

# RADILON A RCW4015W 3733 BK

## DESCRIPTION

PA66 40% glass fibre and mineral reinforced injection moulding grade, heat stabilized. Black colour

Suitable for parts requiring high stiffness, good mechanical resistance and excellent heat ageing properties retention, good dimensional stability.

ISO 1043: PA66-(GF+MD)40

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

Formerly Known As N66MG40HSL BK

## 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. 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  
275 - 300°C

Mold Temperature  
80 - 100°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	ISO 1183	kg/m <sup>3</sup>	1490	
Melt Flow Rate	ISO 1133	g/10min		40
Moulding shrinkage - Parallel / Normal	ISO 294-4	%		0.2 / 0.5
Viscosity Index (Sulfuric Acid)	ISO 307	ml/g		140
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	ISO 527-2/1A	MPa	9200	
Stress at Break	ISO 527-2/1A	MPa	133	
Strain at Break	ISO 527-2/1A	%	2.5	
Flexural Modulus	ISO 178	MPa	8500	
Flexural Strength	ISO 178	MPa	200	
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	42	
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	40	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	5	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	4.5	
Izod Notched Impact Strength	ISO 180/1A	kJ/m <sup>2</sup>	4.6	
Izod Notched Impact Strength	ISO 180/1A	kJ/m <sup>2</sup>	4.4	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	ISO 11357-1/-3	°C	260	
Heat Deflection Temperature	ISO 75/2Af	°C	225	
Heat Deflection Temperature	ISO 75/2Bf	°C	254	
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	30	
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	91	
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	UL 94	class		HB
Automotive Interior Flammability	ISO 3795	mm/min		0
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	IEC 62631-3-1	Ohm*m	1E13	
Surface Resistivity	IEC 62631-3-2	Ohm	1E12	

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

1: Temperature [°C] / Load [kg]

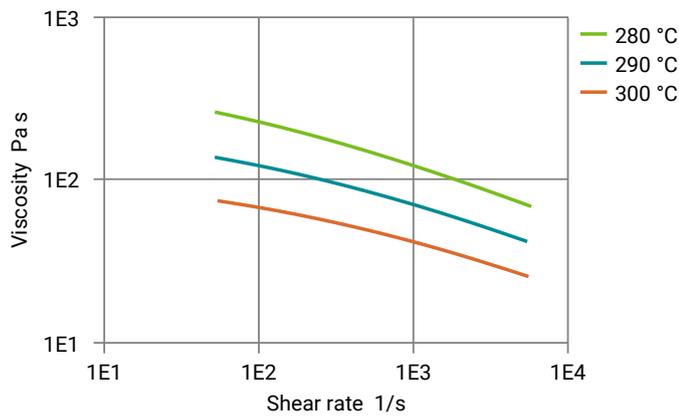
2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



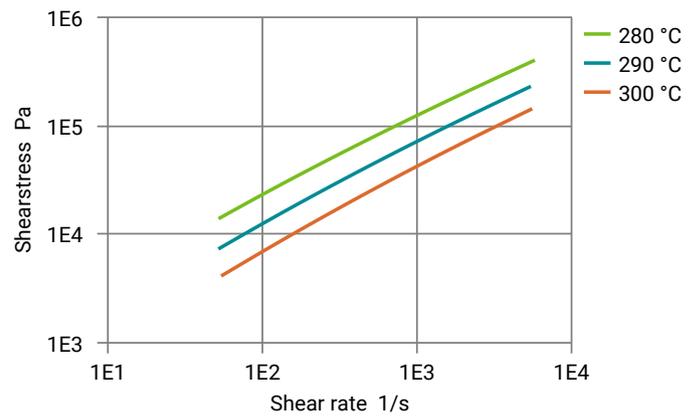
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## DIAGRAMS

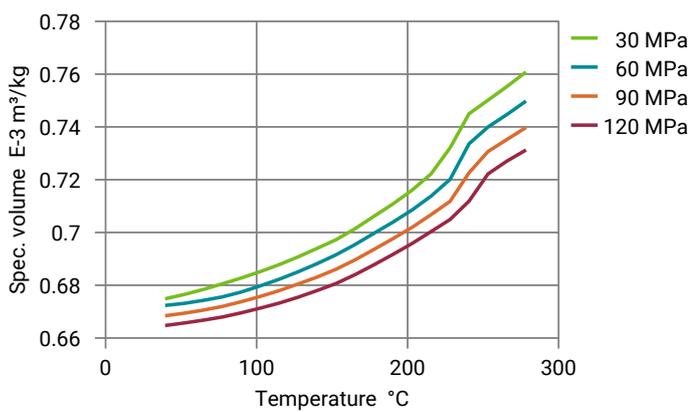
### Viscosity-shear rate



### Shearstress-shear rate



### Specific volume-temperature (pvT)



### Thermal expansion

