

TORZEN Marathon FRU4800XHL BK01

Material Code

Colour Code

DESCRIPTION

PA66 flame retardant injection moulding grade. Improvement of mechanical properties retention versus standard polyamide 66 after heat ageing Halogen and phosphorus free. Black colour.

Suitable for parts where fire retardancy is required. Rated V-0 at 0.4 mm according to UL-94.

ISO 1043 : PA66-T FR(30)

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.10%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more.

Avoid excessive shear rates and high thermal stresses for better processing. 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:
270 ÷ 290 °C	60 ÷ 80 °C	Medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet



Underwriters Laboratories Inc. certified material. www.ul.com

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	1170	
Moulding shrinkage – Parallel / Normal	ISO 294-4	%	1,3-1,6 / 1,3-1,6	
Mechanical Properties				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3900 1870
Stress at Break	5mm/min	ISO 527-2/1A	MPa	73 47
Strain at Break	5mm/min	ISO 527-2/1A	%	13 >13
Flexural Strength	2mm/min	ISO 178	MPa	105 36
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	kJ/m ²	3 13,5
Thermal Properties				
Melting Temperature	10°C/min	ISO 11357-1-3	°C	263
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	85
Flammability Properties				
Flammability	0.25mm	UL 94	class	V0
Flammability	0.4mm	UL 94	class	V0
Flammability	0.8mm	UL 94	class	V0
Glow Wire Flammability Index	0.4 / 0.75 / 1.5mm	IEC 60695-2-12	°C	960 / 960 / 960
Glow Wire Ignition Temperature	0.4 / 0.75 / 1.5mm	IEC 60695-2-13	°C	990 / 990 / 990
Electrical Properties				
Comparative Tracking Index	Sol.A	IEC 60112	-	600

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