



Container Specialties, Inc.

From Fluorination to EVOH:

Driving Innovation and Reducing Environmental Impact

If you're seeking a greener, cost-effective alternative to post-mold barriers like fluorination – one that eliminates PFAS – your solution is here.

Container Specialties is proud to introduce three new bottles featuring co-extruded EVOH layers. Ethylene Vinyl Alcohol (EVOH) copolymer is a trusted material known for significantly enhancing the barrier properties of HDPE packaging, making it suitable for diverse applications.

EVOH copolymer delivers exceptional protection against gases, aromas, fuels, and chemicals, while also serving as an effective barrier against mineral oils making it useful in a wide range of applications. Currently EVOH's versatility is used in food and pharmaceutical packaging, as well as chemical, automotive, and agricultural uses, among many others due to its barrier properties.

Leading the Way in Sustainable Barrier Solutions: EVOH as a Proven Alternative to Fluorination

Midwest Can, the sister company of Container Specialties Inc. (CSI), has been leveraging EVOH technology for years as a reliable substitute for post-mold fluorination in portable fuel containers. This long-standing expertise positions us perfectly to bring the benefits of EVOH to CSI's packaging solutions, offering customers a smarter, greener choice.

Why EVOH is the Future of Barrier Packaging and Replacing Fluorination

- **Superior Barrier Performance**

EVOH delivers outstanding resistance to oxygen, carbon dioxide, and volatile organic compounds, making it an ideal solution for packaging across industries – from food and pharmaceuticals to chemicals and industrial products.

- **Eco-Friendly Advantage**

Unlike fluorination, which involves chemical treatments that pose environmental and disposal challenges, EVOH offers a cleaner alternative. When used in multilayer structures, EVOH enhances recyclability, reducing the environmental footprint of packaging.

- **Regulatory Compliance & Safety**

With increasing regulations on per- and polyfluoroalkyl substances (PFAS) and fluorinated compounds, industries are actively seeking safer, compliant alternatives. EVOH provides a future-proof solution that meets evolving regulatory demands.

- **Streamlined Manufacturing Process**

EVOH is seamlessly integrated into multilayer plastic structures during the manufacturing process, eliminating the need for post-processing treatments like fluorination. This not only simplifies production but also enhances process consistency and quality control.

- **Recyclability & Long-Term Sustainability**

While EVOH itself isn't fully biodegradable, it can be incorporated into recyclable structures, supporting the shift toward circular packaging systems and contributing to long-term sustainability goals.

A Smarter Choice for a Sustainable Future

As industries increasingly prioritize safer, high-performance, and environmentally conscious materials, EVOH is emerging as the leading alternative to fluorination. Backed by years of hands-on experience and technical expertise, CSI is ready to help businesses transition to this in-mold barrier solution – delivering enhanced product protection without compromising environmental responsibility.

Why It's Time to Move Away from Bottle Fluorination

Switching from fluorination to in-mold barrier protection isn't just a smart move – it's a faster, more cost-effective, and environmentally responsible solution. Here's why making the change with Container Specialties, Inc. (CSI) will benefit your business:

The Benefits of In-Mold Barrier Protection

- **Lower Costs, Faster Production**

CSI's in-mold barrier protection process is both more affordable and quicker than traditional fluorination, eliminating the need for a secondary treatment step.

- **Streamlined Logistics**

Bottles can be filled or shipped immediately after production, removing the need for additional transportation to and from a fluorination facility. This reduces freight costs and shortens lead times.

- **Simplified Procurement**

With in-mold barrier protection, you only need one purchase order – no coordinating with multiple vendors for separate barrier treatments. Less hassle, more efficiency.

