

# performanceplastics

2500 W G2 X0

Polycarbonate, medium viscosity, 10% Glass fibre reinforced, self-extinguishing UL94 V0

## PROPERTIES

### Mechanical Properties

	Condition	Standard	Unit	Value
Izod notched impact	23°C 3.2mm	ASTM D256	J/m	150
Izod notched impact	-20°C 3.2mm	ASTM D256	J/m	120
Charpy notched impact	23°C 6x4x50mm	ISO 179	kJ/m <sup>2</sup>	12
Charpy unnotched Impact	23°C 6x4x50mm	ISO 179	kJ/m <sup>2</sup>	70
Charpy unnotched Impact	-20°C 6x4x50mm	ISO 179	kJ/m <sup>2</sup>	60
Tensile Modulus		ISO 527	MPa	3500
Flexural modulus		ISO 178	MPa	3700
Elongation at break		ISO 527	%	8
Flexural break strength		ISO 178	MPa	110
Tensile break strength		ISO 527	MPa	65
Tensile yield strength		ISO 527	MPa	75
Flexural yield strength		ISO 178	MPa	125

### Thermal Properties

Vicat temperature	1Kg 50°C/h	ISO 306	°C	152
Vicat temperature	5Kg 50°C/h	ISO 306	°C	146
Heat deflection temperature	1.82 Mpa 120°C/h	ISO 75A	°C	135
Ball pressure test		VDE 0470	°C	135
Continuous service temperature	20,000h	IEC 60216	°C	130
Continuous service temperature	short term	IEC 60216	°C	150
Continuous service temperature		UL94 746B	°C	75
Coefficient of linear thermal expa	-30°C/+30°C	DIN 5375	K <sup>-1</sup>	3,3x10exp(-5)

### Electrical Properties

Dielectric strength	2mm	IEC 60243-1	kV/mm	24
Comparative tracking index	CTI -Method A	IEC 60112	Volt	175
Comparative tracking index	CTI -Method B	IEC 60112	Volt	100M
Volume resistivity		ASTM D257	Ohm cm	>10exp(15)

### Flammability

Oxygen index		ASTM D2863	%	35
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 <sup>3</sup>	1.26-1.28
Melt flow rate	300°C-1.2Kg	ISO 1133	g/10 min	12
Reinforcing charges	850°C - 1h	ISO 3451	%	10
Water absorption	24h/23°C	ISO 62	%	0.08
Water absorption at saturation		ISO 62	%	0.25
Mould Shrinkage	Parallel		%	0.3-0.5
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.

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