

Eastar™ MB002

Copolyester
Eastman Chemical Company

Message:

Eastar™ copolyester MB002 has been tested for FDA/ISO 10993 and USP Class VI Biological Evaluation testing after Gamma and EtO sterilization. It is a resin specifically developed for extrusion blow molding containers in medical applications where aesthetics such as high clarity and gloss, coupled with high toughness and chemical resistance, are desirable. Compared to many commonly used materials, Eastar™ copolyester MB002 runs on most standard processing equipment with broader processing conditions, and its toughness and melt strength enable blow molding of larger containers with greater design flexibility. This product meets the biocompatibility requirements under FDA/ISO 10993 and USP Class 6, Plastics. This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®.

The GREENGUARD INDOOR AIR QUALITY CERTIFIED® Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute (GEI). GEI is an industry-independent, non-profit organization that oversees the GREENGUARD Certification Program. The GREENGUARD Certification Program is an industry independent, third-party testing program for low-emitting products and materials for indoor environments. For more information about GEI and to obtain printable certificates for Eastman™ Copolyesters, visit www.greenguard.org. Choose Eastman Chemical Company under the Manufacturer category and click search to display a list of our products.

General Information			
Features	Autoclave Sterilizable		
	Biocompatible		
	Good Chemical Resistance		
	Good Color Stability		
	Good Melt Strength		
	High Clarity		
	High Gloss		
	Radiation Sterilizable		
	Ultra High Toughness		
Uses	Blown Containers		
	Containers		
	Labware		
	Medical/Healthcare Applications		
Agency Ratings	ISO 10993		
	USP Class VI		
Forms	Pellets		
Processing Method	Extrusion Blow Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.25	g/cm ³	ASTM D792
Molding Shrinkage - Flow	0.30	%	ASTM D955
Color			ASTM D2244
a	-0.20		
b	0.60		

L	95		
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 23°C)	105		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	1900	MPa	ASTM D638
Tensile Strength			ASTM D638
Yield, 23°C	47.0	MPa	
Break, 23°C	48.0	MPa	
Tensile Elongation			ASTM D638
Yield, 23°C	5.0	%	
Break, 23°C	300	%	
Flexural Modulus (23°C)	1900	MPa	ASTM D790
Flexural Strength (23°C)	65.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C	63	J/m	
23°C	No Break		
Unnotched Izod Impact			ASTM D4218
-40°C	No Break		
23°C	No Break		
Instrumented Dart Impact			ASTM D3763
-40°C, Energy at Peak Load	39.0	J	
0°C, Energy at Peak Load	41.0	J	
23°C, Energy at Peak Load	41.0	J	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	73.0	°C	
1.8 MPa, Unannealed	63.0	°C	
Vicat Softening Temperature	85.0	°C	ASTM D1525
Optical	Nominal Value	Unit	Test Method
Gloss (60°)	143		ASTM D2457
Transmittance			ASTM D1003
Regular	87.0	%	
Total	91.0	%	
Haze	1.3	%	ASTM D1003

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

