

# RADILON S RCP4015LK 100 NT

## DESCRIPTION

PA6 40% glass fibre and mineral filler reinforced injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring improved stiffness and dimensional stability, reduced shrinkage and low warpage.

ISO 1043: PA6-(GF+MX)40

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

## MATERIAL HANDLING AND PROCESSING

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  
250 - 290°C

Mold Temperature  
70 - 80°C

Injection Speed  
medium-high

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet  
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE		
			DAM*	Cond**	
<b>PHYSICAL PROPERTIES</b>					
Density			1470		
Moulding shrinkage - Parallel / Normal	280/80/60 <sup>[1]</sup>	ISO 1183 ISO 294-4	kg/m <sup>3</sup>	0.3 / 0.5	
Water Absorption, immersion at 23°C	2mm	ISO 62	%	6.5	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.6	
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	11400	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	135	
Strain at Break	5mm/min	ISO 527-2/1A	%	2.5	
Flexural Modulus	2mm/min	ISO 178	MPa	11000	
Flexural Strength	2mm/min	ISO 178	MPa	215	
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	55	
<b>THERMAL PROPERTIES</b>					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	220	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	205	
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	215	
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	210	
<b>FLAMMABILITY PROPERTIES</b>					
Flammability	0.8mm	UL 94	class	HB	
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	700	
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0	
<b>ELECTRICAL PROPERTIES</b>					
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12	1E10

\*: DAM = Dry As Moulded state according to ISO 16396-2, \*\*: Cond = Conditioned state similar to ISO 1110

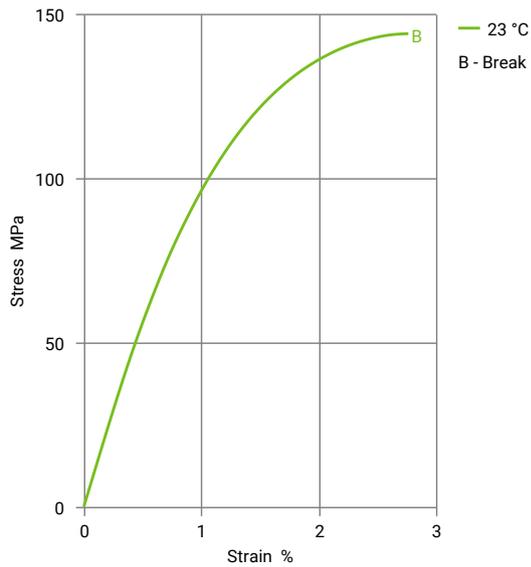
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



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## DIAGRAMS

### Stress-strain (dry)



### Secant modulus-strain (dry)

