

Stanyl[®] MC50

PA46–GF35 FR

35% Glass Reinforced, Flame Retardant (halogen–phosphorous–free)

Stanyl MC50 is a special V–2 rated material with high flow. The Flame Retardant type is Nitrogen–based.

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<i>RHEOLOGICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294–4
Molding shrinkage (normal)	1.1 / *	%	ISO 294–4
<i>MECHANICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Tensile modulus	12500 / 8000	MPa	ISO 527–1/–2
Stress at break	200 / 140	MPa	ISO 527–1/–2
Strain at break	2.5 / 3.6	%	ISO 527–1/–2
Flexural modulus	12500 / 8000	MPa	ISO 178
Charpy impact strength (+23°C)	60 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 13	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	11 / –	kJ/m ²	ISO 180/1A
<i>THERMAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Melting temperature (10°C/min)	295 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	290 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	290 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.35 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.4 / *	E–4/°C	ISO 11359–1/–2
Relative Temperature Index – electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<i>ELECTRICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 62631-3-1
Electric strength	33 / 30	kV/mm	IEC 60243-1
Comparative tracking index	425 / -	V	IEC 60112
Relative permittivity (100Hz)	4.8 / 11.2	-	IEC 62631-2-1
Relative permittivity (1 MHz)	4.4 / 5.2	-	IEC 62631-2-1
<i>OTHER PROPERTIES</i>			
	<i>DRY / COND</i>		
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1490 / -	kg/m ³	ISO 1183