

TORZEN G3500XHL BK20

DESCRIPTION

PA66 35% glass fibre reinforced injection moulding 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-GF35

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

Formerly Known As TORZEN Marathon G3500XHL BK20

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
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density	ISO 1183	kg/m ³	1420	
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.3 / 1.1	
Water Absorption, 24h immersion at 23°C	ISO 62	%	1.1	
Water Absorption, 24h immersion at 23°C	ISO 62	%	2	
Moisture Absorption 23°C - 50%RH	ISO 62	%	1.7	
MECHANICAL PROPERTIES				
Tensile Modulus	ISO 527-2/1A	MPa	11500	
Stress at Break	ISO 527-2/1A	MPa	210	
Strain at Break	ISO 527-2/1A	%	3	
Flexural Modulus	ISO 178	MPa	11000	
Flexural Strength	ISO 178	MPa	310	
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	79	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	14	
Izod Impact Strength	ISO 180/1U	kJ/m ²	14	
THERMAL PROPERTIES				
Melting Temperature	ISO 11357-1/-3	°C	261	
Heat Deflection Temperature	ISO 75/2Af	°C	250	
Heat Deflection Temperature	ISO 75/2Bf	°C	260	
FLAMMABILITY PROPERTIES				
Flammability	UL 94	class	HB	
Automotive Interior Flammability	ISO 3795	mm/min	<100	

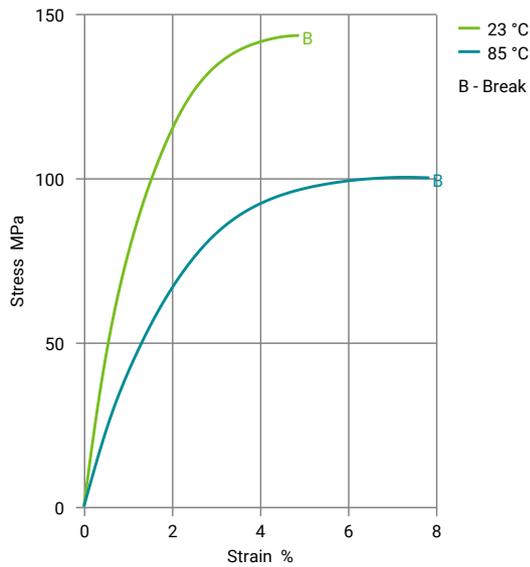
*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 1110



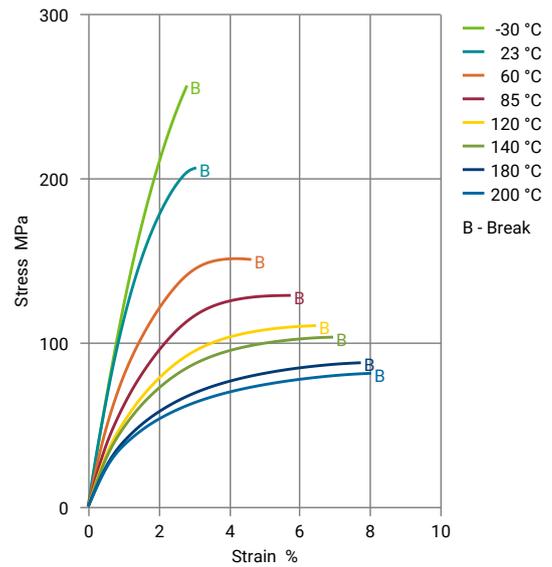
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DIAGRAMS

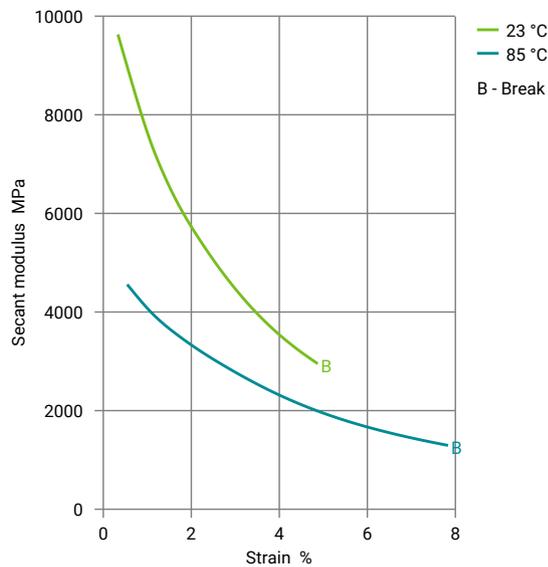
Stress-strain (cond.)



Stress-strain (dry)



Secant modulus-strain (cond.)



Secant modulus-strain (dry)

