TORZEN G3500HSL BK20

DESCRIPTION

PA66 35% glass fibre reinforced injection moulding grade. Heat stabilized. Black colour.

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

ISO 1043: PA66-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	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
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments

TORZEN G3500HSL BK20

PROPERTY		STANDARD	UNIT	VALUE DAM*	VALUE Cond**
PHYSICAL PROPERTIES					
Density		ISO 1183	kg/m³	1410	
Moulding shrinkage - Parallel / Normal		ISO 294-4	%	0.3 / 1.1	
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	
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	12200	8000
Stress at Break	5mm/min	ISO 527-2/1A	MPa	210	140
Strain at Break	5mm/min	ISO 527-2/1A	%	3.1	5
Flexural Modulus	2mm/min	ISO 178	MPa	11000	7000
Flexural Strength	2mm/min	ISO 178	MPa	320	230
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m²	90	100
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m²	75	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m²	15	20
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m²	11	
Izod Notched Impact Strength	+23°C	ISO 180/1A	kJ/m²	14	
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	260	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	250	
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	255	
FLAMMABILITY PROPERTIES					
Flammability	0.8mm	UL 94	class	HB	

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