



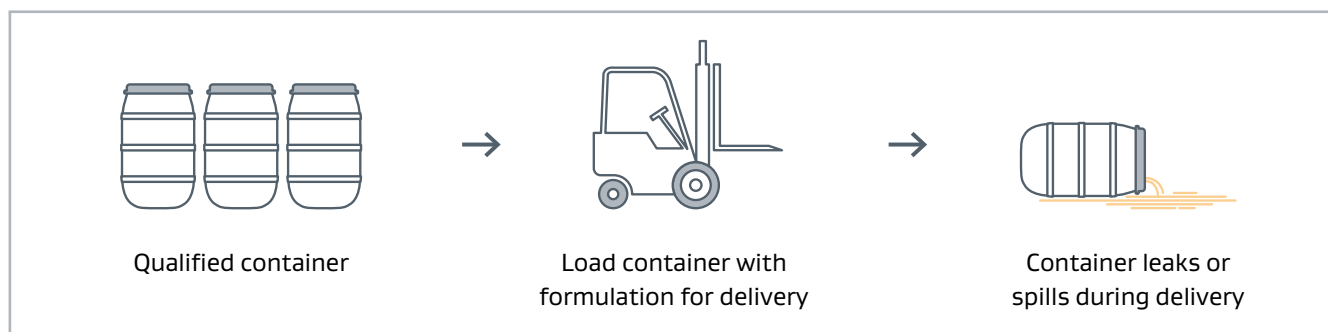
## WHY ARE YOUR DANGEROUS GOODS SPILLING AND BECOMING A LIABILITY?

### Because all liquids are not the same

Even if you use a qualified container with a venting membrane to equalize pressure, why can the container still leak?

Passing the pressure test with water (WEP test) to meet regulatory packaging requirements does not ensure that the membrane can prevent your chemical formulation from leaking or spilling when exposed to real-world conditions.

### Typical Process



**Maintain your container's integrity, protect your brand, and reduce your costs — choose GORE® Packaging Vents for your container!**



Every liquid formulation has a unique chemical make-up that results in significant variations in surface tension and viscosity. These physical properties translate to unique liquid entry pressures, most of which are very different from those of water. For example, most chemical formulations have a surface tension that is much lower than water.

Fluid	Surface Tension (dyn/cm)
Water	73
Ethanol	22
Glycerol	64
Hydrogen Peroxide (80%)	78
Mineral Spirit	25

As a result, the chemicals inside your qualified container can leak or spill because the pressure of the liquid is higher than the resistance of the venting membrane that you selected. Now what?

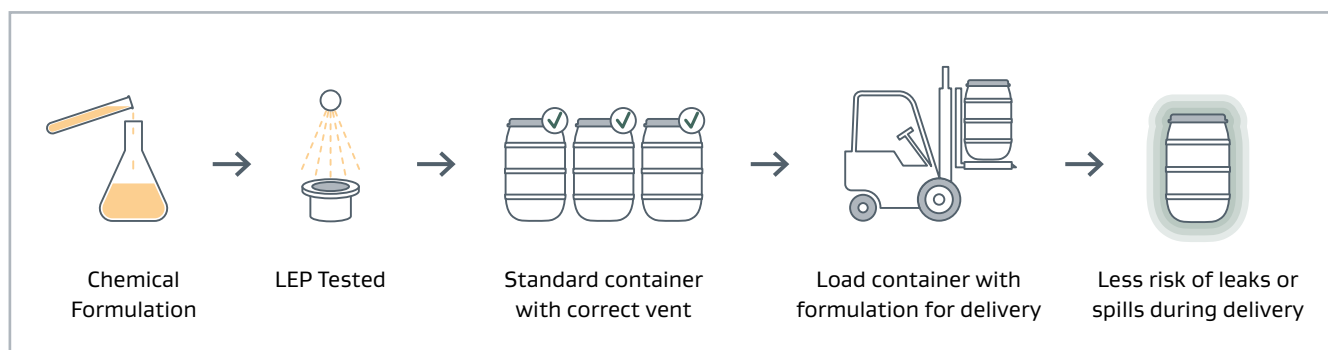
## How do I represent real-world conditions during testing?

Choosing a venting membrane from data sheets or relying on the WEP test alone does not guarantee reliable performance. You need to understand how the container's venting membrane performs with your formulation, or it could leak or spill when exposed to real-world conditions

At W. L. Gore & Associates, we go beyond the WEP test to understand the physical properties of your formulation. We use the LEP (Liquid Entry Pressure) test to identify the amount of pressure required to force various liquid formulations through the membranes used in our GORE® Packaging Vents.

## Bottom Line

Using the LEP test is the most reliable way to ensure you select the right venting membrane and prevent your container from leaking or spilling in real-world conditions — and this requires understanding your formulation!



### FOR INDUSTRIAL USE ONLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.

All technical information and advice given here are based on Gore's previous experiences and/or test results. Gore gives this information to the best of its knowledge, but assumes no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. The above information is subject to change and is not to be used for specification purposes. Gore's terms and conditions of sale apply to the sale of the products by Gore.

GORE, *Together, improving life* and designs are trademarks of W. L. Gore & Associates. © 2021–2024 W. L. Gore & Associates GmbH