

Proven polymers for **premium appliances**

*Specialty plastics for the large appliance
and floor care markets*



Eastman **TRITAN™**
copolyester

DURASTAR™
polymers

Major value for major appliances

The history of the modern home appliance is relatively short—but has still seen tremendous improvements from generation to generation. It's no coincidence that many of these improvements coincide with the development of innovative specialty plastics.

And as polymers continue to improve, so will appliances.

Appliances take the “work” out of housework. Let Eastman help take the guesswork out of specifying the right polymer for your large appliances.

Today, our polymers provide crystal clear views inside refrigerator compartments, ice buckets, washer and dryer doors, and many more appliances. They provide durable chemical-resistant substrates that can handle everyday use and the most diligent cleaning.

Eastman materials perform well in the kitchen, laundry room, and throughout homes and businesses. More important, they demonstrate the durability your customers expect. In that respect, you'll discover that Eastman copolyesters perform admirably in another room altogether: the showroom floor.





Make appreciably better appliances.

Performance is the main attribute that continues to drive sales in large home appliances. But today's consumers are also looking for efficiency, greater sustainability, smart functionality (interactivity), and elegant design.

To succeed in this market, brands are choosing to compete in **higher-margin premium segments**. This means creating uncommon products that not only work better but look and feel different, as well.

Consumers have to be able to see and feel quality in **every aspect of the product**, including design, construction, and materials used.

In applications that were traditionally too challenging for clear plastic, Eastman copolyesters can stand up to the daily grind of repeated cycles and the high-impact reality of the working world. And in doing so, they help appliance brands stand out by offering:

- **Best-in-class chemical resistance** to existing and emerging household cleaners
- **Functional aesthetics** (stain, haze, scratch, and odor resistance; excellent sound quality)
- **Excellent clarity** (a glasslike look and feel; high gloss)
- **Colorability** (the design freedom to keep up with emerging decor trends)
- **Durability** (impact resistance across a wide range of temperatures)
- **BPA-free** and styrene-free manufacture

So it's no spin to say that the materials you choose can make all the difference by providing just the right **thermal, mechanical, and rheological** characteristics you need to create a premium product.

APPLICATIONS

Refrigeration

- Trays and bins
- Ice storage
- Water filtration sumps
- Light management (guiding, diffusing, reflecting)
- Control panels (substrates, decorative, and functional films)

Laundry

- Front-loading washer and dryer door lenses
- Top-loading washer doors and components
- Control panels (substrates, decorative, and functional films)

Dishwashers

- Interior components
- Light management (guiding, diffusing, reflecting)
- Control panels (substrates, decorative, and functional films)

Floor care

- Dust bins and containers
- Water tanks
- Housings
- Nozzles and accessories



Why is chemical resistance important?

As the world becomes more germophobic, people will start using more concentrated, high-efficiency, antibacterial detergents on everything—particularly with and on their household appliances. Added fragrances will also be a trend. To keep customers happy with your brand, choose a polymer that can stand up to these chemicals ... beautifully and for years to come.

Summary of characteristics

Needs	PC	Acrylic (PMMA)	tABS (PMMA/ABS blend)	Tritan	DuraStar
Clarity	●	●	○	●	●
Toughness	●	○	○	●	●
Chemical resistance	○	○	○	●	●
Assembly	●	○	○	●	●
Design flexibility	○	○	○	●	●
Processing ease	○	○	○	○	●
Sound damping	○	○	○	●	●
BPA free	○	●	●	●	●

● Most desirable ○ Least desirable or unacceptable





Cool trends Hot demands

With ease of processing and an array of technical support, Eastman copolyesters also open up new design options for brands. For example, brands now have the flexibility to mold our polymers behind labels and film using either injection molding or blow molding processes. Either way, the glasslike clarity of the substrate creates compelling designs, crisp and precise presentations of text and logos, and bright shine through for LED backlit applications.

Our polymers free designers to create thin-walled lenses, windows, and covers that enhance aesthetics and usability—without some of the compromises inherent with materials such as polymethyl methacrylate (PMMA), polycarbonate (PC), and transparent acrylonitrile-butadiene-styrene (tABS) copolymers.

Designers, molders, and engineers rely on Eastman for a full range of services, including primary and secondary processing support, design reviews, product testing, and marketing support.

eastman.com/appliances



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