

Radilon® S USZ200W 100 NT

 Radici Group High Performance Polymers - *Polyamide 6*
General Information
Product Description

PA6 Super impact modified at sub-ambient temperatures, heat stabilized, injection moulding grade, Natural colour

Suitable for parts requiring moderate stiffness and excellent low temperature impact resistance.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Additive	• Heat Stabilizer • Impact Modifier
Features	• Heat Stabilized • Low Temperature Impact Resistance • Impact Modified • Medium Stiffness
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GMW16942P-PA6
Appearance	• Natural Color
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-T HI

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.07	g/cm ³	ISO 1183
Molding Shrinkage ²			ISO 294-4
Across Flow	1.4	%	
Flow	1.5	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.9	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	2.0	%	ISO 62
Viscosity Index - Sulfuric Acid	3880	in ³ /lb	ISO 307
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	268000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	5950	psi	ISO 527-2/1A/50
Flexural Modulus ³	232000	psi	ISO 178
Flexural Stress ³	7980	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft·lb/in ²	
73°F	38	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180/1A
-22°F	6.2	ft·lb/in ²	
73°F	31	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	257	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	118	°F	ISO 75-2/Af
Vicat Softening Temperature	302	°F	ISO 306/B50
Melting Temperature ⁴	428	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	6.4E-5	in/in/°F	ISO 11359-2



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	482 to 536	°F
Mold Temperature	158 to 176	°F
Injection Rate	Moderate-Fast	

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 280°C Melt Temperature/ 70°C Mold Temperature/ 60 MPa Cavity Pressure
- ³ 0.079 in/min
- ⁴ 10°C/min

