RADILON D 40P50K 100 NT

PA610 RadiciGroup High Performance Polymers

Product Texts

PA610 flexible, high viscosity extrusion grade. Plasticized. Heat stabilized. Natural colour.

Suitable for extrusion of tubes and profiles. Typical application: air pressure pipes. This grade is partially renewably-sourced (64% of base polymer by weight).

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**750 / 530**	MPa	ISO 527
[C] Charpy notched impact strength, +23°C	**25 / 35**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6 / -**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**215 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**50 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**136 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**130 / ***	E-6/K	ISO 11359-1/-2

[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	**2.5 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.1 / ***	%	Sim. to ISO 62
[C] Density	**1100 / -**	kg/m³	ISO 1183
Biobased content	**60**	%	-

[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	**230 - 260**	°C	-
Mold temperature	**70 - 80**	°C	-

Characteristics

Processing
Injection Molding, Pipe/Tube Extrusion, Profile Extrusion

Delivery form
Granules, Natural Color

Additives
Plasticizer

Special Characteristics
Heat stabilized or stable to heat

Certifications
Contains renewable resources

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	Mold Temperature	Injection Speed
230 - 260°C	70 - 80°C	medium

Extrusion Temperature
240 - 290°C