

RADILON A HSX 100 NAT

*Material code**Colour code*

DESCRIPTION

PA66 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring improved impact resistance.

ISO 1043 : PA66-I

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:
270 ÷ 290 °C	70 ÷ 90 °C	Medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

RoHS compliant 2002/95/CE and following amendments

Technical data sheet

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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
Physical Properties				
Density	ISO 1183	Kg/m ³	1100	
Moisture absorption 23°C – 50%RH	2mm thk ISO 62	%	2	
Water absorption, immersion at 23°C	2mm thk ISO 62	%	7.6	
Mechanical Properties				
Tensile Modulus	1mm/min ISO 527-2/1A	MPa	2750	1650
Stress at Yield	50mm/min ISO 527-2/1A	MPa	70	45
Yield Strain	50mm/min ISO 527-2/1A	%	5.5	25
Nominal Strain at Break	50mm/min ISO 527-2/1A	%	35	>50
Flexural Modulus	2mm/min ISO 178	MPa	2300	
Flexural Strength	2mm/min ISO 178	MPa	95	
Charpy Notched Impact Strength	+23°C ISO 179/1 eA	KJ/m ²	15	30
Charpy Notched Impact Strength	-30°C ISO 179/1 eA	KJ/m ²	11	
Thermal Properties				
Melting Temperature	10°C/min ISO 11357-1-3	°C	260	
Heat Deflection Temperature	1.8 MPa ISO 75/2 A f	°C	60	
Heat Deflection Temperature	0.45 MPa ISO 75/2 B f	°C	190	
Vicat Softening Temperature	50°C/h ISO 306/B50 50N	°C	225	
Flammability Properties				
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 FMVSS302	mm/min	<30	
Electrical Properties				
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]

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