

**RADILON S CP300K 100 NT**

PA6-MD30

RadiciGroup High Performance Polymers

**Product Texts**

PA6 30% mineral filled injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring good dimensional stability and mechanical properties, reduced shrinkage and low warpage.

<b>Processing/Physical Characteristics</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.9 / *</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.9 / *</b>	%	ISO 294-4, 2577

[C]: CAMPUS

<b>Mechanical properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>4900 / 2350</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>80 / 55</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>20 / 35</b>	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>6 / 6.5</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

<b>Thermal properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	<b>220 / *</b>	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>90 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>190 / *</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>205 / *</b>	°C	ISO 306
<sup>[C]</sup> Burning Behav. at thickness h	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8 / *</b>	mm	-

[C]: CAMPUS

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

[C]: CAMPUS

<b>Other properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<sup>[C]</sup> Water absorption	<b>7.3 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	<b>2.1 / *</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1350 / -</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>80</b>	°C	-
Pre-drying - Time	<b>2 - 4</b>	h	-
Processing humidity	<b>≤0.15</b>	%	-
Melt temperature	<b>240 - 280</b>	°C	-
Mold temperature	<b>80 - 90</b>	°C	-

**Characteristics****Processing**

Injection Molding

**Special Characteristics**

Heat stabilized or stable to heat

**Delivery form**

Granules, Natural Color

**Features**

Low Warpage

**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 0.15%. 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 - 280°CMold Temperature  
80 - 90°CInjection Speed  
medium-high