

Tecomid® NB40 GR45 NL HS

PA6, 45% glass fiber reinforced, heat stabilized, natural

Property (dry as molded)	Condition	Value	Unit	Standard
General Properties				
Abbreviation	-	PA6 GF45	-	ISO 1043
Density	-	1,51	g/cm ³	ISO 1183
Melt Flow Rate	2.16kg, 270 °C	-	g/10'	ISO 1133
Molding Shrinkage	Parallel / Normal	0,2 / 0,9	%	Eurotec
Moisture Content	-	<0,2	%	ISO 960
Moisture Absorption	50% RH, 23 °C	1,6	%	ISO 62
Mechanical Properties				
Stress at Break	+23°C	200	MPa	ISO 527
Strain at Break	+23°C	2,5	%	ISO 527
Tensile Modulus	+23°C	15000	MPa	ISO 527
Yield Strength	+23°C	-	MPa	ISO 527
Izod Impact, notched	+23 °C	20	kJ/m ²	ISO 180/1A
Izod Impact, notched	-30 °C	18	kJ/m ²	ISO 180/1A
Izod Impact, un-notched	+23 °C	110	kJ/m ²	ISO 180/1U
Izod Impact, un-notched	-30 °C	100	kJ/m ²	ISO 180/1U
Thermal Properties				
Melting Temperature	10 K/min	223	°C	ISO 11357
Heat Deformation Temperature	0.45 MPa	220	°C	ISO 75
Heat Deformation Temperature	1.80 MPa	215	°C	ISO 75
Vicat Softening Temperature	50N	215	°C	ISO 306
Electrical Properties & Flammability				
Volume Resistivity	-	1E+15	Ohm.cm	IEC 60093
Surface Resistivity	-	1E+13	Ohm	IEC 60093
Comparative Tracking Index	solution A	500	V	IEC 60112
Glow Wire Flammability Index (GWFI)	2 mm plaque	-	°C	IEC 60695
Glow Wire Ignitability Temperature (GWIT)	2 mm plaque	-	°C	IEC 60695
Flame Rating	0.75 mm	HB	-	UL94
Flame Rating	1.6 mm	HB	-	UL94

Processing Parameters				
Drying*		80 / 2 - 4	°C / hr	
Feed Throat Temperature		60 - 80	°C	
Processing Temperature		250 - 270	°C	
Mold Temperature		60 - 100	°C	
Hold Pressure		50 - 100	MPa	
Back Pressure		Low	-	
Injection Speed		Fast	-	

* Pre-drying is not necessary for materials in moisture proof closed bags.

All mentioned information in this technical data sheet present current knowledge and experience of Eurotec. The data may not be valid when this product is used in combination with other materials such as pigments or additives. Please note that the data are given dry as molded values related to the mentioned material only. Naturally, these data do not guarantee certain values since may vary on customers processing conditions, so they are provided for reference purposes only and should not be used alone to create specification limits and design basis. It is strongly recommended for customers to test the product under their own processing conditions and test facilities to determine the suitability for the required application and use.