

Radilon® S RV200K 3796 BK

 Radici Group High Performance Polymers - *Polyamide 6*

General Information

Product Description

PA6 20% glass fiber reinforced injection moulding grade. Heat stabilized and colour matched DX9 Black

Suitable for parts requiring medium stiffness and good mechanical resistance and excellent heat ageing properties retention.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 20% Filler by Weight
Additive	• Heat Stabilizer
Features	• Heat Aging Resistant • Heat Stabilized • Medium Stiffness
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• STELLANTIS MS-DB-41 CPN3547 • STELLANTIS MS-DB-41 CPN4384
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF20

 Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.27	--	g/cm ³	ISO 1183
Molding Shrinkage ²				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.40	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	7.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	2.2	--	%	ISO 62
Viscosity Index - Sulfuric Acid	3880	--	in ³ /lb	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.04E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	16200	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	--	%	ISO 527-2/1A/5
Flexural Modulus ³	914000	--	psi	ISO 178
Flexural Stress ³	27600	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.9	--	ft·lb/in ²	
73°F	4.3	--	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	18	--	ft·lb/in ²	
73°F	19	--	ft·lb/in ²	
Notched Izod Impact Strength (73°F)	1.9	--	ft·lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	13	--	ft·lb/in ²	ISO 180/1U
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	401	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	379	--	°F	ISO 75-2/Af



Vicat Softening Temperature	410	--	°F	ISO 306/B50
Melting Temperature ⁴	428	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	7.4E-6	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	1.4E-4	--	in/in/°F	ISO 11359-2

Processing Information

Injection	Dry 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	464 to 536 °F			
Mold Temperature	176 to 194 °F			
Injection Rate	Moderate-Fast			

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 280°C Melt Temperature/ 90°C Mold Temperature/ 60 MPa Cavity Pressure
- ³ 0.079 in/min
- ⁴ 10°C/min

