

# Radilon® A LHSX100W 338 BK

## Radici Group High Performance Polymers - Polyamide 66

### General Information

#### Product Description

PA66 injection moulding grade. Toughened, good flowability. Black colour.

Suitable for parts requiring high productivity, along with improved impact resistance.

#### General

Additive	• Impact Modifier
Features	• Good Flow • Good Impact Resistance • Good Toughness • Impact Modified
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-I

### Properties<sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.12	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.4	--	%	
Flow	1.5	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	7.6	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	2.0	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	450000	247000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	11200	7980	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	4.5	20	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	7.0	> 50	%	ISO 527-2/1A/50
Flexural Modulus <sup>2</sup>	421000	145000	psi	ISO 178
Flexural Stress <sup>2</sup>	16000	7980	psi	ISO 178
Poisson's Ratio	0.40	--		
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	3.6	6.7	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	392	--	°F	
Deflection Temperature Under Load				ISO 75-2/ Af
264 psi, Unannealed	149	--	°F	
Vicat Softening Temperature	464	--	°F	ISO 306/B50

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Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature <sup>3</sup>	500	--	°F	ISO 11357-3
CLTE - Flow (73 to 131°F)	4.7E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	4.7E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	< 1.2	--	in/min	ISO 3795
Flame Rating (0.031 in)	HB	--		UL 94
Glow Wire Flammability Index 0.08 in	1200	--	°F	IEC 60695-2-12

### 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	518 to 554 °F
Mold Temperature	158 to 194 °F
Injection Rate	Moderate

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

<sup>3</sup> 10°C/min