# Eastar™ MN052

#### Copolyester

#### Eastman Chemical Company

#### Message:

Eastar™ Polyester MN052 has been tested for FDA/ISO 10993 and USP Class VI Biological Evaluation testing after Gamma and EtO sterilization. Eastar™ Polyester MN052 does not contain a mold release. It has a relatively high flex modulus and yield strength. This product has high flow characteristics. This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®.

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General Information					
Features	Crystalline				
	E-beam Sterilizable				
	Good Chemical Resistance				
	Good Color Stability				
	High Flow				
	High Strength				
	Homopolymer				
	Radiation Sterilizable				
Uses	Labware				
	Medical/Healthcare Applications				
Agency Ratings	ISO 10993				
	USP Class VI				
Announce	Natural Calar				
Appearance	Natural Color				
Forms	Pellets		T 184 II I		
Physical	Nominal Value	Unit	Test Method		
Specific Gravity	1.32	g/cm³	ASTM D792		
Molding Shrinkage - Flow (3.20 mm)	0.40	%	ASTM D955		
Water Absorption (23°C, 24 hr)	0.10	%	ASTM D570		
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness (R-Scale, 23°C)	110		ASTM D785		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Strength			ASTM D638		
Yield, 23°C	57.0	МРа			
Break, 23°C	26.0	MPa			
Tensile Elongation (Yield, 23°C)	4.0	%	ASTM D638		

Flexural Modulus (23°C)	2500	МРа	ASTM D790
Flexural Strength (Yield, 23°C)	81.0	МРа	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	36	J/m	
23°C	51	J/m	
Unnotched Izod Impact			ASTM D4218
-40°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	66.0	°C	
1.8 MPa, Unannealed	62.0	°C	
Vicat Softening Temperature	79.0	°C	ASTM D1525 <sup>1</sup>
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength <sup>2</sup> (23°C)	16	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
23°C, 1 kHz	3.20		
23°C, 1 MHz	3.00		
Dissipation Factor			ASTM D150
23°C, 1 kHz	8.0E-3		
23°C, 1 MHz	0.020		
Arc Resistance	155	sec	ASTM D495
Injection	Nominal Value	Unit	
Drying Temperature	150 to 160	°C	
Drying Time	4.0 to 6.0	hr	
Processing (Melt) Temp	275 to 295	°C	
Mold Temperature	10.0 to 30.0	°C	
NOTE			
1.	Loading 1 (10 N)		
2.	Method A (Short-Time)		

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### Recommended distributors for this material

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