

Product Texts

PA610 30% glass fibre reinforced injection moulding grade. Heat stabilized, very high hydrolysis resistance. Black colour.

Suitable for parts requiring good dimensional stability and mechanical resistance. Excellent retention of properties in contact with automotive cooling circuit liquids. This grade is partially renewably-sourced (64% of base polymer by weight).

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	8500 / 6800	MPa	ISO 527
^[C] Stress at break	150 / 120	MPa	ISO 527
^[C] Strain at break	5 / 6	%	ISO 527
^[C] Charpy impact strength, +23°C	100 / 105	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	105 / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	15 / 17	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	12 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	222 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	200 / *	°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	1310 / -	kg/m ³	ISO 1183
Biobased content	64	%	-

[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 - 260	°C	-
Mold temperature	80 - 90	°C	-

Characteristics

Processing

Injection Molding

Chemical Resistance

Hydrolytically Stable

RADILON D RV300RG 3900 BK

PA610-GF30

RadiciGroup High Performance Polymers

Delivery form

Granules, Black

Certifications

Contains renewable resources

Additives

Release agent

Applications

Automotive

Special Characteristics

Heat stabilized or stable to heat

Regional Availability

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

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
240 - 260°CMold Temperature
80 - 90°CInjection Speed
high