impact	23°C 3.2mm	ASTM D256	J/m	600
Charpy notched impact	23°C 6x4x50mm	ISO 179	kJ/m ²	30
Charpy unnotched Impact	23°C 6x4x50mm	ISO 179	kJ/m ²	300
Tensile Modulus		ISO 527	MPa	2300
Flexural modulus		ISO 178	MPa	2500
Elongation at break		ISO 527	%	80
Flexural break strength		ISO 178	MPa	90
Tensile break strength		ISO 527	MPa	60
Tensile yield strength		ISO 527	MPa	70
Flexural yield strength		ISO 178	MPa	95

Thermal Properties

Vicat temperature	1Kg 50°C/h	ISO 306	°C	152
Heat deflection temperature	1.82 Mpa 120°C/h	ISO 75A	°C	138
Ball pressure test		VDE 0470	°C	125
Continuous service temperature	20,000h	IEC 60216	°C	120
Continuous service temperature		UL94 746B	°C	75
Coefficient of linear thermal expan	-30°C/+30°C	DIN 5375	K ⁻¹	7x10exp(-5)

Electrical Properties

Dielectric strength	2mm	ASTM D149	kV/mm	22
Comparative tracking index	CTI -Method A	IEC 60112	Volt	200
Volume resistivity		ASTM D257	Ohm cm	>10exp(15)

Flammability

Oxygen index		ASTM D2863	%	34
Flame behaviour (yellow card)	0.97mm	UL94	Class	V0
Glow wire flammability index (GW)	2mm	IEC 60695-2	°C	960

General Properties

Density		ISO 1183	g/cm ³	1.22-1.24
Melt flow rate	300°C-1.2Kg	ISO 1133	g/10 min	12
Water absorption	24h/23°C	ISO 62	%	0.1
Water absorption at saturation		ISO 62	%	0.35
Mould Shrinkage	Parallel		%	0.5-0.7
Mould Shrinkage	Normal		%	0.5-0.7

The values quoted are the average of results obtained under laboratory conditions and are given only as an indication to enable customers to make use of our products.

Prospective users should determine the suitability of materials before adopting them on a commercial scale.

Performance Plastics Ltd

Tel. 01425 403543

Website

www.performance-plastics.co.uk