

# Radilon® S 32E 100 NAT

Polyamide 6

Radici Plastics

## Message:

PA6 medium viscosity extrusion grade. Natural colour.

Suitable for extrusion processes where medium viscosity is required.

Also apt for injection moulding of medium-high thickness items.

ISO 1043 : PA6

General Information				
Features	Medium Viscosity			
Uses	Thick-walled Parts			
RoHS Compliance	RoHS Compliant			
Appearance	Natural Color			
Processing Method	Extrusion Injection Molding			
Resin ID (ISO 1043)	PA6			
Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm <sup>3</sup>	ISO 1183
Water Absorption				ISO 62
Saturation, 23°C, 2.00 mm	11	--	%	
Equilibrium, 23°C, 2.00 mm, 50% RH	2.9	--	%	
Viscosity Number (H <sub>2</sub> SO <sub>4</sub> (Sulphuric Acid))	185	--	cm <sup>3</sup> /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3000	1100	MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	75.0	40.0	MPa	ISO 527-2/1A/50
Tensile Strain (Yield)	4.0	30	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	90	> 50	%	ISO 527-2/1A/50
Flexural Modulus <sup>1</sup>	2400	750	MPa	ISO 178
Flexural Stress <sup>2</sup>	95.0	30.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	4.5	--	kJ/m <sup>2</sup>	
23°C	7.5	--	kJ/m <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				

0.45 MPa, Unannealed	170	--	°C	ISO 75-2/Bf
1.8 MPa, Unannealed	55.0	--	°C	ISO 75-2/Af
Vicat Softening Temperature	195	--	°C	ISO 306/B50
Melting Temperature <sup>3</sup>	220	--	°C	ISO 11357
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Surface Resistivity	1.0E+12	1.0E+10	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+13	ohms·cm	IEC 60093
Comparative Tracking Index	600	--	V	IEC 60112
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Burning Rate	0.0	--	mm/min	FMVSS 302
Flame Rating (0.800 mm)	HB	--		UL 94
Glow Wire Flammability Index (2.00 mm)	800	--	°C	IEC 60695-2-12
<b>Injection</b>	<b>Dry</b>	<b>Unit</b>		
Drying Temperature - Desiccant Dryer	80.0		°C	
Drying Time - Desiccant Dryer	2.0 to 4.0		hr	
Dew Point - Desiccant Dryer	< -20.0		°C	
Suggested Max Moisture	0.15		%	
Processing (Melt) Temp	250 to 280		°C	
Mold Temperature	70.0 to 80.0		°C	
Injection Rate	Moderate			
<b>Extrusion</b>	<b>Dry</b>	<b>Unit</b>		
Drying Temperature	80.0		°C	
Drying Time	2.0 to 4.0		hr	
Suggested Max Moisture	0.15		%	
Melt Temperature	240 to 270		°C	
<b>NOTE</b>				
1.	2.0 mm/min			
2.	2.0 mm/min			
3.	10°C/min			

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