

PRODUCT INFORMATION

RADILON S USZ200 100 NT

DESCRIPTION

PA6 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring excellent impact resistance, even at low temperatures, and high flexibility.

ISO 1043: PA6-HI

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 - 280°C

Mold Temperature
70 - 80°C

Injection Speed
medium

PRODUCT SAFETY AND APPROVALS

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



TECHNICAL DATA SHEET

RADILON S USZ200 100 NT

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density		kg/m ³	1060	
Moulding shrinkage - Parallel / Normal	280 / 70 / 60 ^[1]	%	1.5 / 1.4	
Water Absorption, immersion at 23°C	2mm	%	7.9	
Moisture Absorption 23°C - 50%RH	2mm	%	2	
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	MPa	1600	600
Stress at Yield	50mm/min	MPa	40	20
Yield Strain		%	5	30
Nominal Strain at Break	50mm/min	%	>100	>100
Flexural Modulus	2mm/min	MPa	1400	
Flexural Strength	2mm/min	MPa	55	
Charpy Notched Impact Strength	+23°C	kJ/m ²	85	
Charpy Notched Impact Strength	-30°C	kJ/m ²	85	
THERMAL PROPERTIES				
Melting Temperature	10°C/min	°C	220	
Heat Deflection Temperature	1.80 MPa	°C	50	
Heat Deflection Temperature	0.45 MPa	°C	135	
Vicat Softening Temperature	50°C/h 50N	°C	150	
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	650
Automotive Interior Flammability	3mm	ISO 3795	mm/min	<30
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13 1E11
Surface Resistivity	500V	IEC 60093	Ohm	1E12 1E10
Comparative Tracking Index	Sol.A	IEC 60112	-	600

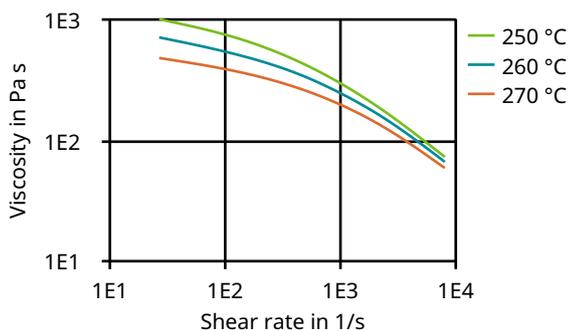
*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



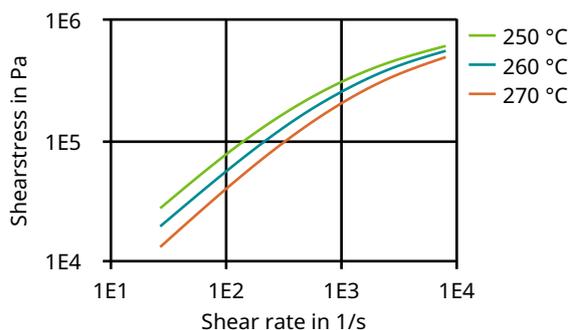
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Diagrams

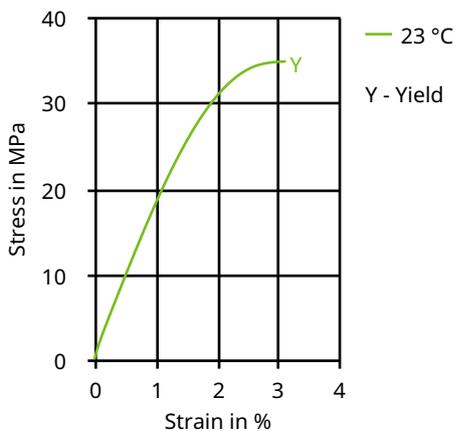
Viscosity-shear rate



Shearstress-shear rate



Stress-strain (dry)



Stress-strain (cond.)

