



Radilon® S USX200 100 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring excellent impact resistance and high flexibility.

General

Features	<ul style="list-style-type: none"> • Good Impact Resistance • High Flexibility
Agency Ratings	<ul style="list-style-type: none"> • EU 2011/65/EC
RoHS Compliance	<ul style="list-style-type: none"> • RoHS Compliant
Appearance	<ul style="list-style-type: none"> • Natural Color
Processing Method	<ul style="list-style-type: none"> • Injection Molding
Resin ID (ISO 1043)	<ul style="list-style-type: none"> • PA6-HI

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.06	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.4	--	%	
Flow	1.5	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.6	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.0	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	232000	87000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	5800	4350	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	5.0	30	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	> 100	> 100	%	ISO 527-2/1A/50
Flexural Modulus ²	196000	65300	psi	ISO 178
Flexural Stress ²	7980	3630	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	12	--	ft·lb/in ²	
73°F	48	59	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
73°F	45	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	275	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	122	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Vicat Softening Temperature	302	--	°F	ISO 306/B50
Melting Temperature ³	428	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1
Comparative Tracking Index Solution A	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	< 1.2	--	in/min	ISO 3795
Flame Rating (0.031 in)	HB	--		UL 94
Glow Wire Flammability Index 0.08 in	1200	--	°F	IEC 60695-2-12

Processing Information

Injection	Dry	Unit
Drying Temperature - Desiccant Dryer	176	°F
Drying Time - Desiccant Dryer	2.0 to 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	482 to 536	°F
Mold Temperature	158 to 176	°F
Injection Rate	Moderate	

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 10°C/min