

# RENYCLE A GF3502K 3033 BK

PROVISIONAL

## DESCRIPTION

Partially recycled PA66, 35% glass-fibre injection moulding grade. Heat stabilized. Black colour.

The recycled material has been developed to reduce its environmental impact in comparison to traditional virgin options. Suitable for parts requiring high stiffness and good mechanical resistance.

ISO 1043: PA66-GF35

REGIONAL AVAILABILITY: Europe

*THE CHARACTERISTICS SHOWN HERE ARE PROVISIONAL AND REFLECT THE AVERAGE VALUES OF PROPERTIES MEASURED OVER A LIMITED NUMBER OF PRODUCTION CAMPAIGNS*

## 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. 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.

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  
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1410	
Melt Volume-Flow Rate	ISO 1133	cm <sup>3</sup> /10min		30
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.4 / 0.9	
Water Absorption, immersion at 23°C	ISO 62	%	6	
Moisture Absorption 23°C - 50%RH	ISO 62	%	1.5	
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	ISO 527-2/1A	MPa	11300	8200
Stress at Break	ISO 527-2/1A	MPa	170	110
Strain at Break	ISO 527-2/1A	%	2.2	4.5
Flexural Modulus	ISO 178	MPa	10600	7000
Flexural Strength	ISO 178	MPa	265	150
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	58	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	7	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	ISO 11357-1/-3	°C	260	
Heat Deflection Temperature	ISO 75/2Af	°C	235	
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	IEC 62631-3-2	Ohm	1E12	1E10

\*: DAM = Dry As Moulded state according to ISO 16396-2, \*\*: Cond = Conditioned state similar to ISO 11110

1: Temperature [°C] / Load [kg]

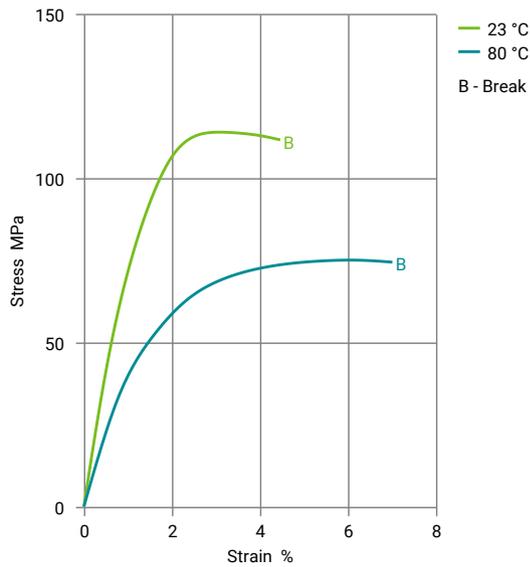
2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



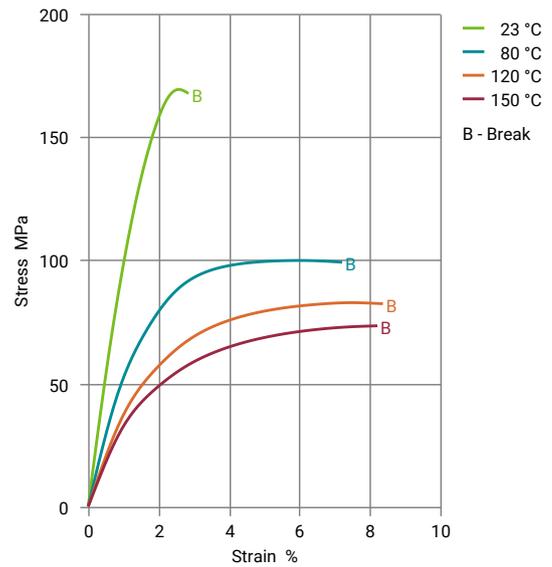
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## DIAGRAMS

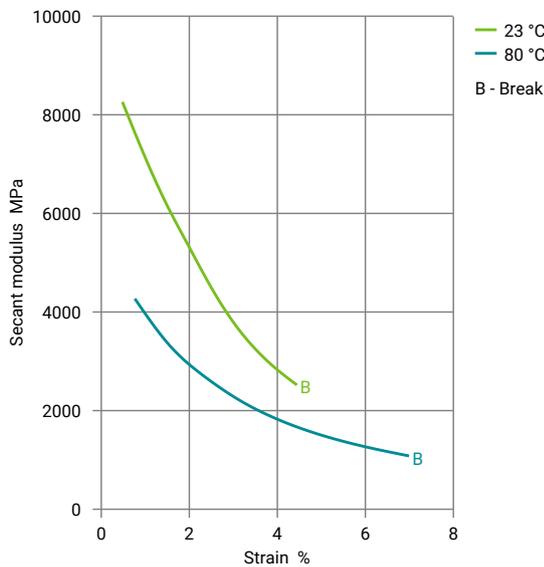
### Stress-strain (cond.)



### Stress-strain (dry)



### Secant modulus-strain (cond.)



### Secant modulus-strain (dry)

