

DYNAMID DYN-RN66HI HSL BK

Polyamide 66
Dynamic Polymer Solutions

Technical Data			
Product Description			
Polyamide 66, high impact modified, heat stabilized & lubricated black Produced with recycled content			
General			
Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• North America		
Additive	• Heat Stabilizer	• Impact Modifier	• Lubricant
Recycled Content	• Yes		
Features	• Abrasion Resistant • Chemical Resistant • Good Processability	• Heat Stabilized • High Impact Resistance • Impact Modified	• Low Temperature Impact Resistance • Lubricated
Appearance	• Black		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.08	1.08 g/cm³	ASTM D792
73°F (23°C)	1.08 g/cm³	1.08 g/cm³	ISO 1183
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	293000 psi	2020 MPa	ASTM D638
--	293000 psi	2020 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	7310 psi	50.4 MPa	ASTM D638
Yield	7110 psi	49.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	60 %	60 %	ASTM D638
Break	35 %	35 %	ISO 527-2/50
Flexural Modulus ⁵			
--	267000 psi	1840 MPa	ASTM D790
--	226000 psi	1560 MPa	ISO 178
Flexural Strength ⁵			
--	10200 psi	70.6 MPa	ASTM D790
--	8560 psi	59.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	No Break	No Break	ISO 179
Notched Izod Impact			
73°F (23°C)	15 ft·lb/in	770 J/m	ASTM D256
73°F (23°C)	No Break	No Break	ISO 180

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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	262 °F	128 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	264 °F	129 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	153 °F	67.0 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	144 °F	62.0 °C	ISO 75-2/A
Peak Melting Temperature	500 °F	260 °C	ASTM D3418 ISO 3146

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	158 to 194 °F	70 to 90 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	< 0.15 %	< 0.15 %
Processing (Melt) Temp	509 to 554 °F	265 to 290 °C
Mold Temperature	113 to 149 °F	45 to 65 °C
Injection Rate	Moderate	Moderate
Back Pressure	80.0 to 120 psi	0.552 to 0.827 MPa

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² Typical properties: these are not to be construed as specifications.
- ³ 0.39 in/min (10 mm/min)
- ⁴ 2.0 in/min (50 mm/min)
- ⁵ 0.20 in/min (5.0 mm/min)

