

### PRODUCT INFORMATION



## RADILON A ESL128 100 NT

### DESCRIPTION

PA66 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring good impact strength.

ISO 1043: PA66-HI

270 - 290°C

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

### 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.

Injection Molding Processing Parameters Melt Temperature

Mold Temperature 70 - 90°C

Injection Speed medium

### PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet Underwriters Laboratories Inc. certified material www.ul.com ROHS compliant 2011/65/EU and following amendments

Issued: 10/10/2022

IT;CN;US

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



### PRODUCT INFORMATION



## RADILON A ESL128 100 NT

PROPERTY		STANDARD	UNIT	<i>VAI</i> DAM <sup>*</sup>	LUE Cond <sup>**</sup>
PHYSICAL PROPERTIES					
Density Moulding shrinkage - Parallel / Normal Water Absorption, immersion at 23°C Moisture Absorption 23°C - 50%RH	290/70/60 <sup>[1]</sup> 2mm 2mm	ISO 1183 ISO 294-4 ISO 62 ISO 62	kg/m³ % % %	1100 1.6 / 1.4 7.6 2	
MECHANICAL PROPERTIES					
Tensile Modulus Stress at Yield Yield Strain Nominal Strain at Break Flexural Modulus Flexural Strength Charpy Impact Strength Charpy Notched Impact Strength Charpy Notched Impact Strength	1mm/min 50mm/min 50mm/min 50mm/min 2mm/min 2mm/min +23°C +23°C -30°C	ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 178 ISO 178 ISO 179/1eU ISO 179/1eA ISO 179/1eA	MPa MPa % % MPa MPa kJ/m² kJ/m² kJ/m²	2100 60 6 40 1950 75 N 65	1350 35 30 >100
THERMAL PROPERTIES					
Melting Temperature Heat Deflection Temperature Heat Deflection Temperature Vicat Softening Temperature	10°C/min 1.80 MPa 0.45 MPa 50°C/h 50N	ISO 11357-1/-3 ISO 75/2Af ISO 75/2Bf ISO 306	°C °C °C	260 60 140 210	
FLAMMABILITY PROPERTIES					
Flammability Glow Wire Flammability Index Automotive Interior Flammability	0.8mm 2mm 3mm	UL 94 IEC 60695-2-12 ISO 3795	class °C mm/min	HB 650 <30	
ELECTRICAL PROPERTIES					
Volume Resistivity Surface Resistivity Comparative Tracking Index	500V 500V Sol.A	IEC 62631-3-1 IEC 62631-3-2 IEC 60112	Ohm*m Ohm V	1E13 1E12 600	1E11 1E10

<sup>\*:</sup> DAM = Dry As Moulded state according to ISO 16396-2 , \*\*: Cond = Conditioned state similar to ISO 1110

Issued: 10/10/2022

IT;CN;US

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

<sup>1:</sup> Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]





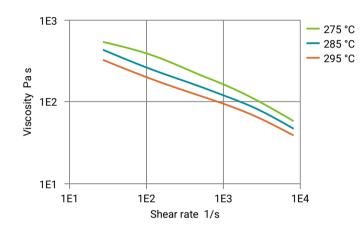


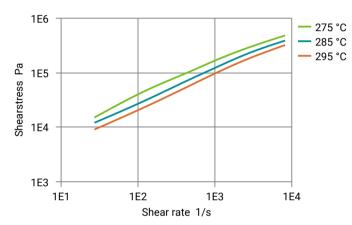
# RADILON A ESL128 100 NT

### **DIAGRAMS**

Viscosity-shear rate

### Shearstress-shear rate

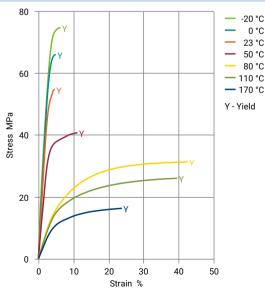




### Stress-strain (cond.)

### 

### Stress-strain (dry)



Issued: 10/10/2022

IT;CN;US

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

The information provided in this documentation corresponds to our knowledge on the subject as of date of 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 the mentioned companies cannot anticipate all variations in actual end-use conditions, they make no warranties and assume 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.

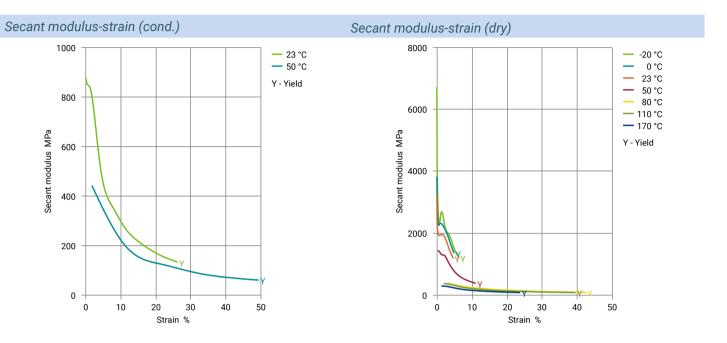
RADICI NOVACIPS SPA – Headquarters of RadiciGroup High Performance Polymers



PRODUCT INFORMATION



## RADILON A ESL128 100 NT



Issued: 10/10/2022

IT;CN;US

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