

# Modified Plastics MN 6/6-FG 10

Modified Plastics, Inc. - Polyamide 66

## General Information

General	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Forms	• Pellets
Processing Method	• Injection Molding

## Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.22		ASTM D792
Molding Shrinkage - Flow	0.017	in/in	ASTM D955
Water Absorption (24 hr)	1.3	%	ASTM D570
Water Absorption (Saturation)	7.6	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	13000	psi	ASTM D638
Tensile Elongation (Yield)	3.5	%	ASTM D638
Flexural Modulus	660000	psi	ASTM D790
Flexural Strength (Yield)	20000	psi	ASTM D790
Compressive Strength	17000	psi	ASTM D695
Shear Strength	9000	psi	ASTM D732
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.250 in)	0.70	ft-lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.250 in)	5.0	ft-lb/in	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	120		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	495	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed	480	°F	ASTM D648
Vicat Softening Temperature	509	°F	ASTM D1525
CLTE - Flow	2.5E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+15	ohms-cm	ASTM D257
Dielectric Strength	550	V/mil	ASTM D149
Dielectric Constant			ASTM D150
100 Hz	4.10		
1 kHz	1.90		
1 MHz	3.70		
Dissipation Factor (1 kHz)	0.030		ASTM D150

## Processing Information

Injection	Nominal Value	Unit
Drying Temperature	200	°F
Processing (Melt) Temp	520 to 560	°F
Mold Temperature	200 to 220	°F