TORZEN Marathon G3000XHL BK20

Material Code *Colour Code*

DESCRIPTION

PA66 30% 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 GF30

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

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PROPERTY		*STANDARD*	*UNIT*	*VALUE* *DAM**	*Cond***
Physical Properties					
Density		ISO 1183	Kg/m^3	1370	
Moulding shrinkage – Parallel / Normal		ISO 294-4	%	0,3-0,4 / 0,95-1,05	
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	1,8	
Water absorption, 24h immersion at 23°C	2mm thk	ISO 62	%	1,2	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	9800	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	195	
Strain at Break	5mm/min	ISO 527-2/1A	%	3,1	
Flexural Modulus	2mm/min	ISO 178	MPa	9100	
Flexural Strength	2mm/min	ISO 178	MPa	270	
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	kJ/m^2	10	
Charpy Notched Impact Strength	-40°C	ISO 179/1 eA	kJ/m^2	9	
Izod Impact Strength	+23°C	ISO 180/1 eU	kJ/m^2	10	
Thermal Properties					
Melting Temperature	10°C/min	ISO 11357-1-3	°C	262	
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	248	
Heat Deflection Temperature	0.45 MPa	ISO 75/2 B f	°C	255	

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