Radilon® S CV300 333 BK

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 30% glass beads filled injection moulding grade. Black colour.

Suitable for parts requiring good dimensional stability, reduced shrinkage and low warpage. It provides a good surface finish to moulded parts.

General	
Filler / Reinforcement	• Glass Bead, 30% Filler by Weight
Features	• Good Dimensional Stability • Low Shrinkage • Good Surface Finish • Low Warpage
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6 GB30

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.34	--	g/cm³	ISO 1183
Molding Shrinkage [2]				ISO 294-4
Across Flow	1.1	--	%	
Flow	1.1	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	8.0	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.2	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	595000	363000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	9430	5080	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	3.0	10	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	10	40	%	ISO 527-2/1A/50
Flexural Modulus [3]	580000	--	psi	ISO 178
Flexural Stress [3]	17400	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	0.95	--	ft·lb/in²	
73°F	1.7	2.1	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	12	--	ft·lb/in²	
73°F	14	19	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	338	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	158	--	°F	
Vicat Softening Temperature	392	--	°F	ISO 306/B50
Melting Temperature [4]	428	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity [5]	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity [5]	1.0E+15	1.0E+13	ohms·cm	IEC 62631-3-1
Comparative Tracking Index				IEC 60112
Solution A	400	--	V	
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.031 in)	HB	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
0.08 in	1290	--	°F	
Flammability (0.12 in)	0	--	in/min	FMVSS 302

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	0.15	%
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/ 80°C Mold Temperature/ 60 MPa Cavity Pressure

[3] 0.079 in/min

[4] 10°C/min

[5] 500V