

Radilon® S HSX150W 1700 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 injection moulding grade. Toughened and heat stabilized. Natural colour

Suitable for applications requiring a balance of outstanding flexibility, ductility and toughness.

General

Additive	<ul style="list-style-type: none"> Heat Stabilizer Impact Modifier
Features	<ul style="list-style-type: none"> Ductile Good Toughness Heat Stabilized High Flexibility Impact Modified
Uses	<ul style="list-style-type: none"> Automotive Applications
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-TI

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.09	g/cm ³	ISO 1183
Water Absorption (Saturation, 73°F, 0.0787 in)	9.5	%	ISO 62
Water Absorption Equilibrium, 73°F, 0.0787 in, 50% RH	2.7	%	ISO 62
Viscosity Index - Sulfuric Acid	4150	in ³ /lb	ISO 307
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	334000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	9430	psi	ISO 527-2/1A/50
Flexural Modulus ²	305000	psi	ISO 178
Flexural Stress ²	12600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	8.1	ft·lb/in ²	
73°F	9.0	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	4.8	ft·lb/in ²	
73°F	6.7	ft·lb/in ²	
Unnotched Izod Impact Strength (73°F)	No Break		ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	311	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	133	°F	ISO 75-2/ Af
Vicat Softening Temperature	374	°F	ISO 306/B50
Melting Temperature ³	428	°F	ISO 11357-3

Radilon® S HSX150W 1700 NT
Radici Group High Performance Polymers - Polyamide 6

Processing Information

Injection	Nominal Value	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	0.10	%
Processing (Melt) Temp	428 to 500	°F
Mold Temperature	104 to 158	°F
Injection Rate	Moderate-Fast	
Extrusion	Nominal Value	Unit
Melt Temperature	446 to 482	°F

Notes

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

² 0.079 in/min

³ 10°C/min