

# Heramid® A NER MP/1 K

## Radici Group High Performance Polymers - Polyamide 66

### General Information

#### Product Description

PA66 injection moulding grade. Toughened, heat stabilized. Black colour.

Post-industrial grade produced with selected polymers coming from polymerization, fibres and compounding plants.

#### General

Additive	• Impact Modifier
Recycled Content	• Post-Industrial (PIR)/Pre-Consumer
Features	• Good Toughness • 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-IT

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

Physical	Dry	Conditioned	Unit	Test Method
Density	1.12	--	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) 275°C/1.0 kg	8.0	--	g/10 min	ISO 1133
Molding Shrinkage <sup>2</sup> Across Flow	1.5	--	%	ISO 294-4
Flow	1.4	--	%	
Water Absorption Saturation, 73°F, 0.0787 in	7.5	--	%	ISO 62
Water Absorption Equilibrium, 73°F, 0.0787 in, 50% RH	2.5	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	348000	218000	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	8700	6530	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	6.0	--	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	33	--	%	ISO 527-2/1A/50
Flexural Modulus <sup>3</sup>	319000	--	psi	ISO 178
Flexural Stress <sup>3</sup>	13100	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength 73°F	6.2 ft·lb/in <sup>2</sup>	No Break		ISO 179/1eA
Charpy Unnotched Impact Strength 73°F	No Break	No Break		ISO 179/1eU
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	347	--	°F	ISO 75-2/Bf

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	149	--	°F	ISO 75-2/Af
Melting Temperature <sup>4</sup>	500	--	°F	ISO 11357-3
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	< 3.9	--	in/min	ISO 3795
Flame Rating (0.031 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	0.10	%
Processing (Melt) Temp	518 to 554	°F
Mold Temperature	158 to 176	°F
Injection Rate	Moderate-Fast	

### Notes

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

<sup>2</sup> 290°C Melt Temperature, 70°C Mold Temperature, 60 MPa Cavity Pressure

<sup>3</sup> 0.079 in/min

<sup>4</sup> 10°C/min