

DYNAMID DYN-RN66G50 HSL BK

Polyamide 66

Dynamic Polymer Solutions

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Polyamide 66, 50% glass fiber reinforced, heat stabilized & lubricated black Produced with recycled content

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer	• Lubricant	
Recycled Content	• Yes		
Features	• Good Stiffness • Good Strength	• Heat Stabilized • Lubricated	
Appearance	• Black		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.56	1.56 g/cm ³	ASTM D792
73°F (23°C)	1.56 g/cm ³	1.56 g/cm ³	ISO 1183

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	2.22E+6 psi	15300 MPa	ASTM D638
--	2.22E+6 psi	15300 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	30000 psi	207 MPa	ASTM D638
Yield	29900 psi	206 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	2.5 %	2.5 %	ASTM D638
Break	2.6 %	2.6 %	ISO 527-2/50
Flexural Modulus ⁵			
--	2.00E+6 psi	13800 MPa	ASTM D790
--	1.89E+6 psi	13000 MPa	ISO 178
Flexural Strength ⁵			
--	42000 psi	290 MPa	ASTM D790
--	53400 psi	368 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	3.6 ft·lb/in ²	7.5 kJ/m ²	ISO 179
Notched Izod Impact			
73°F (23°C)	2.5 ft·lb/in	130 J/m	ASTM D256
73°F (23°C)	7.1 ft·lb/in ²	15 kJ/m ²	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	412 °F	211 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	491 °F	255 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	408 °F	209 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	482 °F	250 °C	ISO 75-2/A
Peak Melting Temperature	504 °F	262 °C	ASTM D3418 ISO 3146

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	194 to 230 °F	90 to 110 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Suggested Max Moisture	< 0.15 %	< 0.15 %
Processing (Melt) Temp	536 to 581 °F	280 to 305 °C
Mold Temperature	131 to 176 °F	55 to 80 °C
Injection Rate	Fast	Fast
Back Pressure	80.0 to 140 psi	0.552 to 0.965 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)

