Eastman Tritan™ copolyester—
a new option for clear electronic device applications

Eastman Tritan™ copolyester

- Tritan is an innovative, new-generation copolyester that retains the versatility of traditional copolyesters while offering higher temperature performance and impact resistance. The unique properties of Tritan deliver advantages over other clear thermoplastics.
- Functional attributes of Eastman Tritan™ copolyester:
  - Toughness
  - Clarity
  - Excellent chemical resistance
  - Higher temperature performance compared to traditional copolyester
  - Lower melt processing temperature compared to standard polycarbonate
  - Good adhesion to ink/films
  - Low levels of residual stress

Striking a balance

- Tritan offers good clarity, toughness, chemical resistance, and flow but with melt temperature sufficiently cool enough to avoid ink washout. Tritan offers this at a cost generally lower than some blended material options.
- Tritan boasts inherently low levels of residual stress which suggests it's well-suited for complex designs and shapes.
- Tritan is suitable for IMD and may be an attractive option for thin-wall lenses in mobile phones, appliances, and medical devices.

Material	Impact resistance, notched Izod (J/m)[a]	Light transmission (%)[b]	Haze[b]	Melt processing temperature (°C)
Tritan copolyester VX351HF	980	91	<1%	260–280

[a] *ASTM D256 @ 23°C*
[b] *ASTM D1003*

EASTMAN

The results of **insight**™

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Safety Data Sheets providing safety precautions that should be observed when handling and storing Eastman products are available online or by request. You should obtain and review the available material safety information before handling any of these products. If any materials mentioned are not Eastman products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

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 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 either by 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. The ranges of tests under FDA-Modified ISO-10993, Part 1, "Biological Evaluation of Medical Devices" include cytotoxicity, sensitization, irritation or intracutaneous reactivity, systemic toxicity (acute), subchronic toxicity (subacute), implantation, and hemocompatibility. For Eastman products offered for the medical market, limited testing information is available on 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 on 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.

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