

# The Top Five Cap Liners and Seals in the Industry

The main purpose of the cap liner is to create a seal between the bottle and the cap, preventing leakage and inventory waste. The seal also instills peace-of-mind by providing tamper-evidence protection. Using the wrong liner leads to costly failures and can put both the integrity of the product and your brand in jeopardy.

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Plans are underway for distribution of your product in the global marketplace. This new product has passed compatibility testing with all of your packaging components, except for... how do you “seal the deal” and select the best cap liner and seal combination?

## How to Select the Right Cap Liner and Seal

There are a wide range of cap liner and seal combinations available. Let's narrow the field by focusing on these three key questions:

### **What level of tamper evidence do you need?**

Different products require different levels of adhesion for evidence of tampering. Furthermore, retailers are increasingly demanding tamper-evident labeling on packaging as part of their supply chain risk mitigation programs. Consumers have also come to expect some type of seal as indication that the product is safe.

When it is a federal government requirement or imperative that consumers know a product has not been altered since it left the manufacturer, welded tamper-evident liners and seals are a great option. Another solution is a clean peel seal where the entire liner peels away cleanly, leaving the container opening clean and clear of residue.

### **Is the product a liquid, powder, or solid?**

Aggressive contents may require a barrier layer; inert contents may not.

### **Does the package need to be leak-tight?**

Air and watertight seals prevent leakage. Varying degrees of adhesion can be applied to create the perfect seal for the container material.

**Once these questions are answered, your choices can be narrowed down to choosing one of the top five cap liners and seals used in packaging today.**





**Foam Polystyrene Pressure Seal**



**Foil One-piece Heat Induction Seal**



**Lift 'n' Peel™ Heat Induction Liner**



**Two-piece Heat Induction Liner**



**Foam Cap Liner (Polyethylene or Polypropylene)**

**There are different types and styles of cap liners and seals as well as industries where they work best. Here are the top five most popular cap liners and seals – trusted and used by the best-selling brands around the world.**

**1. Foam Polystyrene Pressure Seal**

Need to balance conserving your working capital with expanding sales and delivering a high-quality looking package to your buyers? Pressure seal liners are the way to go as they are coated with torque-activated adhesive and do not require an outside heat source. The regular torque application of the cap creates a tamper-evident seal that is also easy to remove. This eliminates the need for expensive heat induction equipment to apply the liner to the bottle.

Pre-printed “SEALED FOR YOUR PROTECTION” or “SEALED FOR FRESHNESS” verbiage on the label makes the Foam Polystyrene Pressure Seal a cost-effective solution for dry products such as nutraceuticals, cosmetics, vitamins, spices, and pharmaceutical products.

**Need an air- and liquid-tight bond? Bring on the heat!**

When properly applied, induction-lined caps provide a hermetic, leakproof, and tamper evident seal. In fact, the FDA regards induction sealing as an effective method of tamper evidence. Studies indicate that induction seals are extremely important to consumers as well. Depending on the type of product they are purchasing, consumers place the highest emphasis on product safety, freshness, ensuring no leaks or spills, and easy removal.

Here’s how the induction sealing process works: After the container has been filled and capped with an induction-lined closure, it’s ready to pass underneath the induction sealing

system where a foil laminate inner seal bonds to the lip of the container. This non-contact heating process welds the liner to the container and creates a hermetic seal. This makes an induction sealing system ideal for meeting FDA guidelines, extending product shelf life, preventing costly leaks and enhancing the product’s value.

**2. Foil One-piece Heat Induction Seal**

Foil one-piece liners offer a broad appeal due to their compatibility with glass and all types of plastic bottles and jars. Varying degrees of adhesion are applied to create the right seal for the bottle. Since it “sticks” to the bottle after sealing, this single-use foil is one of the most common forms of sealing. Side tabs and Lift ‘n’ Peel™ options add to the experience of easy removal from the lid for items like milk and juices. An added barrier layer can also provide protection against aggressive products.

An air and watertight hermetic seal prevents leakage in packaging for edible oils, water, juices, condiments, shampoos & conditioners, gasoline treatments, additives, food & beverages, nutraceutical products, health & beauty products, vitamins, spices, and pharmaceutical products.

**3. Lift ‘n’ Peel™ Heat Induction Liner\***

Research reveals that consumers want easy-to-open packages and have a strong preference for the Lift ‘n’ Peel™ heat seal material with a polyester tab. Convenience and being easy to open was the factor most liked about the Lift ‘n’ Peel™ over a traditional seal. So strong, in fact, is the consumer pull that marketers have started to indicate Lift ‘n’ Peel™ as a benefit listed on product packaging.

Engineered to maintain product integrity and prevent leaks, a Lift 'n' Peel™ liner can add value to brands and be a differentiating competitive advantage. Whether you need a clean peeling seal that maintains freshness and prevents leaks, or a welded tamper-indicating seal, Lift 'n' Peel™ enables brand differentiation.

Lift 'n' Peel™ uses a foam liner that's backed to a foil innerseal to create an air and watertight hermetic seal. The tab consists of a twin construction of polyester that has been designed to be ergonomically easy to grip, flexible, and extremely strong. No additional processing or equipment is required to incorporate the Lift 'n' Peel™ liner.

*\* Lift 'n' Peel™ is a Selig Group brand.*

#### **4. Two-piece Heat Induction Liner**

The benefit of using two-piece heat induction liners is that they eliminate the need for lining the closure in two separate stages: The base liner is temporarily bonded to the paper-backed foil with wax. During the induction sealing process, the paper absorbs the wax. The wax barrier and foil form an air and water tight hermetic seal that prevents leakage and indicates tamper

evidence. The pulp board liner stays in the cap for repeat use, helping to extend shelf life and prevent leakage.

Varying degrees of adhesion and a choice of liners, from puncture-resistant and pierceable welded liners, to easy entry clean and peel, make this a great seal for a variety of packages, including: dry products, glass cleaner, fruit juices, peroxide, milk, and spices.

#### **5. Foam Cap Liner (Polyethylene or Polypropylene)**

Foam Cap Liners are ideal for general-purpose leak prevention. The foam can protect against: acids, alkalis, solvents, alcohols, oils, cosmetics and aqueous products.

White, glossy foam material liners compress in the cap to create a secondary seal for repeat use. This makes this liner a great solution for preventing leaks in plastic bottles and glass bottles that contain water-based adhesives, pharmaceuticals, cosmetics, lotions, ammonia (household), liquid antacids, auto cleaners, bleaching fluid, liquid detergent, honey, hydrogen peroxide, lemon juice, mouthwash, mustard, pickles, olives, salad dressing, shampoo, shoe polish, spices, starch, syrups and vinegar.

## Re-cap

Lids and liners are tasked with providing reliable protection against leaks, assisting in preserving freshness, authenticating product integrity, aiding in preventing product contamination, and strengthening consumer confidence and brand image. In fact, consumer-friendly packaging continues to be one of the highest and most sought after package design components.

Closure fit and function depend on selecting the proper liner. With so many lid and liner options to choose from, selecting the right combination may seem like no easy feat! Rely on the technical expertise of packaging sealing experts to help ensure your product efficiently and cost effectively moves across the supply chain and into the hands of consumers.

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