Product Information

RADILON S HS 100 P NAT

Material code *Colour code*

DESCRIPTION

PA6 injection moulding grade. Nucleated, fast cycling. Natural colour.

General purpose grade, suitable for parts requiring high productivity.

ISO 1043 : PA6

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

RoHS compliant 2011/65/UE and following amendments

The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience become available. The data provided reflects the average values of the properties measured over an adequate number of different production cycles and relates only to the designated material; this data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits nor used alone as the basis of design; it is not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since Radici Plastics cannot anticipate all variations in actual end-use conditions Radici Plastics makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.

Technical data sheet

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PROPERTY		STANDARD	UNIT	VALUE DAM*	VALUE Cond**
Physical Properties					
Density		ISO 1183	Kg/m^3	1140	
Moulding shrinkage – Parallel / Normal	270/70/60***	ISO 294-4	%	0,8 / 1	
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	2.7	
Water absorption, immersion at 23°C	2mm thk	ISO 62	%	10.9	
Viscosity Index (Sulfuric Acid)		ISO 307	ml/g	146	
Rockwell Hardness	Scale M	ISO 2039-2		>90	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	3100	1200
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	80	45
Yield Strain	50mm/min	ISO 527-2/1A	%	4.2	30
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	30	>50
Flexural Modulus	2mm/min	ISO 178	MPa	2800	850
Flexural Strength	2mm/min	ISO 178	MPa	105	30
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m^2	7	13
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	220	
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	170	
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	190	
Flammability Properties					
Flammability	0.8mm	UL 94	class	V2	
Glow Wire Flammability Index	1mm / 2mm	IEC 60695-2-1/2	°C/mm	750 / 700	
Glow Wire Ignition Temperature	1mm / 2mm	IEC 60695-2-1/3	°C/mm	775 / 725	
Automotive interior flammability	Burn rate@3mm	FMVSS302	mm/min	0	
Electrical Properties					
Volume resistivity	500V	IEC 60093	ohm · m	1 E+13	1E+11
Surface resistivity	500V	IEC 60093	ohm	1 E+12	1E+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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