Product Data Sheet

NYCOA 5033 HS

33% Glass-Fiber Reinforced, Heat Stabilized, Nylon 66 Resin.

NYCOA 5033 HS is a 33% glass fiber reinforced, heat stabilized Nylon 66 resin used for injection molding. It offers an outstanding balance of mechanical properties over standard grades of conventional Nylon 66.

NYCOA 5033 HS has been specifically formulated for optimum thermal stability and chemical resistance. This grade is available in UV stable, custom colors, and impact modified grades.

Typical applications include pedal brackets and supports, air intake manifolds, radiator end tanks, valve covers, and power tool housings.

Property	Method	English		SI	
	ASTM	Unit	Value	Unit	Value
Physical Properties					
Specific Gravity	D 792	-	1.38	-	1.38
Water Absorption, 24 hr	D 570	%	0.7	%	0.7
Linear Mold Shrinkage (Parallel)	D 955	%	0.5	%	0.5
Linear Mold Shrinkage (Normal)	D 955	%	0.8	%	0.8
Mechanical Properties					
Hardness, Rockwell (R Scale)	D 785	-	122	-	122
Tensile Strength	D 638	psi	29,008	MPa	200
Ultimate Elongation	D 638	%	4	%	4
Flexural Modulus	D 790	psi	1,290,838	MPa	8,900
Flexural Strength	D 790	psi	37,710	MPa	260
Notched Izod Impact	D 256	ft.lbs./in.	2.6	J/m	130
Thermal Properties					
Melting Temperature	D 789	° F	505	° C	263
Heat Deflection Temp, 66 psi (0.45 MPa)	D 648	° F	500	° C	260
Heat Deflection Temp, 264 psi (1.82 MPa)	D 648	° F	464	° C	240

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.