

RADILON S ESL128 100 NAT

*Material code**Colour code*

DESCRIPTION

PA6 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring good impact strength.

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

RoHS compliant 2002/95/CE and following amendments

Technical data sheet

RADILON S ESL128 100 NAT

Material code Colour code

PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
Physical Properties					
Density		ISO 1183	Kg/m ³	1080	
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	2.6	
Water absorption, immersion at 23°C	2mm thk	ISO 62	%	9	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	2100	700
Stress at Yield	50mm/min	ISO 527-2/1A	MPa	50	25
Yield Strain	50mm/min	ISO 527-2/1A	%	4.1	35
Nominal Strain at Break	50mm/min	ISO 527-2/1A	%	65	>100
Flexural Modulus	2mm/min	ISO 178	MPa	1900	
Flexural Strength	2mm/min	ISO 178	MPa	75	
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m ²	65	120
Charpy Notched Impact Strength	-30°C	ISO 179/1 eA	KJ/m ²	15	
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	50	
Heat Deflection Temperature	0.45 MPa	ISO 75/2 B f	°C	155	
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	170	
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]

Issued: 02/09/2011

www.radicigroup.com/plastics – info.plastics@radicigroup.com

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.