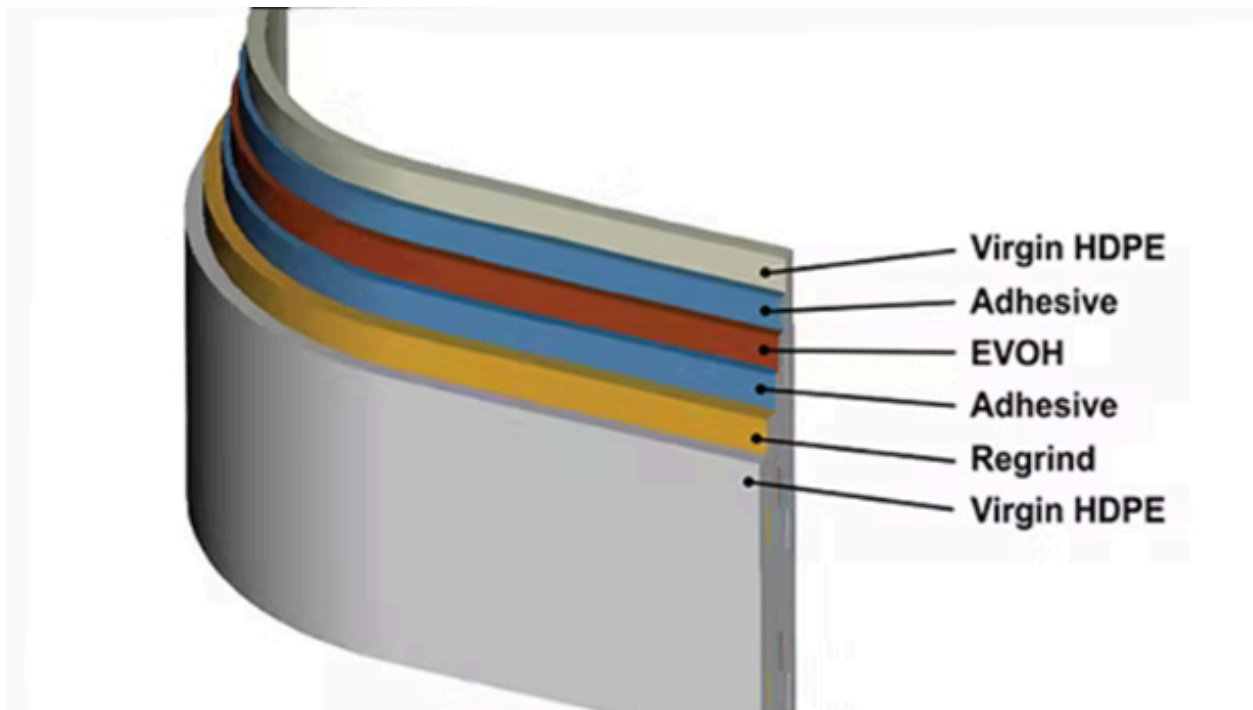
- **Regulatory Compliance**

The EPA is actively working to limit and prevent fluorination due to environmental concerns and the risks associated with PFAS. Transitioning to EVOH now helps you stay ahead of regulatory changes and ensures your packaging remains compliant.

What is In-Mold Barrier Protection?

In-mold barrier protection integrates a barrier layer directly into the bottle during the blow molding process. Using EVOH (Ethylene Vinyl Alcohol), a thin, high-performance barrier layer is co-extruded between the inner and outer HDPE layers. This method:

- **Ensures Uniform Coverage:** The barrier layer is evenly distributed throughout the bottle, providing consistent protection against gases, chemicals, and volatile substances.
- **Eliminates Secondary Operations:** Since the barrier is built into the bottle during manufacturing, there's no need for post-mold treatments like fluorination.



Make the Switch Today

By adopting EVOH in-mold barrier technology, you'll:

- Cut costs and production times
- Simplify logistics and vendor management
- Protect your products with a reliable, proven barrier solution
- Stay compliant with evolving environmental regulations

Switching now doesn't just save you money – it positions your company for long-term success in an industry moving toward safer, more sustainable packaging solutions.

Container Specialties' availability

CSI will have 1-gallon rounds, 1-gallon f-styles and 2.5-gallon f-styles available for the market this Spring.

For more information:

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