

Radilon® AGV HW 30 Black E

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 30% glass fibre reinforced, high heat stabilized

The material is suitable for technical parts requiring high stiffness and dimensional stability, eg. oil pan, housing, gear boxes, mechanical parts for oil circuit

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Heat Stabilizer
Features	• Good Dimensional Stability • Heat Stabilized • High Stiffness
Uses	• Automotive Applications • Housings • Gears • Oil/Gas Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF30

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.7	--	%	
Viscosity Index - Sulfuric Acid	4040	--	in ³ /lb	ISO 307
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.45E+6	943000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	26100	18100	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.0	5.0	%	ISO 527-2/1A/5
Flexural Modulus ²	1.23E+6	870000	psi	ISO 178
Flexural Stress ²	39900	30500	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	4.3	6.2	ft-lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	29	--	ft-lb/in ²	
73°F	36	43	ft-lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/B
66 psi, Unannealed	482	--	°F	
Deflection Temperature Under Load				ISO 75-2/A
264 psi, Unannealed	482	--	°F	
Melting Temperature ³	500	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity ⁴	--	0.30	ohms	IEC 62631-3-2

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Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	1.1	--	in/min	ISO 3795
Flame Rating (0.06 in)	HB	--		UL 94

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	527 to 581	°F
Mold Temperature	140 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

⁴ 500V