RADILON D ERV300W 333 BK

PA610-GF30 RadiciGroup High Performance Polymers

Product Texts

PA610 30% glass fibre reinforced injection moulding grade. Toughened, heat stabilized. Black colour.

Suitable for parts requiring good dimensional stability, high stiffness and mechanical resistance. Typical application: automotive fuel system components. This grade is partially renewably-sourced (64% of base polymer by weight).

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**7000 / 5100**	MPa	ISO 527
[C] Stress at break	**110 / 90**	MPa	ISO 527
[C] Strain at break	**5 / 8**	%	ISO 527
[C] Charpy impact strength, +23°C	**100 / 105**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**85 / -**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**30 / 40**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**20 / -**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**220 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**195 / ***	°C	ISO 75-1/-2
[C] Burning Behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Volume resistivity	**1E13 / 1E11**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	***/ 1E10**	Ohm	IEC 62631-3-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**2.2 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1 / ***	%	Sim. to ISO 62
[C] Density	**1260 / -**	kg/m³	ISO 1183
Biobased content	**42**	%	-

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Processing humidity	**≤0.1**	%	-
Melt temperature	**240 - 280**	°C	-
Mold temperature	**80 - 90**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Granules, Black

Additives
Release agent

Certifications
Contains renewable resources

Applications
Automotive

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Special Characteristics

Heat stabilized or stable to heat

Other text information

Injection molding

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. 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	Mold Temperature	Injection Speed
240 - 280°C	80 - 90°C	high