Product Data Sheet

Eastman Tritan™ Copolyester MP150

Application/Uses

- Extrusion coating
- Medical & Pharmaceutical packaging
- Specialty laminations & packaging

Key Attributes

- Does not contain Bisphenol-A (BPA)
- Does not contain plasticizers
- Excellent clarity
- Excellent hydrolytic stability
- Good heat resistance
- Good melt flow
- No pre-drying of film prior to thermoforming
- Outstanding chemical resistance
- Tremendous toughness
- Wide thermoforming window

Product Description

Eastman Tritan copolyester MP150 is a high flow grade of Eastman Tritan. Eastman Tritan copolyester MP150 has viscosity reductions of 40-50% relative to Eastman Tritan copolyester MP100. It is intended for use in extrusion coating processes or where high melt flow rate is desirable.

Other outstanding features include good toughness, hydrolytic stability, and heat and chemical resistance. Eastman Tritan copolyester MP150 may be used in food contact applications with restrictions and is compliant with applicable and select sections of USP 35 <661>, ISO10993, and ISO11607.

Typical Properties (Preliminary)

Property[a]	Test[b] Method	Typical Value, Units[c]
General Properties		
Specific Gravity	D 792	1.18
Mold Shrinkage	D 955	0.005-0.007 mm/mm (0.005-0.007 in./in.)
Mechanical Properties		
Tensile Stress @ Yield	D 638	43 MPa (6200 psi)
Tensile Stress @ Break	D 638	52 MPa (7500 psi)
Elongation @ Yield	D 638	7%
Elongation @ Break	D 638	210%
Tensile Modulus	D 638	1575 MPa (2.28 x 10^5 psi)

Flexural Modulus	D 790	1575 MPa (2.28 x 10^5 psi)
Flexural Yield Strength	D 790	64 MPa (9300 psi)
Rockwell Hardness, R Scale	D 785	111
Izod Impact Strength, Notched @ 23°C (73°F)	D 256	860 J/m (16.1 ft·lbf/in.)
Impact Strength, Unnotched @ 23°C (73°F)	D 4812	NB
Thermal Properties		
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	94°C (201°F)
@ 1.82 MPa (264 psi)	D 648	81°C (178°F)
Glass Transition Temperature (T_g)	DSC	110°C (229°F)
Optical Properties		
Total Transmittance	D 1003	91%
Haze	D 1003	<1%
Film Properties (Cast Film)		
Thickness of Film Tested		5 mils
Tear Strength, notched		
T.D. - Max Force	EMN	14 lbf
T.D. - Work to Fracture	EMN	0.10 J/mm^2
Gardner Impact Resistance 8-lb. Falling Weight - Mean Fracture Energy	D 5420	3.5 J
Tensile Strength @ Break	D 882	41 lbf
Tensile Stress @ Break	D 882	8200 psi
Elongation @ Break	D 882	217%
Tensile Modulus	D 882	142000 psi
Typical Processing Conditions		
Drying Temperature		88°C (190°F)
Drying Time		4-6 hrs
Processing Melt Temperature		260-282°C (500-540°F)
Mold Temperature		38-66°C (100-150°F)

[a] *Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.*

[b] *Unless noted otherwise, the test method is ASTM.*

[c] *Units are in SI or US customary units.*

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

Technical Disclaimer

Although the information and recommendations set forth herein are presented in good faith, Eastman Chemical Company makes no representations or warranties as to the completeness

or accuracy thereof. You must make your own determinations of its suitability and completeness for your own use, for the protection of the environment and for the health and safety of your employees and purchasers of your products. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment or formulation in conflict with any patent, and we make no representations or warranties, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFER AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITION OF SALE. Material Safety Data Sheets providing safety precautions that should be observed when handling and storing our products are available online or by request. You should obtain and review available material safety information before handling our products. If any materials mentioned are not our products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

Eastman Medical Disclaimer

It is the responsibility of the medical device manufacturer ("Manufacturer") to determine the suitability of all component parts and raw materials, including any Eastman product, used in its final product in order to ensure safety and compliance with requirements of the United States Food and Drug Administration (FDA) or other international regulatory agencies. Eastman products have not been designed for nor are they promoted for end uses that would be categorized by either the United States FDA or by the International Standards Organization (ISO) as implant devices. Eastman products are not intended for use in the following applications: (1) in any bodily implant applications for greater than 30 days, based on FDA-Modified ISO-10993, Part 1 "Biological Evaluation of Medical Devices" tests (including any cosmetic, reconstructive or reproductive implant applications); (2) in any cardiac prosthetic device application, regardless of the length of time involved, including, without limitation, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices, or (3) as any critical component in any medical device that supports or sustains human life. For manufacturers of medical devices, biological evaluation of medical devices is performed to determine the potential toxicity resulting from contact of the component materials of the device with the body. Tests are defined in FDA-Modified ISO-10993, Part 1 'Biological Evaluation of Medical Devices'. Limited testing information for certain Eastman products is available upon request. The Manufacturer of the medical device is responsible for the biological evaluation of the finished medical device. The suitability of an Eastman product in a given end-use environment is dependent upon various conditions including, without limitation, chemical compatibility, temperature, part design, sterilization method, residual stresses, and external loads. It is the responsibility of the Manufacturer to evaluate its final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

07-Apr-2015 6:53:19 AM