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		
Additive	• Heat Stabilizer	• Impact Modifier
Features	• Heat Stabilized • Impact Modified	• Low Temperature Impact Resistance • Medium Stiffness
Uses	• Automotive Applications	
Agency Ratings	• EU 2011/65/EC	
RoHS Compliance	• RoHS Compliant	
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/cm³	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			ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.0	%	
Viscosity Index - Sulfuric Acid	3880	in³/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/in²	
73°F	33	ft·lb/in²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	6.2	ft·lb/in²	
73°F	33	ft·lb/in²	

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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	
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