

## PRODUCT INFORMATION

# RADILON S HSX 100 NT

### DESCRIPTION

PA6 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring improved impact resistance.

ISO 1043: PA6-I

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  
260 - 290°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 HSX 100 NT

PROPERTY	STANDARD	UNIT	VALUE	DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>					
Density		kg/m <sup>3</sup>	1110		
Moulding shrinkage - Parallel / Normal	280 /70 /60 <sup>[1]</sup>	%	1.3 / 1.2		
Water Absorption, immersion at 23°C	2mm	%	9.2		
Moisture Absorption 23°C - 50%RH	2mm	%	2.7		
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	2500	1050
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	65	40
Yield Strain		ISO 527-2/1A	%	4.1	20
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	40	>100
Flexural Modulus	2mm/min	ISO 178	MPa	2300	
Flexural Strength	2mm/min	ISO 178	MPa	90	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	15	
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	10	
<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	55	
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	160	
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	185	
<b>FLAMMABILITY PROPERTIES</b>					
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	
<b>ELECTRICAL PROPERTIES</b>					
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	

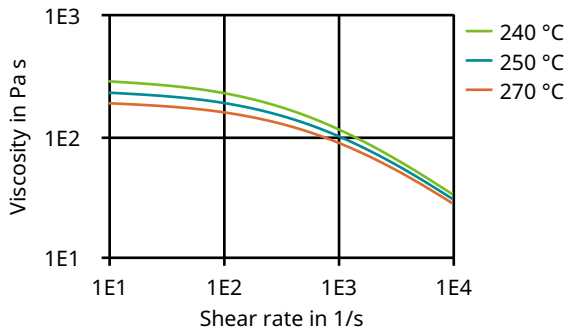
\*: DAM = Dry As Moulded state according to ISO 16396-2 \*\*: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

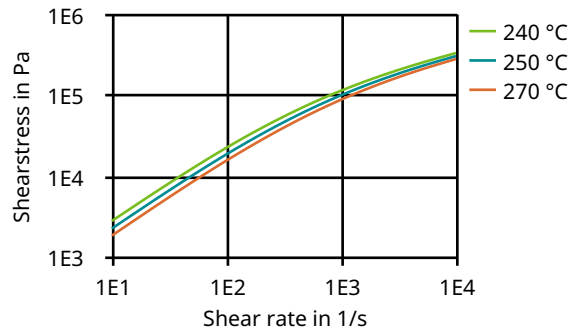
# RADILON S HSX 100 NT

Diagrams

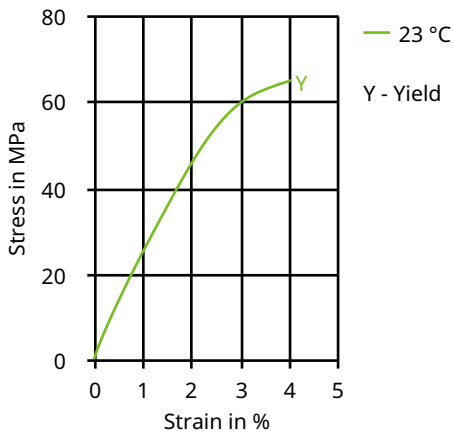
Viscosity-shear rate



Shearstress-shear rate



Stress-strain (dry)



Stress-strain (cond.)

