

DYNAMID DYN-RN6G35 HSL BK

Polyamide 6

Dynamic Polymer Solutions

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Polyamide 6, 35% 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, 35% 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			
--	1.39	1.39 g/cm ³	ASTM D792
73°F (23°C)	1.39 g/cm ³	1.39 g/cm ³	ISO 1183

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	1.26E+6 psi	8650 MPa	ASTM D638
--	1.25E+6 psi	8650 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	24800 psi	171 MPa	ASTM D638
Yield	24700 psi	170 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	3.0 %	3.0 %	ASTM D638
Break	3.0 %	3.0 %	ISO 527-2/50
Flexural Modulus ⁵			
--	1.24E+6 psi	8580 MPa	ASTM D790
--	1.26E+6 psi	8670 MPa	ISO 178
Flexural Strength ⁵			
--	34200 psi	236 MPa	ASTM D790
--	37700 psi	260 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	3.3 ft·lb/in ²	7.0 kJ/m ²	ISO 179
Notched Izod Impact			
73°F (23°C)	2.1 ft·lb/in	110 J/m	ASTM D256
73°F (23°C)	5.9 ft·lb/in ²	12 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	408 °F	209 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	423 °F	217 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	388 °F	198 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	414 °F	212 °C	ISO 75-2/A
Peak Melting Temperature	430 °F	221 °C	ASTM D3418 ISO 3146

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	140 to 185 °F	60 to 85 °C
Drying Time	3.0 to 5.0 hr	3.0 to 5.0 hr
Suggested Max Moisture	< 0.15 %	< 0.15 %
Processing (Melt) Temp	482 to 536 °F	250 to 280 °C
Mold Temperature	131 to 176 °F	55 to 80 °C
Injection Rate	Fast	Fast
Back Pressure	80.0 to 130 psi	0.552 to 0.896 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)

