

NYCOA 2176

Plasticized, Extrusion Grade, Nylon Alloy.

NYCOA 2176 is a high viscosity resin particularly suitable for extrusion processing. Its high melt viscosity and extremely good melt strength provides ease of processing for tubing, complex profile, and mandrel extrusion.

NYCOA 2176 was specifically formulated to offer high flexibility and strength, superior toughness and high impact resistance, even at low temperatures. The alloy offers improved recyclability with minimum loss in physical properties after repeated extrusions.

This material performs well in applications where softness, ductility and exceptional impact resistance are required.

NYCOA 2176 is available with custom additive packages: heat stabilizer, UV stabilizer and/or flame retardant.

Typical extrusion applications include hose mandrels for rubber vulcanization, high-pressure & hydraulic hoses, and flexible & vacuum tubing.

Property	Method	English		SI	
		Unit	Value	Unit	Value
Physical Properties					
Specific Gravity	D 792	-	1.07	-	1.07
Water Absorption, 24 hr	D 570	%	1.0	%	1.0
Linear Mold Shrinkage (Parallel)	D 955	%	0.8	%	0.8
Linear Mold Shrinkage (Normal)	D 955	%	1.0	%	1.0
Mechanical Properties					
Shore Durometer	D 2240	D	64	D	64
Tensile Strength	D 638	psi	6,400	MPa	44
Ultimate Elongation	D 638	%	300+	%	300+
Flexural Modulus	D 790	psi	92,000	MPa	635
Flexural Strength	D 790	psi	4,000	MPa	28
Notched Izod Impact	D 256	ft.lbs./in	16 (NB)	J/m	800 (NB)
Thermal Properties					
Melting Temperature	D 789	° F	423	° C	217
<small>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.</small>					
<small>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.</small>					