

PRODUCT INFORMATION

TORZEN Marathon G3500XHL BK34

DESCRIPTION

PA66 35% glass fiber reinforced injection molding grade with enhanced thermal resistance in contact with hot air. High improvement of mechanical properties retention versus standard polyamide 66 after heat ageing. Black colour.

Suitable for parts requiring high stiffness, good mechanical resistance and good heat ageing properties retention.

ISO 1043: PA66-T GF35

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.15%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature
280 - 300°C

Mold Temperature
80 - 100°C

Injection Speed
medium-high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
ROHS compliant 2011/65/UE and following amendments

TECHNICAL DATA SHEET

TORZEN Marathon G3500XHL BK34

PROPERTY		STANDARD	UNIT	VALUE	
					Cond**
<i>PHYSICAL PROPERTIES</i>					
Density		ISO 1183	kg/m ³	1420	
Water Absorption, 24h immersion at 23°C	2mm	ISO 62	%	1.1	
Water Absorption, 24h immersion at 23°C	1mm	ISO 62	%	2	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.7	
<i>MECHANICAL PROPERTIES</i>					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	11500	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	210	
Strain at Break	5mm/min	ISO 527-2/1A	%	3	
Flexural Modulus	2mm/min	ISO 178	MPa	10500	
Flexural Strength	2mm/min	ISO 178	MPa	320	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	12	
Izod Impact Strength	+23°C	ISO 180/1U	kJ/m ²	12	
<i>THERMAL PROPERTIES</i>					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	262	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	250	
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	260	

*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110