

NYCOA 5100 HS

Heat Stabilized, Impact Modified Nylon 66 Resin.

NYCOA 5100 HS is an impact modified, heat stabilized Nylon 66 resin used for injection molding. This material is specially formulated to provide improved flexibility and ductility vs. standard Nylon 66.

NYCOA 5100 HS offers outstanding toughness, exceptional processability, and a greater service life at elevated temperatures than standard grades of Nylon 66. It is available in UV stable, and custom colors grades. It also has excellent chemical resistance to greases, oils, and other hydrocarbons.

Typical applications include automotive wiring harnesses, motor component housings, gears, and electrical connectors.

Property	Method	English		SI	
		Unit	Value	Unit	Value
Physical Properties					
Specific Gravity	D 792	-	1.12	-	1.12
Water Absorption, 24 hr	D 570	%	1.2	%	1.2
Linear Mold Shrinkage (Parallel)	D 955	%	1.5	%	1.5
Linear Mold Shrinkage (Normal)	D 955	%	1.6	%	1.6
Mechanical Properties					
Hardness, Rockwell (R Scale)	D 785	-	118	-	118
Tensile Strength	D 638	psi	9,425	MPa	65
Ultimate Elongation	D 638	%	50	%	50
Flexural Modulus	D 790	psi	322,000	MPa	2,220
Flexural Strength	D 790	psi	12,330	MPa	85
Notched Izod Impact	D 256	ft.lbs./in.	2.7	J/m	135
Thermal Properties					
Melting Temperature	D 789	°F	496	°C	258
Heat Deflection Temp, 66 psi (0.45 MPa)	D 648	°F	372	°C	189
Heat Deflection Temp, 264 psi (1.82 MPa)	D 648	°F	149	°C	70
<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>					