RADILON S HS 105 M NT

PA6 RadiciGroup High Performance Polymers

Product Texts

PA6 injection moulding grade. Nucleated, fast cycling. Natural colour.

General purpose grade, suitable for parts requiring high productivity.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**0.7 / ***	%	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	**3100 / 1200**	MPa	ISO 527
[C] Yield stress	**75 / 45**	MPa	ISO 527
[C] Yield strain	**4.3 / 30**	%	ISO 527
[C] Nominal strain at break	**35 / >50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N / -**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**5.5 / 35**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**4.5 / -**	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	**60 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**170 / ***	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**190 / ***	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**85 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**85 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at thickness h	**V-2 / ***	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] Comparative tracking index	**600 / -**	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**9.5 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**2.7 / ***	%	Sim. to ISO 62
[C] Density	**1140 / -**	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	**250 - 280**	°C	-
Mold temperature	**70 - 80**	°C	-

Characteristics

Processing
Injection Molding

Features
Nucleated

Delivery form
Granules, Natural Color

Applications
General Purpose

Additives
Release agent

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. Avoid excessive shear rates and high thermal stresses for better processing. 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
250 - 280°C	70 - 80°C	medium