

DYNAMID DYN-N6GM40L NC

Polyamide 6
Dynamic Polymer Solutions

Technical Data			
Product Description			
Polyamide 6, 40% glass fiber/mineral reinforced & lubricated natural			
General			
Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber\Mineral, 40% Filler by Weight		
Additive	• Lubricant		
Features	• Lubricated		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.46	1.46 g/cm³	ASTM D792
73°F (23°C)	1.46 g/cm³	1.46 g/cm³	ISO 1183
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	1.01E+6 psi	6980 MPa	ASTM D638
--	1.01E+6 psi	6980 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	19000 psi	131 MPa	ASTM D638
Yield	18900 psi	130 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	10 %	10 %	ASTM D638
Break	7.0 %	7.0 %	ISO 527-2/50
Flexural Modulus ⁵			
--	1.00E+6 psi	6890 MPa	ASTM D790
--	1.09E+6 psi	7500 MPa	ISO 178
Flexural Strength ⁵			
--	26000 psi	179 MPa	ASTM D790
--	25800 psi	178 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	1.2 ft·lb/in²	2.6 kJ/m²	ISO 179
Notched Izod Impact			
73°F (23°C)	1.2 ft·lb/in	64 J/m	ASTM D256
73°F (23°C)	3.4 ft·lb/in²	7.2 kJ/m²	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	441 °F	227 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	410 °F	210 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	399 °F	204 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	374 °F	190 °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	158 to 203 °F	70 to 95 °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	500 to 554 °F	260 to 290 °C
Mold Temperature	140 to 194 °F	60 to 90 °C
Injection Rate	Moderate	Moderate
Back Pressure	90.0 to 130 psi	0.621 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)

