

Radilon® S 40E 100 NAT

Polyamide 6

Radici Plastics

Message:

PA6 high viscosity extrusion grade. Lubricated. Natural colour.
Suitable for extrusion of tubes, profiles, bars, rods and sheets.
Also apt for injection moulding of high thickness items.
ISO 1043 : PA6

General Information				
Additive		Lubricant		
Features		High Viscosity		
		Lubricated		
Uses		Profiles		
		Rods		
		Sheet		
		Thick-walled Parts		
		Tubing		
RoHS Compliance		RoHS Compliant		
Appearance		Natural Color		
Processing Method		Extrusion		
		Injection Molding		
Multi-Point Data		Isothermal Stress vs. Strain (ISO 11403-1)		
		Specific Volume vs Temperature (ISO 11403-2)		
		Viscosity vs. Shear Rate (ISO 11403-2)		
Resin ID (ISO 1043)		PA6		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 23°C, 2.00 mm	11	--	%	
Equilibrium, 23°C, 2.00 mm, 50% RH	3.1	--	%	
Viscosity Number (H2SO4 (Sulphuric Acid))	245	--	cm ³ /g	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3000	1150	MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	75.0	40.0	MPa	ISO 527-2/1A/50

Tensile Strain (Yield)	4.0	25	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 100	> 100	%	ISO 527-2/1A/50
Flexural Modulus ¹	2450	750	MPa	ISO 178
Flexural Stress ²	95.0	30.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	6.0	--	kJ/m ²	
23°C	8.0	20	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	165	--	°C	ISO 75-2/Bf
1.8 MPa, Unannealed	60.0	--	°C	ISO 75-2/Af
Vicat Softening Temperature	200	--	°C	ISO 306/B50
Melting Temperature ³	220	--	°C	ISO 11357
Electrical	Dry	Conditioned	Unit	Test Method
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
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate	0.0	--	mm/min	FMVSS 302
Flame Rating (0.800 mm)	HB	--		UL 94
Glow Wire Flammability Index (2.00 mm)	750	--	°C	IEC 60695-2-12
Injection	Dry	Unit		
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			
Extrusion	Dry	Unit		
Drying Temperature	80.0		°C	
Drying Time	2.0 to 4.0		hr	
Suggested Max Moisture	0.15		%	
Melt Temperature	240 to 270		°C	
NOTE				

1.	2.0 mm/min
2.	2.0 mm/min
3.	10°C/min

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT