

Radilon® S USZ200W 333 BK

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

PA6 Super impact modified at sub-ambient temperatures, heat stabilized, injection moulding grade, Black 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	• Black		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA6-T HI		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.06	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	254000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	5800	psi	ISO 527-2/1A/50
Flexural Modulus ³	239000	psi	ISO 178
Flexural Stress ³	8700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.7	ft·lb/in ²	
73°F	33	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	6.2	ft·lb/in ²	
73°F	33	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
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

- 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

