

A Hot-topic Report From



BRGTownsendINC.
A BUSINESS RESEARCH GROUP COMPANY

For more than two decades, blow molded PET containers have used technology as the driver to unabashedly seize individual applications and entire markets from glass and metal packaging formats. Now, the emergence of clarifier and processing technologies are leading the way for opportunities for clear, rigid polypropylene containers as an alternative to PET.

No other study available has the ability to look so closely or project so far out – to 2012 – giving you a wider window of perspective, analysis, and most importantly, conclusions and direction.

Polypropylene:

An Emerging Alternative To PET

The 9th report in a continuing series on plastic packaging

In certain segments, use of clear rigid polypropylene containers could grow as much as 18% annually through 2012!

Use this intelligence to establish benchmarks and targets for both PET and polypropylene – and to determine how the market for both is rapidly changing and how you can be out in front of those dynamics

Examine 11 cost model scenarios to determine head-to-head comparative container pricing

Evaluate cost-reduction possibilities and market opportunities for hot-fill, aseptic, and retort applications

Learn the key role injection stretch blow molding will have on polypropylene's ability to go head-to-head with PET

Get solid projections for where PET will continue to dominate; where polypropylene will make headway against it; and how barrier and non-barrier technologies will help both penetrate current and emerging markets

Polypropylene:

An Emerging Alternative To PET

PET vs. Polypropylene:

It's a plastic vs. plastic battle

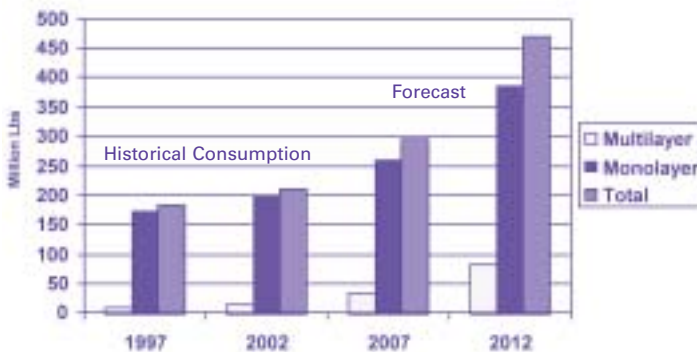
that will be fought and won on a total systems and solutions front that considers processing, performance, application, established support and manufacturing infrastructures, and, most importantly, price competitiveness.

Enabled by the rapidly emerging developments in additives, clarifiers, nucleating agents, and process enhancements, polypropylene is beginning to edge its way into markets once the exclusive realm of PET: waters, new age beverages, health and beauty, custom food, and non-food applications.

These are but a few of the compelling reasons fillers, users, converters, and raw materials developers and suppliers are investigating and investing now in polypropylene processes and container development. But there are many more reasons that you'll find in the 200 originally researched pages of **Polypropylene: An Emerging Alternative to PET.**

PET vs. Polypropylene: Can You Project The Long-Term Impact on Your Business?

POLYPROPYLENE FORECAST, 2007 TO 2012
VS. HISTORICAL CONSUMPTION



Source: Packaging Strategies/BRG Townsend, Inc.

If polypropylene sustains its projected annualized growth of 18% per year through 2012 in the food and non-carbonated beverage segments alone, it will create a significant threat to PET.

CONSUMPTION AND GROWTH FORECASTS OF POLYETHYLENE TEREPHTHALATE SOLID-STATE RESIN BY SEGMENT, 2002 TO 2007

| Segment | % CAGR, 2002-2007 | |
|-----------------------------|-------------------|----------------|
| | North America | Western Europe |
| Carbonated soft drinks | 5% | 7% |
| Bottled water | 12 | 10 |
| New Age drinks | 10 | 15 |
| Other beverages | 15 | 14 |
| Custom containers – food | 10 | 8 |
| Custom containers – nonfood | 5 | 10 |
| Film/sheet and other | 6 | 9 |
| Total | 8% | 9% |

Source: Packaging Strategies/BRG Townsend, Inc.

While the main focus of this study is North America, *Packaging Strategies* and *BRGTownsend* understand your need for an even greater perspective to make the absolute best decisions possible that consider the global marketplace. That's why we have included an entire section on markets, trends, and end-uses for PET and polypropylene in Western Europe – including highly valued consumption and growth forecasts for solid-state PET resins – predictors of potential penetration opportunities for polypropylene across a wide array of food and beverage applications.

Know Your Information Source

Packaging Strategies has for years been the world's foremost provider of competitive intelligence on the topic of rigid plastic packaging technologies, formats, filling processes, materials, markets, trends, and forecasts, including:

- Aseptic Packaging in the United States
- Aseptic Vs. Hot-Fill for PET
- Barrier-enhancing Technologies for PET & PP Containers and Closures
- Beer in PET
- Beer in PET Review
- Custom PET Packaging for Foods & Beverages
- High Performance Polyester Packaging for Foods and Beverages
- Technology, Markets, and Prospects: PET Packaging in Foods and Beverages in the U.S.

BRGTownsend has an equally long track record of providing highly respected research and expertise in the plastics industry. Now, these two institutions have collaborated to produce *Polypropylene: An Emerging Alternative to PET*, a body of research, intelligence, forecasts, and conclusions that will enable you to make highly educated and informed decisions that will ultimately drive business and build profit.

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