

TORZEN G3000HR BK34

DESCRIPTION

PA66 30% glass fibre reinforced injection moulding grade. Heat stabilized, hydrolysis resistance. Black colour.

Suitable for parts requiring high stiffness and good mechanical resistance.

ISO 1043: PA66-GF30

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
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	1370	
Melt Flow Rate	ISO 1133	g/10min		35
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.3 / 1.1	
Water Absorption, 24h immersion at 23°C	ISO 62	%	1.2	
Water Absorption, 24h immersion at 23°C	ISO 62	%	2	
Moisture Absorption 23°C - 50%RH	ISO 62	%	1.8	
MECHANICAL PROPERTIES				
Tensile Modulus	ISO 527-2/1A	MPa	9700	6500
Stress at Break	ISO 527-2/1A	MPa	185	120
Strain at Break	ISO 527-2/1A	%	3.7	6
Flexural Modulus	ISO 178	MPa	8900	6000
Flexural Strength	ISO 178	MPa	285	185
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	85	80
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	60	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	12	13
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	8	
Izod Notched Impact Strength	ISO 180/1A	kJ/m ²	10	
THERMAL PROPERTIES				
Melting Temperature	ISO 11357-1/-3	°C	260	
Heat Deflection Temperature	ISO 75/2Af	°C	245	
Heat Deflection Temperature	ISO 75/2Bf	°C	250	
FLAMMABILITY PROPERTIES				
Flammability	UL 94	class	HB	
Glow Wire Flammability Index	IEC 60695-2-12	°C	650	
Glow Wire Flammability Index	IEC 60695-2-12	°C	960	
Glow Wire Ignition Temperature	IEC 60695-2-13	°C	675	
Automotive Interior Flammability	ISO 3795	mm/min	<30	
ELECTRICAL PROPERTIES				
Volume Resistivity	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	IEC 62631-3-2	Ohm	1E12	1E10
Electric Strength	IEC 60243-1	kV/mm	30	15
Comparative Tracking Index	IEC 60112	V	400	

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

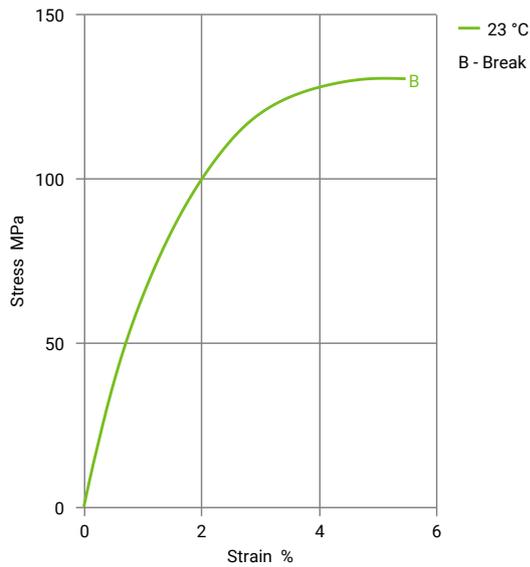
1: Temperature [°C] / Load [kg]



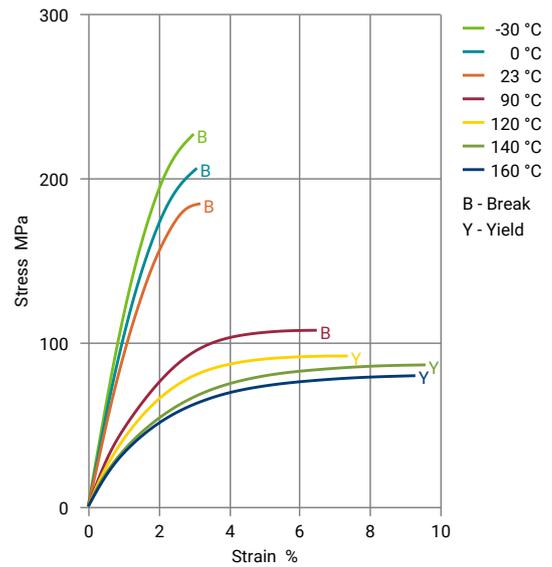
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DIAGRAMS

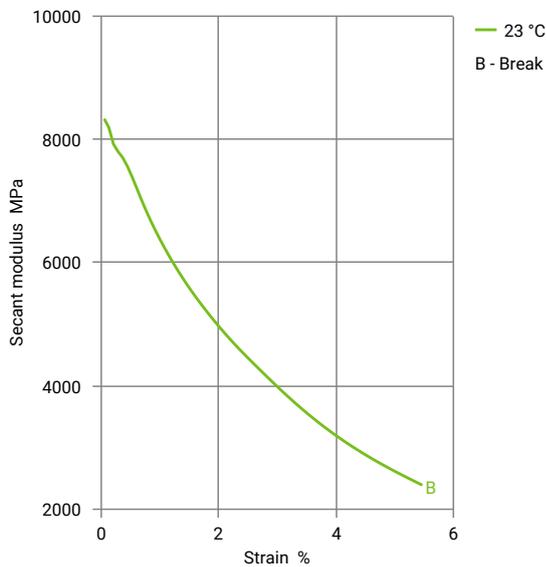
Stress-strain (cond.)



Stress-strain (dry)



Secant modulus-strain (cond.)



Secant modulus-strain (dry)

