



Product Data Sheet

Eastman Tritan Copolyester TX1001

Application/Uses

- Appliances
- Consumer and durable goods
- Housewares
- Small appliances

Key Attributes

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

Product Description

Eastman Tritan TX1001 is an amorphous copolyester with excellent appearance and clarity. *EastmanTritan* TX1001 contains a mold release derived from vegetable based sources. Its most outstanding features are excellent toughness, hydrolytic stability, and heat and chemical resistance. This new-generation copolyester can also be molded into various applications without incorporating high levels of residual stress. Combined with *Tritan* copolyester's outstanding chemical resistance and hydrolytic stability, these features give molded products enhanced durability in the dishwasher environment, which can expose products to high heat, humidity and aggressive cleaning detergents. *Tritan* TX1001 copolyester may be used in repeated use food contact articles under United States Food and Drug Administration (FDA) regulations. *Tritan* TX1001 copolyester is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

Typical Properties (Preliminary)

Specific Gravity	D 792	1.18
Mold Shrinkage	D 955	0.005-0.007 mm/mm (0.005-0.007 in./in.)
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)
Flexural Modulus	D 790	1550 MPa (2.25)
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.)
Impact Strength, Unnotched @ 23°C (73°F)	D 4812	NB

Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	99°C (210°F)
@ 1.82 MPa (264 psi)	D 648	85°C (185°F)

Total Transmittance	D 1003	90%
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.

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