

NYCOA 446

High Viscosity, FDA Compliant, Nucleated Nylon 6 Resin.

NYCOA 446 is a high viscosity, nucleated Nylon 6 resin for extrusion processing. Its high viscosity and fast set-up time make NYCOA 446 an excellent material for extrusion of tubing, rods, sheet and film.

NYCOA 446 has been approved by Underwriters' Laboratories in thicknesses of 3mm or greater in accordance with specification UL-94 V-2.

NYCOA 446 complies with all the requirements of the FDA regulations 21 CFR 177.1500.

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	%	1.7	%	1.7
Relative Viscosity	NYCOA	SAV	4.0 – 4.4	FAV	145 - 200
Water Extractable	NYCOA	%	0.8	%	0.8
Mechanical Properties					
Hardness, Rockwell (R Scale)	D 785	-	120	-	120
Tensile Strength	D 638	psi	11,600	MPa	80
Ultimate Elongation	D 638	%	40	%	40
Flexural Modulus	D 790	psi	385,000	MPa	2,655
Flexural Strength	D 790	psi	16,675	MPa	115
Notched Izod Impact	D 256	ft.lbs./in	0.80	J/m	40
Thermal Properties					
Melting Temperature	D 789	°F	430	°C	221
Heat Deflection Temp, 66 psi (0.45 Mpa)	D 648	°F	375	°C	191
Heat Deflection Temp, 264 psi (1.82 Mpa)	D 648	°F	155	°C	68
<small>All test specimens tested in "dry" state – less than 0.3% moisture. Izod Impact – 1/2" x 1/4" 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>					