

# RENYCLE S GF3003 3033 BK

PRELIMINARY

## DESCRIPTION

Partially recycled PA6, 30% glass-fibre-reinforced injection moulding grade. 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.

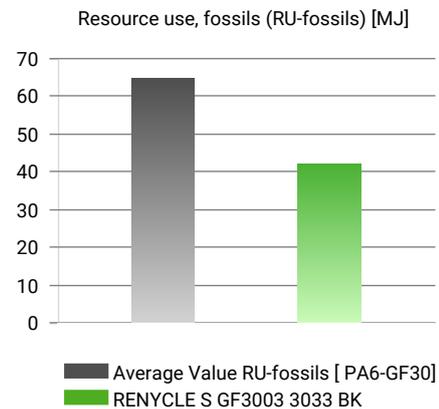
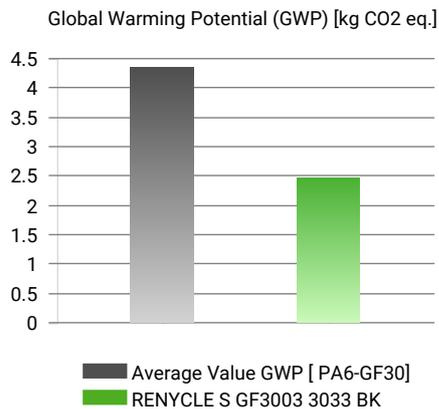
ISO 1043: PA6-GF30

REGIONAL AVAILABILITY: Europe

*THE CHARACTERISTICS SHOWN HERE MUST BE CONSIDERED PRELIMINARY AND INDICATIVE FOR A PRODUCT AT DEVELOPMENTAL STAGE*

Formerly Known As RADILON S X21205 BK

## 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. 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**
<b>PHYSICAL PROPERTIES</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1360	
Melt Flow Rate	ISO 1133	g/10min		20
Moulding shrinkage - Parallel / Normal	ISO 294-4	%		0.3 / 0.8
Water Absorption, immersion at 23°C	ISO 62	%		7.5
Moisture Absorption 23°C - 50%RH	ISO 62	%		2
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	ISO 527-2/1A	MPa	9400	6500
Stress at Break	ISO 527-2/1A	MPa	150	105
Strain at Break	ISO 527-2/1A	%	3.5	6.5
Flexural Modulus	ISO 178	MPa	8300	6100
Flexural Strength	ISO 178	MPa	230	160
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	75	85
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	11	15
<b>THERMAL PROPERTIES</b>				
Melting Temperature	ISO 11357-1/-3	°C		220
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	UL 94	class		HB

\*: 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]

