

Eastman TRITAN™ HM

glass fiber reinforced copolyester

Hey polycarbonate, your competition just got a lot stiffer.

A new model for modulus

Designers, molders, and brands looking for greater functionality in their products have a new alternative to glass, metal, polycarbonate, and other plastics. Eastman Tritan™ HM glass fiber reinforced (GFR) copolyester is a high-modulus material that offers greater stiffness, excellent chemical resistance, BPA-free manufacture, and sound-damping qualities.

A strong choice. A sound choice.

It is perhaps ironic that a stiffer material gives designers greater flexibility. With the addition of glass fibers, Tritan HM is an engineered polymer that enables designers to create durable products with thinner, lighter parts—or to easily mold plastic parts that require stiffness and strength superior to unfilled polymers.

Property	Tritan HM 1020 (10% GFR)	Tritan HM 1040 (20% GFR)	Tritan HM 1060 (30% GFR)	Polycarbonate (10% GFR)	Polycarbonate (20% GFR)	Polyamide 6 ^a (10% GFR)	Polyamide 6 ^a (20% GFR)
Tensile strength (MPa)	59	92	114	60	100	60	85
Tensile modulus (MPa)	2900	5080	7660	3790	5860	2600	4500
Flexural modulus (MPa)	3020	5000	7290	3490	5520	—	—

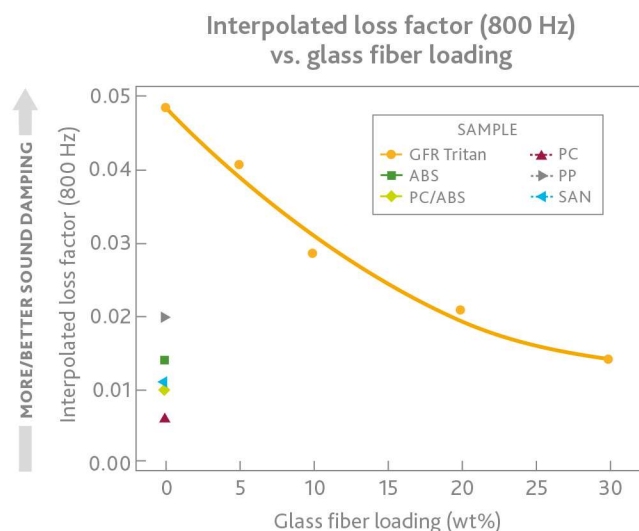
^aPolyamide 6 is conditioned.

Similar to the neat resin, secondary processing, such as ultrasonic welding, is no problem. Additionally, because Tritan HM has contact clarity, it can undergo other processes for quick reliable joining, e.g., laser welding.



^aGFR, 10%
^bGFR, 20%

Tritan HM exhibits superior contact clarity over other competing materials.



Even with high glass loadings, Tritan HM exhibits advanced sound-damping properties, producing less acoustic resonance than products made from glass, polycarbonate (PC), or styrene-acrylonitrile (SAN). As a result, replacing existing housing materials with Tritan HM can help reduce sound by several decibels (dB).

Outperforming other plastics

Like all copolyesters within the Tritan family, Tritan HM exhibits superior chemical resistance, which can help prevent environmental stress cracking—especially after exposure to increasingly harsh cleaners and disinfectants. Unlike polyamide, it is also resistant to moisture uptake, so there's minimal dimensional change in humid conditions.

High-strength performance. Low-stress processing.

With the same chemical resistance and BPA-free manufacturing you'd expect from Tritan products, Tritan HM offers better dimensional stability for applications that demand durability and rigidity. Also, with a wider processing window, it enables molders to create thick and thin walls, creating complex and functional designs. Because it's Tritan, it's proven in the market. Brands rely on Tritan for its durability, chemical resistance, aesthetics, and safety. Molders and designers rely on it for its ease of processing, good flow properties, and compatibility with secondary operations such as laser welding and printing.

For processing support, molders and engineers can take advantage of TritanMoldIt.com, an interactive online community for injection molders.

Applications/markets

Because of its processability and superior rigidity, Tritan HM is ideal for:

- Appliances
- Automotive applications
- Electronics

To see whether Eastman Tritan™ HM glass fiber reinforced copolyester is right for your next project, contact your Eastman representative or visit us at www.Eastman.com/Tritan.

EASTMAN

The results of insight™

Eastman Corporate Headquarters

P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, +(1) 423-229-2000

www.eastman.com/locations

Although the information and recommendations set forth herein are presented in good faith, Eastman Chemical Company ("Eastman") and its subsidiaries make no representations or warranties as to the completeness or accuracy thereof. You must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment, or formulation in conflict with any patent, and we make no representations or warranties, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND NOTHING HEREIN WAIVES ANY OF THE SELLER'S CONDITIONS OF SALE.

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

© 2019 Eastman. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries or are being used under license. The ® symbol denotes registered trademark status in the U.S.; marks may also be registered internationally. Non-Eastman brands referenced herein are trademarks of their respective owners.