

DYNAMID DYN-N6G35IML NC

Polyamide 6

Dynamic Polymer Solutions

PROSPECTOR®

www.ulprospector.com

Technical Data

Product Description

Polyamide 6, 35% glass fiber reinforced, impact modified & lubricated natural

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• North America		
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Impact Modifier	• Lubricant	
Features	• Abrasion Resistant • Chemical Resistant • Good Processability	• Good Stiffness • Good Strength • High Impact Resistance	• Impact Modified • Low Temperature Impact Resistance • Lubricated
Appearance	• Natural Color		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity			
--	1.35	1.35 g/cm ³	ASTM D792
73°F (23°C)	1.35 g/cm ³	1.35 g/cm ³	ISO 1183
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	1.20E+6 psi	8270 MPa	ASTM D638
--	1.20E+6 psi	8270 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	20800 psi	143 MPa	ASTM D638
Yield	20600 psi	142 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	8.0 %	8.0 %	ASTM D638
Break	6.5 %	6.5 %	ISO 527-2/50
Flexural Modulus ⁵			
--	1.18E+6 psi	8140 MPa	ASTM D790
--	1.35E+6 psi	9300 MPa	ISO 178
Flexural Strength ⁵			
--	31300 psi	216 MPa	ASTM D790
--	38400 psi	265 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	4.8 ft·lb/in ²	10 kJ/m ²	ISO 179
Notched Izod Impact			
73°F (23°C)	3.3 ft·lb/in	180 J/m	ASTM D256
73°F (23°C)	9.4 ft·lb/in ²	20 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	419 °F	215 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	426 °F	219 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	401 °F	205 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	403 °F	206 °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	3.0 to 5.0 hr	3.0 to 5.0 hr
Suggested Max Moisture	< 0.15 %	< 0.15 %
Processing (Melt) Temp	500 to 554 °F	260 to 290 °C
Mold Temperature	140 to 185 °F	60 to 85 °C
Injection Rate	Fast	Fast
Back Pressure	100 to 150 psi	0.689 to 1.03 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)

