RADILON DT RV500RKC2 306 BK

PA612-GF50 RadiciGroup High Performance Polymers

Product Texts

PA612, 50% glass fibre reinforced injection moulding grade. Heat stabilized, improved flowability. Black colour.

Suitable for parts requiring very high stiffness and high mechanical resistance in direct contact with drinking water and food. Excellent dimensional stability, improved hydrolytic stability and chemical resistance to disinfectants. Product developed for applications in civil and industrial water management as well as appliances.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.2 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**0.6 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**14900 / 13400**	MPa	ISO 527
[C] Stress at break	**195 / 170**	MPa	ISO 527
[C] Strain at break	**3 / 3.2**	%	ISO 527
[C] Charpy impact strength, +23°C	**90 / 95**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**80 / -**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**15 / 17**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**14 / -**	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	**200 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**20 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**87 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**0.8 / ***	mm	-
Yellow Card available	**yes / ***	-	-

[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	**1.5 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**0.6 / ***	%	Sim. to ISO 62
[C] Density	**1510 / -**	kg/m³	ISO 1183

[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	**260 - 290**	°C	-
Mold temperature	**80 - 90**	°C	-

Characteristics

Processing
Injection Molding

Delivery form
Granules, Black

Additives
Release agent

Special Characteristics
Heat stabilized or stable to heat

Chemical Resistance
Hydrolytically Stable

Certifications
Food contact, Drinking water contact

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
260 - 290°C	80 - 90°C	medium