

Technical Data Sheet

Eastman Tritan™ Copolyester GX100

Applications

- Automotive
- Commercial housewares
- Decorative laminates-metal
- Decorative laminates-wood
- Displays/in-store fixtures
- Equipment & machinery
- Industrial
- Lighting
- Outdoor signs
- Signs
- Visual merchandising

Key Attributes

- Does not contain Bisphenol-A (BPA)
- Does not contain plasticizers
 - Ease of fabrication
 - High impact
- Temperature resistance
- Thermoforming
 - Transparent

Product Description

Eastman Tritan™ copolyester GX100's strength, clarity and temperature resistance make it ideal for demanding applications. Extruded sheet is manufactured with Eastman's Tritan™ copolyester GX100 resin in a thickness range from 0.080" to 0.250". It is readily available in clear with colors available upon request.

This product has been *CRADLE TO CRADLE CERTIFIED*™ Bronze, with Material Health Certificate, Platinum. The *CRADLE TO CRADLE CERTIFIED* mark is a registered certification mark used under license through the Cradle to Cradle Products Innovation Institute, a nonprofit organization that administers the publicly available *Cradle to Cradle Certified*™ Product Standard which provides designers and manufacturers with criteria and requirements for continually improving product materials and manufacturing processes. The *Cradle to Cradle Certified*™ Product Standard guides designers and manufacturers through a continual improvement process that looks at a product through five quality categories—material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness. A product receives an achievement level in each category—Basic, Bronze, Silver, Gold, or Platinum—with the lowest achievement level representing the product's overall mark.

The Material Health Certificate provides manufacturers with a trusted way to communicate their efforts to identify and replace chemicals of concern in their products. For more information about Cradle to Cradle certification and to obtain printable certificates for Eastman copolyesters, visit www.cn-plas.com. Search for Eastman Chemical Company in *Cradle to Cradle Certified* Products Registry.

Typical Properties

Property ^a	Test Method ^b	Typical Value, Units ^c
General Properties		
Thickness of Film Tested	D 374	2.97 mm (0.117 in.)
Specific Gravity	D 792	1.18-118
Water Absorption, 24 h immersion	D 570	0.18 % (0.18)
Mechanical Properties		
Tensile Stress @ Yield	D 638	45 MPa (6527 psi)
Tensile Stress @ Break	D 638	46 MPa (6672 psi)
Elongation @ Yield	D 638	7 % (7)
Elongation @ Break	D 638	133 % (133)
Flexural Modulus	D 790	1483 MPa (2.18 x 10 ⁵ psi)
Rockwell Hardness, R Scale	D 785	114-114
Izod Impact Strength, Notched		

@ 0°C (32°F)	D 256	1006 J/m (18.8 ft·lbf/in.)
@ 23°C (73°F)	D 256	1011 J/m (18.9 ft·lbf/in.)
@ -30°C (-22°F)	D 256	133 J/m (2.5 ft·lbf/in.)
Impact Strength, Unnotched		
@ 0°C (32°F)	D 4812	No Break J/m (No Break ft·lbf/in.)
@ 23°C (73°F)	D 4812	No Break J/m (No Break ft·lbf/in.)
@ -30°C (-22°F)	D 4812	1214 J/m (22.8 ft·lbf/in.)
Thermal Properties		
Vicat Softening Temperature	D 1525	110 °C (230 °F)
Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	99.2 °C (210.56 °F)
@ 1.82 MPa (264 psi)	D 648	90.9 °C (195.62 °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.

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