

Editorial Contact:
Nicole Adrian
Bader Rutter
+1 (262) 938-5556
nadrian@bader-rutter.com

Eastman Eastar[™] copolyester used for new water filter bowl from Clear Diamond Water

Material provides superior clarity, toughness and chemical resistance

Kingsport, Tenn. — Oct. 15, 2015 — Clear Diamond Water Solutions tested numerous materials in its search for a tough, clear material that would meet safety standards for its new water filter bowl before launching its product with <u>Eastman Eastar</u> copolyester. The Clear Tube Water Filter Bowl is often used as housing for water filtration systems found in places such as office buildings or apartment complexes. Eastar, which is free of bisphenol A (BPA), provides filter housings with excellent durability and improved chemical resistance.

Material search

Clear Diamond Water Solutions provides superior water filtration bowls with multiple applications, including recreational vehicles, well water pumping systems and home water filtration. The idea for the Clear Tube Water Filter Bowl made with Eastman Eastar[™] copolyester came about four years ago when a customer asked for a clear water housing for their customers. The material used for the original version of the product didn't meet National Sanitation Foundation (National Science Foundation)(NSF) standards.

In searching for alternative materials that would meet customers' needs and national standards, the company discovered Eastman Eastar[™] copolyester. The material stood up to rigorous testing, including passing the 800 psi burst test and 200,000 cycle fatigue tests. In addition, the material is made in the United States. The filter bowl launched at the 2015 Water Quality Association Convention and Exposition. E&R, an injection molding company owned by Clear Diamond Water Solutions, helped develop the product.

"When filtration bowls made of alternative materials fail and water leaks in places such as office or apartment buildings, the water can destroy the area around the housing units," said Nelson McIlveen, owner and CEO, Clear Diamond Water Solutions. "In addition to meeting NSF standards, Eastman Eastar™ copolyester is so tough that it meets and exceeds insurance companies' standards when the filtration bowls are used in these buildings. We believe insurance companies could begin pushing this material for large-scale filtration systems."

Eastman Eastar[™] copolyester used for new water filter bowl from Clear Diamond Water Solutions, p.2

Meeting standards

When used for clear filtration housings, Eastman Eastar[™] copolyester provides a clear view of the filtration media, without the breakage and durability issues associated with some clear plastics, including styrene acrylonitrile copolymers (SAN). The glasslike clarity of Eastar also allows for greater tinting flexibility, compared with the noticeable blue cast of SAN. In addition, unlike polycarbonate (PC), the material is made without BPA. Eastar also is free of styrene.

As noted, Eastman Eastar[™] copolyester meets the requirements of the NSF for water filtration units and delivers the benefits of transparent filter housings with excellent durability, improved chemical resistance and toughness. The toughness of Eastar helps ensure longer filter housing life and can reduce issues related to breakage, cracking and product failure. In addition, chemical resistance is increasingly important in applications in which the filter housing comes into contact with cleaners and glycol winterizers.

"Manufacturers who use Eastman Eastar[™] copolyester for their housings have the potential to simplify processing by eliminating the need for annealing to relieve residual stresses — something often required for thick parts molded from PC and SAN," said Marty Boykin, Ph.D., director of consumer durables and the Tritan[™] platform, Eastman Chemical Company. "The toughness of Eastar can reduce breakage that can occur during processing SAN and other brittle polymers, and compatible with a variety of secondary operations, such as welding. This is an excellent added benefit for manufacturers who work with Eastar."

For more information on Eastman Eastar[™] copolyester, visit <u>www.eastman.com/eastar</u>.

About Eastman Chemical Company

Eastman is a global specialty chemical company that produces a broad range of products found in items people use every day. With a portfolio of specialty businesses, Eastman works with customers to deliver innovative products and solutions while maintaining a commitment to safety and sustainability. Its market-driven approaches take advantage of world-class technology platforms and leading positions in attractive end-markets such as transportation, building and construction, and consumables. Eastman focuses on creating consistent, superior value for all stakeholders. As a globally diverse company, Eastman serves customers in approximately 100 countries and had 2014 revenues of approximately \$9.5 billion. The company is headquartered in Kingsport, Tennessee, USA, and employs approximately 15,000 people around the world.

For more information, visit www.eastman.com.

About Clear Diamond Water Solutions

Clear Diamond Water Solutions is providing the next generation in water solutions and has partnerships with companies that are developing high-performance water products. All products from Clear Diamond Water Solutions will meet or exceed National Sanitation Foundation and U.S. Food & Drug Administration standards. The 10-inch clear filter housing is the company's first new performance product.

For more information about Clear water Diamond Solutions visit www.clearwaterdiamondsolutions.com