EASTMAN

Product Data Sheet

Eastman Tritan Copolyester EX401

Application / Uses

- Infant care

Key Attributes

- Ease of processing
- Excellent clarity
- Excellent hydrolytic stability
- Good chemical resistance
- Good heat resistance
- Outstanding impact resistance

Product Description

Eastman Tritan EX401 is an amorphous copolyester with excellent appearance and clarity. *Tritan* EX401 contains a mold release derived from vegetable based sources. Its most outstanding features are excellent toughness, hydrolytic stability, and heat and chemical resistance. *Tritan* EX401 was specifically developed for the Infant Care market using Eastman's knowledge of copolyester chemistry. *Tritan* EX401 can be converted into parts using injection molding and extrusion blow molding techniques. *Tritan* EX401 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations.

Typical Properties (Preliminary)

Specific Gravity	D 792	1.17
Mold Shrinkage	D 955	0.005-0.007 mm/mm (0.005-0.007 in./in.)
Tensile Stress @ Yield	D 638	44 MPa (6400 psi)
Tensile Stress @ Break	D 638	53 MPa (7700 psi)
Elongation @ Yield	D 638	7%
Elongation @ Break	D 638	140%
Tensile Modulus	D 638	1585 MPa (2.28)
Flexural Modulus	D 790	1585 MPa (2.28)
Flexural Yield Strength	D 790	66 MPa (9600 psi)
Rockwell Hardness, R Scale	D 785	115
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	650 J/m (12.2 ft·lbf/in.)
@ -40°C (-40°F)	D 256	126 J/m (2.4 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	59 J (43 ft·lbf)
@ -40°C (-40°F)	D 3763	63 J (46 ft·lbf)
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	109°C (228°F)
@ 1.82 MPa (264 psi)	D 648	92°C (198°F)
Total Transmittance	D 1003	92%
Haze	D 1003	<1%
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)

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.