

RADILON S RCP3010LW 322 BK

DESCRIPTION

PA6 30% glass fibre and mineral filler reinforced injection moulding grade. Heat stabilized. Black colour.

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

ISO 1043: PA6-(GF+MX)30

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

Formerly Known As X5919

MATERIAL HANDLING AND PROCESSING

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
240 - 280°C

Mold Temperature
80 - 90°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**
PHYSICAL PROPERTIES				
Density		kg/m ³	1380	
Moulding shrinkage - Parallel / Normal	280/80/60 ^[1]	ISO 1183 ISO 294-4	%	0.4 / 0.6
Water Absorption, immersion at 23°C	2mm	ISO 62	%	7.5
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	2
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	7800
Stress at Break	5mm/min	ISO 527-2/1A	MPa	100
Strain at Break	5mm/min	ISO 527-2/1A	%	2.4
Flexural Modulus	2mm/min	ISO 178	MPa	7200
Flexural Strength	2mm/min	ISO 178	MPa	155
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	40
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m ²	35
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	4
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	3.5
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	220
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	190
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	210
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	205
FLAMMABILITY PROPERTIES				
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
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12
Comparative Tracking Index	Sol.A	IEC 60112	V	500

*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 11110

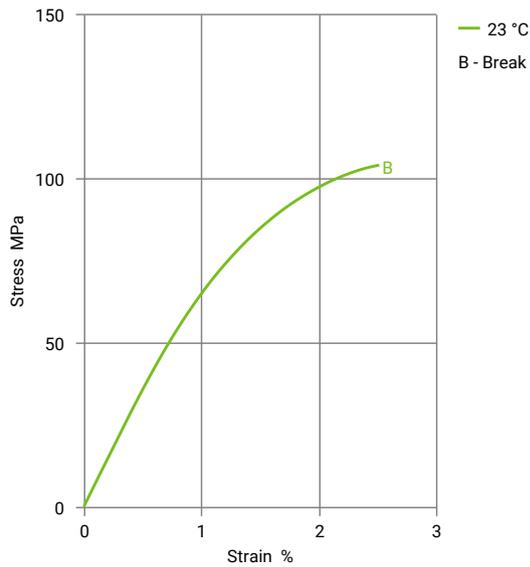
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



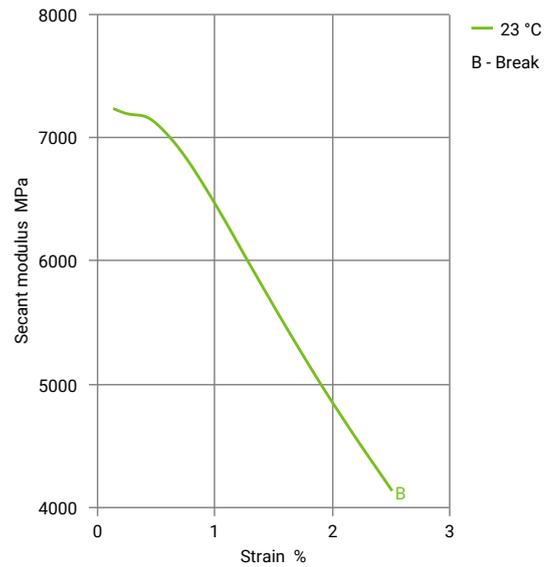
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DIAGRAMS

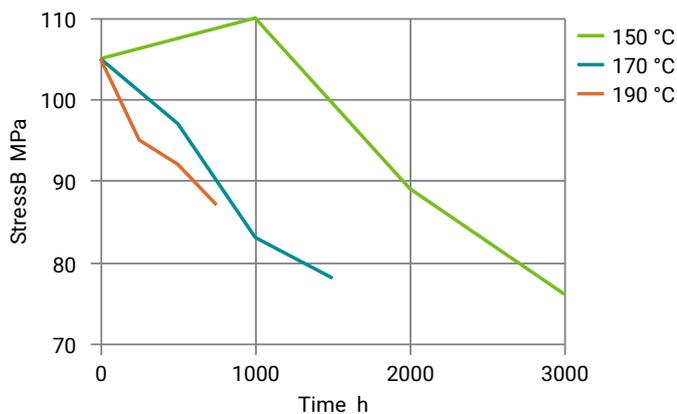
Stress-strain (dry)



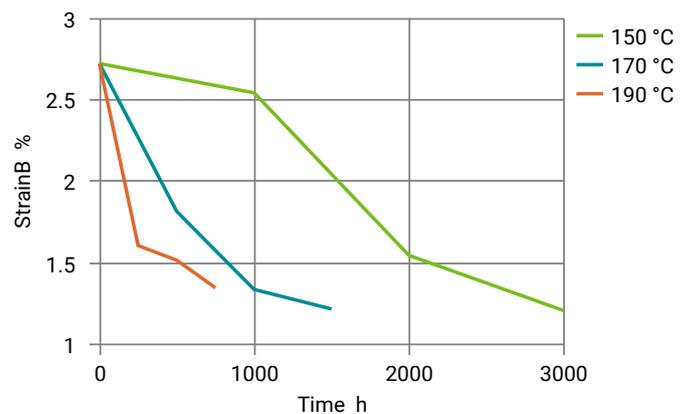
Secant modulus-strain (dry)



LTHA-Stress at Break 4mm (dry)



LTHA-Strain at Break 4mm (dry)



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LTHA-Charpy Impact Strength (23°C) 4mm (dry)

