Radilon® A RCW4015W 3733 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 40% glass fibre and mineral reinforced injection moulding grade, heat stabilized. Black colour.

Suitable for parts requiring high stiffness, good mechanical resistance and excellent heat ageing properties retention, good dimensional stability.

General		
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight	
Additive	• Heat Stabilizer	
Features	• Good Dimensional Stability • Good Stiffness	• Heat Aging Resistant • Heat Stabilized
Uses	• Automotive Applications	
Agency Ratings	• EU 2011/65/EC	
RoHS Compliance	• RoHS Compliant	
Appearance	• Black	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA66-(GF+MD)40	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.49	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (275°C/0.325 kg)	40	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	0.50	%	
Flow	0.20	%	
Viscosity Index - Sulfuric Acid	3880	in³/lb	ISO 307
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.33E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	19300	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.5	%	ISO 527-2/1A/5
Flexural Modulus [2]	1.23E+6	psi	ISO 178
Flexural Stress [2]	29000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.1	ft·lb/in²	
73°F	2.4	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	19	ft·lb/in²	
73°F	20	ft·lb/in²	
Notched Izod Impact Strength			ISO 180/1A
-22°F	2.1	ft·lb/in²	
73°F	2.2	ft·lb/in²	

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	489	°F	ISO 75-2/Bf
Deflection Temperature Under Load			ISO 75-2/Af
264 psi, Unannealed	437	°F	
Melting Temperature [3]	500	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.7E-5	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	5.1E-5	in/in/°F	ISO 11359-2

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	ohms·m	IEC 62631-3-1

Flammability	Nominal Value	Unit	Test Method
Burning Rate (0.118 in)	0.0	in/min	ISO 3795
Flame Rating (0.031 in)	HB		UL 94

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	527 to 572	°F
Mold Temperature	176 to 212	°F
Injection Rate	Moderate-Fast	

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.079 in/min

[3] 10°C/min