

A stack of white plastic bottles with green caps. The bottles are arranged in a row, with the top of the stack in the foreground and more bottles visible behind it. The caps are bright green and have a textured, ribbed appearance. The bottles themselves are white and have a similar textured surface. The background is a plain, light color.

THE PATH TO AN OPTIMIZED BOTTLE

You invest incredible energy developing and marketing your products. Make sure the bottles you select as packaging for those products reflect the value of your brands. Optimized packaging meets your standards for clever design, manufacturing excellence and consumer appeal.

How to optimize your bottles? Avient can help. Polymer science, industry-leading expertise with colors and additives, and our in-house color design service make us a powerful collaborator during bottle design, manufacturing, and product marketing.

Caps and closures are critical in delivering a high quality package to consumers. We offer additives, TPE liners and overmolding to help define high-performance caps and closures that provide both functionality and shelf appeal.



Economics

The difference between success and cost overrun is less than \$0.01 per bottle. We help you reduce bottle weight and manufacturing costs without compromising a package's properties.

Functionality

Our formulations can overcome your packaging challenges, such as oxygen ingress, CO₂ egress, impact resistance, UV protection, or counterfeiting.

Aesthetics

The average supermarket stocks over 40,000 SKUs and the average shopper is in-store less than 40 minutes. With our color and design support, your bottle can get noticed quickly.

Regulations

You can have confidence that our products will help you meet or exceed regulatory and reporting requirements across the globe.

Sustainability

We have additives that enable greater use of recycled content and minimize negative impacts on recycle streams.



ACHIEVING BOTTLE OPTIMIZATION

Avient can support every type of bottle blow-molding application. With both liquid and solid polymer formulations, we give you the flexibility to select the best solution for your process.

Five ways we help you achieve bottle optimization:

1

IMPROVE ECONOMICS

Discover ways to achieve lasting cost advantages, which will help you reduce cycle times and overall cost of production during the molding process.

- Lightweighting
- Cost-to-color efficiencies
- Optimized layer structure
- Material selection
- Buoyancy offset
- Improved changeover times

2

ENHANCE FUNCTIONALITY

Bring us your concerns about sensitive contents, Environmental Stress Crack Resistance (ESCR), UV degradation, easy twist-off, and other functional issues. Our additive formulations solve the challenges faced by bottle manufacturers and their customers.

- Barrier solutions (Oxygen, Moisture)
- UV absorbers
- Light blockers
- Drop impact performance
- Anti-static performance
- Ease of evacuation
- Scratch and mar resistance
- Organoleptic protection
- Flavor preservation

3

INCREASE CONSUMER ENGAGEMENT

Collaborate with our in-house color and design service. They provide leading-edge insight in polymer science, packaging design and consumer trends while helping you explore innovative colorants and effects that will set you apart in the market.

- Design support
- Color consulting
- Special effects colorants
- ISBM and multi-layer EBM prototyping
- Testing
- Operations support

4

MEET REGULATORY COMPLIANCE

Trust us to help you meet or exceed today's stringent compliance standards across the globe. Our materials contain ingredients that conform to accepted legal and regulatory compliance guidelines.

- Global food contact compliance*
- U.S. FDA approved materials
- European regulations and directives
- Mercosur (S.A.) region regulations
- GB (China) national standards
- Avient No Surprises PledgeSM

5

REDUCE ENVIRONMENTAL FOOTPRINT

Meet your objectives for environmental responsibility. Avient has a range of technical solutions to support your sustainability goals, and to increase the percentage of reprocessed materials without sacrificing performance or aesthetics.

- Material reduction
- Increased regrind content
- Sustainable materials
- Extended useful life
- Reduce energy use during conversion

*Contact Avient for the appropriate food contact declaration of compliance



Take advantage of our breadth of polymer solutions, along with our design capabilities and industry expertise, on your path to bottle optimization. Our approach is to work as your partner in creating distinctive packaging that combines innovative functionality with high shelf impact.

**To consult with one of our experts, contact us at +1.844.4AVIENT
or submit your request at [Connect Now](#).
www.avient.com**



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