



## VENTED CLOSURES

Reliable Caps, LLC

With vented closures, the closures themselves are not actually vented, but are lined with a venting lining material. Vented liners are recommended for any product that is subject to changes in temperatures, altitude, pressure, or has gaseous properties. The vented liner will allow air and/or gases to pass through to prevent the container from swelling, paneling or leaking. There are several different vented liners available. Each liner has its own specifications as to how the venting works. Reliable Caps recommends thorough testing to ensure the liner you have chosen will work with the contents of your container. We offer free samples for you to conduct this testing.

The following is a brief description of each of the vented lining materials Reliable Caps offers:

### **P-PE Vented** (Pulp & Polyethylene)

This material is vented as it is being fed into the lining machines at Reliable Caps. The material is perforated with approximately 16 pin holes per square inch. The air/gases will escape through these pin holes, through the layers of the pulp, and out through the threads of the cap.

### **Polyscrim**

This material is white reinforced kraft paper with a low density extrusion coated film on one side and adhered to a pulp backing. There are filament threads in a crossed pattern on the facing of the material. The air/gases will follow these filament threads out to the threads on the cap to escape the container.

### **Ventseal 76**

This material is a three-ply coextruded foam material consisting of outside layers of LDPE with a foamed polyolefin core. Parallel channels are formed into the material. The air/gases will follow these channels out to the threads of the cap to escape the container.

### **Circumvent and Airfoil**

This is a patented venting system, developed by Performance Systematix, Inc. It can be used with a wide range of products, utilizing either a foam or heat-induction liner. The lining material will have a hole in it covered with a ePTFE material. This material allows air/gases to be exchanged, but liquids stay in the container. For more information on this lining system, you may call Reliable Caps' customer service department at (800) 356-8483 or visit the web site of Performance Systematix, Inc. at [www.psix.com](http://www.psix.com).