EASTMAN

Technical Data Sheet

Eastman Tritan™ Copolyester LX100

Applications

- Fragrance packaging
- Jars-skin care pkg
- Personal care & cosmetics packaging

Key Attributes

- Ease of processing
- Excellent clarity
- Fast drying times
- Good chemical resistance
- Good heat resistance
- Outstanding impact resistance
- Quick cycle times

Product Description

Eastman Tritan™ LX100 is an amorphous copolyester with excellent appearance and clarity. Its most outstanding features are excellent toughness, hydrolytic stability, and heat and chemical resistance. Eastman Tritan™ LX100 was developed for the cosmetic, fragrance, and personal care markets. Tritan™ LX100 can easily be converted into articles for application in consumer and personal care markets by injection molding, extrusion blow molding, and injection blow molding.

Typical Properties

Property[a]	Test Method[b]	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	53 MPa (7700 psi)
Elongation @ Yield	D 638	6 %
Elongation @ Break	D 638	210 %
Tensile Modulus	D 638	1550 MPa (2.25 x 10^5 psi)
Flexural Modulus	D 790	1550 MPa (2.25 x 10^5 psi)
Flexural Yield Strength	D 790	62 MPa (9000 psi)
Rockwell Hardness, R Scale	D 785	112
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	980 J/m (18.4 ft·lbf/in.)
@ -40°C (-40°F)	D 256	110 J/m (2.1 ft·lbf/in.)
Impact Strength, Unnotched		
@ 23°C (73°F)	D 4812	NB
@ -40°C (-40°F)	D 4812	NB
Impact Resistance (Puncture), Energy @ Max. Load		
@ 23°C (73°F)	D 3763	61 J (45 ft·lbf)
@ -40°C (-40°F)	D 3763	66 J (49 ft·lbf)
Optical Properties		
Total Transmittance	D 1003	90 %
Haze	D 1003	<1 %
Thermal Properties		
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	99 °C (210 °F)
@ 1.82 MPa (264 psi)	D 648	85 °C (185 °F)

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.