

RENYCLE S GF3001 HF0 3033 BK

DESCRIPTION

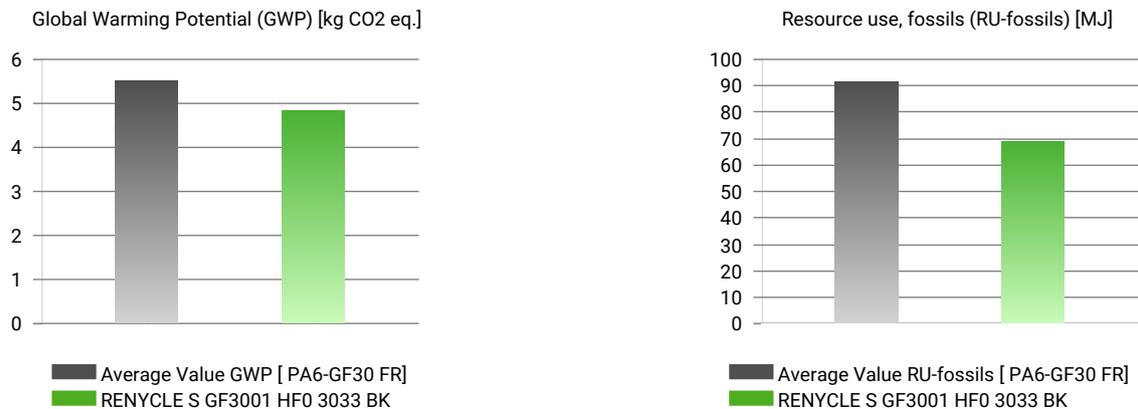
Partially recycled PA6, flame retardant injection moulding grade, halogen and red phosphorus free. 30% glass-fibre-reinforced. Black colour.

The recycled material has been developed to reduce its environmental impact in comparison to traditional virgin options. Suitable for parts requiring fire retardancy along with medium stiffness and enhanced mechanical resistance. Tested V-0 at 0.8 mm according to UL-94.

ISO 1043: PA6-GF30 FR(40)

REGIONAL AVAILABILITY: Europe

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 0.10%. 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
240 - 280°C

Mold Temperature
80 - 90°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			1430	
Moulding shrinkage - Parallel / Normal	270/80/60 ^[1]	ISO 1183	kg/m ³	
Water Absorption, immersion at 23°C	2mm	ISO 294-4	%	0.3 / 0.6
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	4.9
		ISO 62	%	1.6
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	10600
Stress at Break	5mm/min	ISO 527-2/1A	MPa	120
Strain at Break	5mm/min	ISO 527-2/1A	%	2.2
Flexural Modulus	2mm/min	ISO 178	MPa	10300
Flexural Strength	2mm/min	ISO 178	MPa	190
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	50
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	215
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	V-0
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	960
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12
Comparative Tracking Index	Sol.A	IEC 60112	V	500

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

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

