

## NYLON 6/6 MOLDING COMPOUNDS TYPICAL PROPERTIES (1)

Properties	Test Method	Units	Nylon 6/6 Neat Resin 10-1000	Nylon 6/6 13% Glass Reinforced 10-1002	Nylon 6/6 20% Glass Reinforced 10-1004	Nylon 6/6 30% Glass Reinforced 15% PTFE	Nylon 6/6 33% Glass HS HR BK Reinforced 10-1007
<b>Physical</b>							
Specific Gravity	ASTM-D792	----	1.14	1.21	1.29	1.49	1.37
Water Absorption (24 hr)	ASTM-D570	%	1.25	0.65	0.6	0.50	0.55
<b>Mechanical</b>							
Tensile Strength	ASTM-D638	psi	12,000	15,000	20,000	23,000	27,000
Tensile Elongation	ASTM-D638	%	60	6	5	4	4
Flexural Strength	ASTM-D790	psi	20,000	24,000	30,000	37,000	38,000
Flexural Modulus	ASTM-D790	psi	410,000	700,000	840,000	1,250,000	1,290,000
Izod Impact Strength		ft. lb./in.					
Notched (1/8")			1.0	0.9	1.2	1.8	2.0
Unnotched (1/8")				6.0	8	15	18.0
Rockwell Hardness	ASTM-D785	R Scale	119	120	121	118	121



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**NYLON 6/6 MOLDING COMPOUNDS TYPICAL PROPERTIES (1 CONT'D.)**

Properties	Test Method	Units	Nylon 6/6 Neat Resin 10-1000	Nylon 6/6 13% Glass Reinforced 10-1002	Nylon 6/6 20% Glass Reinforced 10-1004	Nylon 6/6 30% Glass Reinforced 15% PTFE	Nylon 6/6 33% Glass HS HR BK Reinforced 10-1007
<b>Thermal</b>							
Melting Point	ASTM-D789	°F	491	491	491	490	491
Heat Deflection Temp.	ASTM-D648	°F					
66 psi			455	495	500	500	500
264 psi			195	480	485	480	490
Coefficient of Linear Thermal Expansion	ASTM-D696	in./in./ °F X 10 <sup>-5</sup>	4.3	1.3	2.3	2.5	1.8
<b>Miscellaneous</b>							
Flammability	UL SUBJ. 94	----	V-2	94HB	94HB	94HB	94HB
Mold Shrinkage (1/8")	ASTM-D955	in./in.	0.018	0.006	0.005	0.004	0.004

Suggested processing parameters are available upon request. Seller is not responsible or liable for any loss or damage resulting from product use, and no warranty is stated or implied.



## NYLON 6/6 MOLDING COMPOUNDS TYPICAL PROPERTIES (2)

Properties	Test Method	Units	Nylon 6/6 40% Glass Reinforced	Nylon 6/6 50% Glass Reinforced	Nylon 6/6 60% Glass Reinforced	Nylon 6/6 MI Medium Impact	Nylon 6/6 HI High Impact
<b>Physical</b>							
Specific Gravity	ASTM-D792	----	1.46	1.57	1.70	1.09	1.08
Water Absorption (24 hr)	ASTM-D570	%	0.6	0.5	0.3	1.2	1.1
<b>Mechanical</b>							
Tensile Strength	ASTM-D638	psi	30,000	33,000	35,000	8,800	7,500
Tensile Elongation	ASTM-D638	%	2.0	2.5	1.5		
Flexural Strength	ASTM-D790	psi	49,000	46,000	48,500		120,000
Flexural Modulus	ASTM-D790	psi	1,600,000	2,200,000	2,800,000	310,000	290,000
Izod Impact Strength		ft. lb./in.					
Notched (1/8")			2.9	2.8	3.9	4.5	16
Unnotched (1/8")			29	20	NB		NB
Rockwell Hardness	ASTM-D785	R Scale	122	121	121	115	110



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## NYLON 6/6 MOLDING COMPOUNDS TYPICAL PROPERTIES (2 CONT'D.)

Properties	Test Method	Units	Nylon 6/6 40% Glass Reinforced	Nylon 6/6 50% Glass Reinforced	Nylon 6/6 60% Glass Reinforced	Nylon 6/6 MI Medium Impact	Nylon 6/6 HI High Impact
<b>Thermal</b>							
Melting Point	ASTM-D789	°F				518	489
Heat Deflection Temp.	ASTM-D648	°F					
66 psi			499	500		311	425
264 psi			491	500	495	151	160
Coefficient of Linear Thermal Expansion	ASTM-D696	in./in./ °F X 10 <sup>-5</sup>	1.0	0.9	0.9		4.4
<b>Miscellaneous</b>							
Flammability	UL SUBJ. 94	----	94HB	94HB	94HB	94HB	94HB
Mold Shrinkage (1/8")	ASTM-D955	in./in.	0.006	0.003	0.002	0.015	0.016

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