

RENYCLE A GF3504K 3033 BK

PROVISIONAL

DESCRIPTION

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

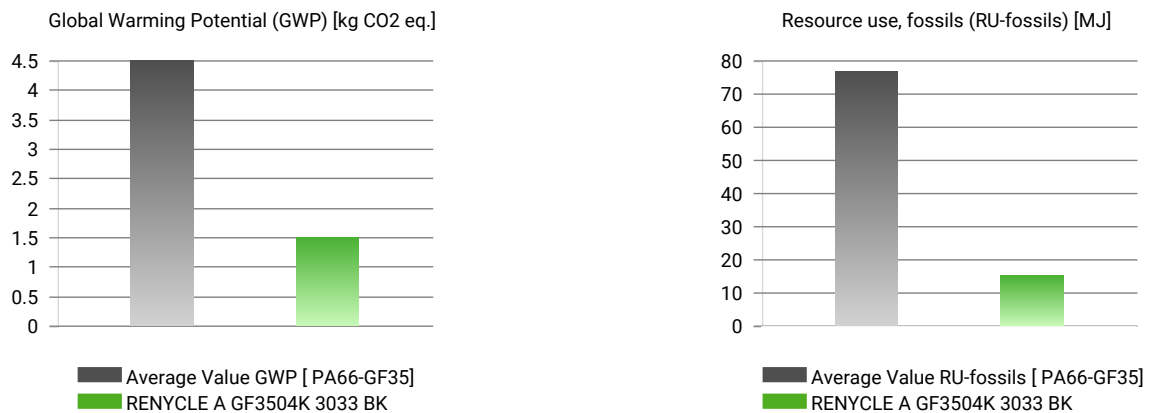
The recycled material has been developed to reduce its environmental impact in comparison to traditional virgin options. Suitable for parts requiring high stiffness and good mechanical resistance.

ISO 1043: PA66-GF35

REGIONAL AVAILABILITY: Europe, Asia Pacific

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

ENVIRONMENTAL PERFORMANCE



The environmental performance metrics GWP and RU-fossils are defined per kg of material produced and are up to date as of the release date of the Technical Data Sheet.

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**	
PHYSICAL PROPERTIES					
Density		ISO 1183	kg/m³	1400	
Melt Volume-Flow Rate	275/5 ^[1]	ISO 1133	cm³/10min		35
Moulding shrinkage - Parallel / Normal	290/90/60 ^[2]	ISO 294-4	%		0.4 / 0.9
Water Absorption, immersion at 23°C	2mm	ISO 62	%		6
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%		1.5
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	11400	8200
Stress at Break	5mm/min	ISO 527-2/1A	MPa	170	110
Strain at Break	5mm/min	ISO 527-2/1A	%	2.1	4.2
Flexural Modulus	2mm/min	ISO 178	MPa	10600	7000
Flexural Strength	2mm/min	ISO 178	MPa	265	150
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m²	55	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m²	7	
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C		260
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C		235
ELECTRICAL PROPERTIES					
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12	1E10

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

1: Temperature [°C] / Load [kg]

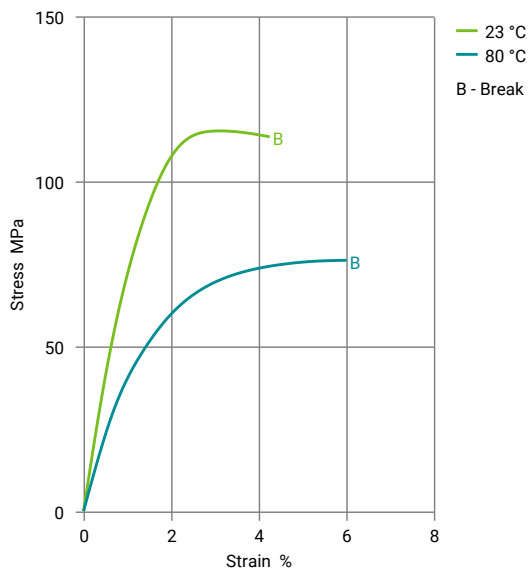
2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



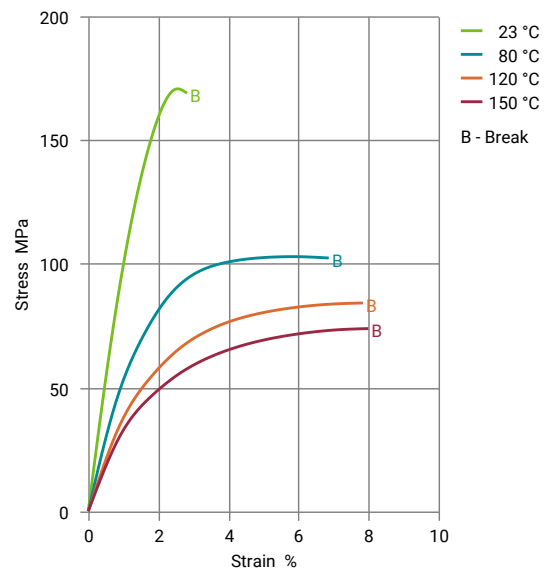
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DIAGRAMS

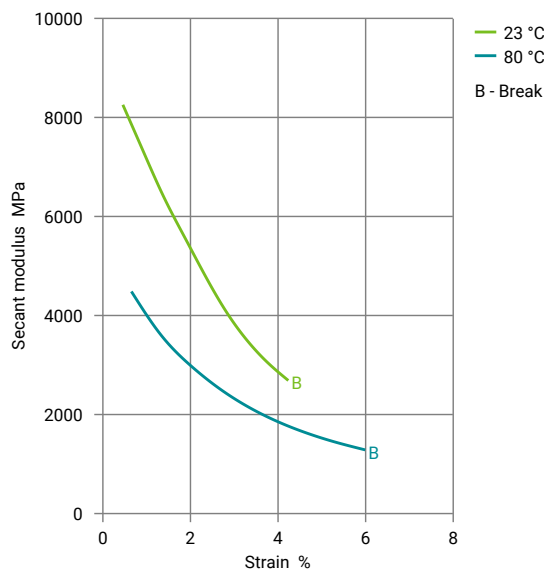
Stress-strain (cond.)



Stress-strain (dry)



Secant modulus-strain (cond.)



Secant modulus-strain (dry)

