

NYCOA 471

Medium Viscosity, High Strength, Nylon 6 Resin.

NYCOA 471 is a medium viscosity Nylon 6 resin particularly suitable for extrusion processing. It possesses an excellent combination of strength, and toughness; as well as excellent heat, chemical, and abrasion resistance inherent to Nylon 6.

Its high melt viscosity and strength provide ease of processing from either a flat or a circular die. Similarly, tubes, pipes, and tapes have been processed with excellent results.

Injection molding of high strength parts can be accomplished with molding cycles similar to those obtained with general purpose grade resins, even though higher cylinder temperatures may sometimes be required.

Property	Test Method	English		SI	
		Unit	Value	Unit	Value
Physical Properties					
Specific Gravity	D 792	-	1.13	-	1.13
Water Absorption, 24 hr	D 570	%	1.6	%	1.6
Relative Viscosity	NYCOA	SAV	3.3 – 3.5	FAV	85 – 95
Water Extractable	NYCOA	%	Max 0.8	%	Max 0.8
Melt Flow Index (235 °C; 1kg)	D 1238	-	-	gm/ 10min	2.4 – 2.8
Mechanical Properties					
Tensile Strength	D 638	psi	11,600	MPa	80
Ultimate Elongation	D 638	%	100+	%	100+
Flexural Modulus	D 790	psi	363,000	MPa	2,500
Flexural Strength	D 790	psi	14,500	MPa	100
Notched Izod Impact	D 256	ft.lbs./in.	1.0	J/m	50
Thermal Properties					
Melting Temperature	D 789	°F	428	°C	220
Heat Deflection Temp, 66 psi (0.45 MPa)	D 648	°F	350	°C	117

All test specimens tested in "dry" state – less than 0.3% moisture.

Izod Impact – ½" x ¼" bars.

All tensile properties obtained at a testing speed of 2 in./min.

The information contained herein is based upon data believed to be thoroughly reliable. However, due to the many uses to which this material is put, and the different equipment and techniques used, we cannot guarantee results in specific instances. Nor should any statement herein be construed as a recommendation to use our products in the infringement of a patent.