

# 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

Additive	<ul style="list-style-type: none"> <li>Heat Stabilizer</li> <li>Impact Modifier</li> </ul>
Features	<ul style="list-style-type: none"> <li>Heat Stabilized</li> <li>Impact Modified</li> <li>Low Temperature Impact Resistance</li> <li>Medium Stiffness</li> </ul>
Uses	<ul style="list-style-type: none"> <li>Automotive Applications</li> </ul>
Agency Ratings	<ul style="list-style-type: none"> <li>EU 2011/65/EC</li> </ul>
RoHS Compliance	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Appearance	<ul style="list-style-type: none"> <li>Natural Color</li> </ul>
Processing Method	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>
Resin ID (ISO 1043)	<ul style="list-style-type: none"> <li>PA6-T HI</li> </ul>

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.07	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>			ISO 294-4
Across Flow	1.4	%	
Flow	1.5	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.9	%	ISO 62
Water Absorption			ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.0	%	
Viscosity Index - Sulfuric Acid	3880	in <sup>3</sup> /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 <sup>3</sup>	232000	psi	ISO 178
Flexural Stress <sup>3</sup>	7980	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft-lb/in <sup>2</sup>	
73°F	38	ft-lb/in <sup>2</sup>	
Notched Izod Impact Strength			ISO 180/1A
-22°F	6.2	ft-lb/in <sup>2</sup>	
73°F	31	ft-lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	257	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/af
264 psi, Unannealed	118	°F	

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Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	302	°F	ISO 306/B50
Melting Temperature <sup>4</sup>	428	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	6.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	1.2E-4	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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 280°C Melt Temperature/ 70°C Mold Temperature/ 60 MPa Cavity Pressure

<sup>3</sup> 0.079 in/min

<sup>4</sup> 10°C/min