

TORZEN Marathon G5000XHL BK34

Material Code

Colour Code

DESCRIPTION

PA66 50% 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 very high stiffness and mechanical resistance, along with good heat ageing properties retention.

ISO 1043 : PA66-T GF50

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.

Processing Parameters

Melt Temperature:	Mold Temperature:	Injection Speed:
280 ÷ 300 °C	80 ÷ 100 °C	Medium-high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

RoHS compliant 2011/65/UE and following amendments

TORZEN Marathon G5000XHL BK34

Material Code
Colour Code

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
Physical Properties				
Density	ISO 1183	Kg/m ³	1570	
Moulding shrinkage – Parallel / Normal	ISO 294-4	%	0,2-0,3 / 0,8-0,9	
Moisture absorption 23°C – 50%RH	ISO 62	%	1,1	
Water absorption, 24h immersion at 23°C	ISO 62	%	0,65	
Mechanical Properties				
Tensile Modulus	ISO 527-2/1A	MPa	16900	
Stress at Break	ISO 527-2/1A	MPa	247	
Strain at Break	ISO 527-2/1A	%	2,4	
Flexural Modulus	ISO 178	MPa	16700	
Flexural Strength	ISO 178	MPa	350	
Charpy Notched Impact Strength	ISO 179/1 eA	kJ/m ²	16	
Charpy Notched Impact Strength	ISO 179/1 eA	kJ/m ²	14	
Izod Impact Strength	ISO 180/1 eU	kJ/m ²	13	
Thermal Properties				
Melting Temperature	ISO 11357-1-3	°C	262	
Heat Deflection Temperature	ISO 75/2 A f	°C	255	
Heat Deflection Temperature	ISO 75/2 B f	°C	260	

*DAM = Dry As Moulded state **Cond = Conditioned state similar to ISO 1110 ***Melt Temp [°C] / Mold Temp [°C] / Cavity press [MPa]