

RADILON A HSK 164 NAT

Material code

Colour code

DESCRIPTION

PA66 injection moulding grade. Internally lubricated, fast cycles, easy mould release. Heat stabilized. Natural colour.

Suitable for high productivity applications like fasteners, connectors, cable ties.

ISO 1043 : PA66-T

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



Underwriters Laboratories Inc. certified material. File number: E116324 www.ul.com

RoHS compliant 2011/65/UE and following amendments





Technical data sheet

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PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
Physical Properties					
Density		ISO 1183	Kg/m ³	1140	
Moulding shrinkage – Parallel / Normal	290/70/60***	ISO 294-4	%	1,2 / 1,3	
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	2.1	
Water absorption, immersion at 23°C	2mm thk	ISO 62	%	8.9	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3200	1300
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	85	55
Yield Strain	50mm/min	ISO 527-2/1A	%	4.5	30
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	30	>50
Flexural Modulus	2mm/min	ISO 178	MPa	3000	
Flexural Strength	2mm/min	ISO 178	MPa	110	
Charpy Impact Strength	+23°C	ISO 179/1 eU	KJ/m ²	NB	
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m ²	5	12
Charpy Notched Impact Strength	-30°C	ISO 179/1 eA	KJ/m ²	4	
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	70	
Heat Deflection Temperature	0.45 MPa	ISO 75/2 B f	°C	200	
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	240	
Coefficient of Linear Thermal Expansion, parallel	23°C	ISO 11359-1/-2	E-6/K	85	
Coefficient of Linear Thermal Expansion, normal	23°C	ISO 11359-1/-2	E-6/K	85	
Flammability Properties					
Flammability	0.4mm	UL 94	class	V2	
Flammability	0.8mm	UL 94	class	V2	
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C/mm	800	
Automotive interior flammability	Burn rate	FMVSS302	mm/min	0	
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]

