

# RADILON S USX200 100 NAT

Material code

Colour code

## DESCRIPTION

PA6 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring excellent impact resistance and high flexibility.

ISO 1043 : PA6-HI

## 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.

### Processing Parameters

Melt Temperature:	Mold Temperature:	Injection Speed:
250 ÷ 280 °C	70 ÷ 80 °C	Medium

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet



Underwriters Laboratories Inc. certified material. File number: E116324 [www.ul.com](http://www.ul.com)

RoHS compliant 2002/95/CE and following amendments



## Technical data sheet

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PROPERTY	UNIT	STANDARD	VALUE	
			DAM*	Cond**
<b>Physical Properties</b>				
Density		ISO 1183	Kg/m <sup>3</sup>	1060
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	2
Water absorption, immersion at 23°C	2mm thk	ISO 62	%	7.6
<b>Mechanical Properties</b>				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	1600      600
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	40      30
Yield Strain	50mm/min	ISO 527-2/1A	%	5.2      30
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	>100      >100
Flexural Modulus	2mm/min	ISO 178	MPa	1350      450
Flexural Strength	2mm/min	ISO 178	MPa	55      25
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m <sup>2</sup>	90      125
Charpy Notched Impact Strength	-30°C	ISO 179/1 eA	KJ/m <sup>2</sup>	16
Izod Notched Impact Strength	+23°C	ISO 180/1 eA	KJ/m <sup>2</sup>	95
<b>Thermal Properties</b>				
Melting Temperature	10°C/min	ISO 11357-1-3	°C	220
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	50
Heat Deflection Temperature	0.45 MPa	ISO 75/2 B f	°C	135
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	150
<b>Flammability Properties</b>				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C/mm	650
Automotive interior flammability	Burn rate@3mm	FMVSS302	mm/min	<30
<b>Electrical Properties</b>				
Volume resistivity	500V	IEC 60093	ohm · m	1 E+13      1 E+11
Surface resistivity	500V	IEC 60093	ohm	1 E+12      1 E+10
Comparative Tracking Index	Sol.A	IEC 60112	V	600

\*DAM = Dry As Moulded state    \*\*Cond = Conditioned state similar to ISO 1110    \*\*\*Melt Temp [°C] / Mold Temp [°C] / Cavity press [MPa]

