

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

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight
Additive	• Heat Stabilizer
Features	• Good Dimensional Stability • Heat Aging Resistant • Good Stiffness • Heat Stabilized
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GMW8751P-PA66-M25GF15 • STELLANTIS MS-DB-41 CPN2554
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/cm ³	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	in ³ /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/in ²	
73°F	2.4	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	19	ft·lb/in ²	
73°F	20	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180/1A
-22°F	2.1	ft·lb/in ²	
73°F	2.2	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	489	°F	ISO 75-2/Bf



Deflection Temperature Under Load (264 psi, Unannealed)	437 °F	ISO 75-2/Af
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

