

# Stanyl® MC50

## PA46-GF35 FR

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

Print Date: 2018-12-13

Properties	Typical Data	Unit	Test Method
<b>Rheological properties</b> dry / cond			
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
<b>Mechanical properties</b> dry / cond			
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 <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 13	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	11 / -	kJ/m <sup>2</sup>	ISO 180/1A
<b>Thermal properties</b> dry / cond			
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
Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Relative Temperature Index - electrical	65	°C	UL746B
RTI electrical (Thickness (1) tested)	0.75	mm	UL746B

Property Data (Provisional)

# Stanyl<sup>®</sup> MC50

Print Date: 2018-12-13

Properties	Typical Data	Unit	Test Method
<b>Electrical properties</b>			
	dry / cond		
Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 60093
Electric strength	33 / 30	kV/mm	IEC 60243-1
Comparative tracking index	425 / -	V	IEC 60112
Relative permittivity (100Hz)	4.8 / 11.2	-	IEC 60250
Relative permittivity (1 MHz)	4.4 / 5.2	-	IEC 60250
<b>Other properties</b>			
	dry / cond		
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1490 / -	kg/m <sup>3</sup>	ISO 1183