NYCOA Polyamide ASN 27 440 KNF

Polyamide 6

Nycoa (Nylon Corporation of America)

Message:

NYCOA ASN 27/440 KNF is a 44% glass fiber reinforced, heat stabilized Nylon 6 resin used for injection molding. This resin was engineered for applications requiring high stiffness, and toughness.

NYCOA ASN 27/440 KNF is available in UV stable, custom colors, and impact modified grades. It also has excellent chemical resistance to greases, oils, and other hydrocarbons.

Typical applications include automotive pedals, weed trimmer heads, and speaker brackets.

General Information					
Filler / Reinforcement	Glass fiber reinforced material, 44% filler by weight				
Additive	heat stabilizer				
Features	Rigidity, high				
	Good chemical resistance				
	Hydrocarbon resistance				
	Oil resistance				
	Grease resistance				
	Thermal Stability				
	Good toughness				
Uses	Lawn and Garden Equipment				
	Application in Automobile Field				
Appearance	Available colors				
Forms	Particle				
Processing Method	Injection molding				
Physical	Nominal Value	Unit	Test Method		
Specific Gravity	1.50	g/cm³	ASTM D792		
Molding Shrinkage			ASTM D955		
Flow	0.10	%	ASTM D955		
Transverse flow	0.20	%	ASTM D955		
Water Absorption (24 hr)	0.80	%	ASTM D570		
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness (R-Scale)	121		ASTM D785		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus ¹	11900	MPa	ASTM D638		
Tensile Strength ²	240	MPa	ASTM D638		
Tensile Elongation ³ (Break)	2.0	%	ASTM D638		
Flexural Modulus ⁴	13100	MPa	ASTM D790		
Flexural Strength ⁵	280	MPa	ASTM D790		

ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load220°CASTM D6480.45 MPa, not annealed210°CASTM D6481.8 MPa, not annealed210°CDSCMelting Temperature221°CDSCAdditional Information°CDSCThe value listed as Melting Point DSC, was test-test in accordance with ASTM D789.UnitDrying Temperature71.1 - 82.2°CDrying Temperature232 - 271°CDrying Time4.0 - 6.0hrRear Temperature232 - 271°CMiddle Temperature232 - 271°CNoral Value°CSCMiddle Temperature254 - 291°CNozel Temperature254 - 291°CNozel Sign (Melt) Temp254 - 291°CNozel Sign (Melt) Temp1.59 - 6.35mmMold Temperature0.138 - 0.517MPaCushion1.59 - 6.35mmScrew Cumpresion Ratio3.0.10Screw Cumpresion RatioNote1.0Screw Cumpresion Ratio51 mm/min2.51 mm/minScrew Cumpresion Ratio51 mm/min3.51 mm/minScrew Cumpresion Ratio51 mm/min4.51 mm/minScrew Cumpresion Ratio51 mm/min	Impact	Nominal Value	Unit	Test Method
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