

DYNAMID DYN-N6MIL NC

Polyamide 6
Dynamic Polymer Solutions

Technical Data			
Product Description			
Polyamide 6, medium impact modified & lubricated natural			
General			
Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Availability	• North America		
Additive	• Impact Modifier	• Lubricant	
Features	• Abrasion Resistant • Chemical Resistant • Good Processability	• 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			
--	1.10	1.10 g/cm³	ASTM D792
73°F (23°C)	1.10 g/cm³	1.10 g/cm³	ISO 1183
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus			
-- ³	255000 psi	1760 MPa	ASTM D638
--	255000 psi	1760 MPa	ISO 527-1/10
Tensile Strength			
Yield ⁴	8010 psi	55.2 MPa	ASTM D638
Yield	7830 psi	54.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ⁴	60 %	60 %	ASTM D638
Break	40 %	40 %	ISO 527-2/50
Flexural Modulus ⁵			
--	250000 psi	1720 MPa	ASTM D790
--	355000 psi	2450 MPa	ISO 178
Flexural Strength ⁵			
--	11000 psi	75.8 MPa	ASTM D790
--	13100 psi	90.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	4.2 ft·lb/in²	8.8 kJ/m²	ISO 179
Notched Izod Impact			
73°F (23°C)	3.5 ft·lb/in	190 J/m	ASTM D256
73°F (23°C)	9.5 ft·lb/in²	20 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	351 °F	177 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	320 °F	160 °C	ISO 75-2/B
264 psi (1.8 MPa), Unannealed	140 °F	60.0 °C	ASTM D648
264 psi (1.8 MPa), Unannealed	131 °F	55.0 °C	ISO 75-2/A
Peak Melting Temperature	428 °F	220 °C	ASTM D3418 ISO 3146

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	140 to 185 °F	60 to 85 °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	473 to 527 °F	245 to 275 °C
Mold Temperature	122 to 167 °F	50 to 75 °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)

