



**24 Hour Ice Water Performance From a Paper Label!**

# ICE BREAKER

With AquaLok™ 100 Waterproof Adhesive

YEAR ROUND LABEL APPLICATION FOR:  
Wine | Beer | Spirits | Beverages

**trysk**  
print solutions™  
focus • create • deliver



Don't Let Soggy Paper Labels Dampen Your Brand .....3

Choose the Best Label Material for Your Application .....4

An Introduction to Ice Bucket Testing .....5

Standard Ice Bucket Test.....6

Interpretation of Standard Results.....6

Ice Breaker Test 1: Submersion (Ice Bucket) .....8

Ice Breaker Test 2: Refrigeration .....9

Interpretation of Ice Breaker Submersion and Refrigeration Test Results .....10

Bottling Line Test .....11

Conclusions .....12

The Ice Breaker Challenge.....13

Additional Resources.....14

With Ice Breaker, paper labels that peel up, bubble, or turn gray in water are no longer normal.







## Don't Let Soggy Paper Labels Dampen Your Brand

Your brand is everything and your brand image should be supported by your label packaging. For too long now, paper labels have only been expected to last a few hours under the harsh conditions of refrigeration or ice water submersion. In the world of beverage bottle packaging, a label that visually deteriorates when wet, but manages to barely cling to the bottle, has received a passing grade. In other words, despite a distorted and deteriorating presentation of your brand message, today's paper beverage labels are graded solely on their ability to adhere to the bottle.

Paper labels that come apart or completely fall off bottles have posed a considerable challenge to wine, spirits, beer, and beverage producers for many years. Brand owners have simply opted to accept this assuming poor label performance in wet or damp environments is normal and even acceptable. But is it?

Many labeled products require refrigeration, are served chilled, and others are regularly submerged in ice water, such as white wine, champagne, and beer. Yet despite the obvious need for a label material suitable for these conditions, few gains have been made in completely resolving this very frustrating issue – until now. The last thing a brand

owner wants to see is a label floating off their bottle in a tasting room or restaurant ice bucket. With so much time, effort, and energy spent on brand image and label design, isn't it time your labels performed the way you want them to?

In researching this issue for our clients we have found that most label materials are simply not engineered or expected to completely outlast the useful life of a beverage bottle, including so-called "wet strength papers". The useful life of a standard beer, wine, or distilled spirits label can range anywhere from a few minutes to several hours or days (in the case of refrigeration). For us, this simply wasn't good enough. For 4 years we worked exhaustively to find a solution.

Our goal: to locate a paper label material that can survive the harshest conditions imaginable. A label that can be completely submerged in ice water for 24 hours and not wrinkle, dissolve, bubble or peel up, all while preserving the sharp text and bright colors of the label design and brand messaging.

We're thrilled to be able to finally offer a one of a kind, rock-solid solution to this long standing issue. We call it Ice Breaker.

Finally, paper labels that won't fall apart in water.





## Choose the Best Label Material for Your Application

We can all agree label packaging that provides a lasting impression is a vital sales and marketing tool for your products, but how do we get there? What's the next step after you've created a beautiful label packaging design?

For the best possible outcome, research and testing of available label materials is the key. This begins with you and your label provider knowing how to test your existing labels against any new material you might decide to try.

For your reference, we've included standard refrigeration and submersion (or "ice bucket") testing procedures in this guide. The process outlined in these pages is actually a compilation of test methods used by the top 3 U.S. label material suppliers. To our knowledge, this is the first publication of these test procedures.

For comparison, we have also included our new and revised ice bucket test, one that is far more strenuous than standard methods. We believe our test better aligns with the real world exposure your labeled products will experience. The requirements to pass our revised test method raise the bar for all label materials on the market today.





## An Introduction to Ice Bucket Testing

A label submersion test is commonly known as an ice bucket test, and it is one of the most difficult performance tests a label material will encounter.

During testing, labeled bottles are immersed in a ice water bath for a specific period of time based on a customer's requirements or material suppliers suggestions. Common issues exposed by ice bucket testing include bubbling, edge lifting, labels floating or sliding off the bottle, labels deteriorating, ink or foil flaking off, or a graying effect in the paper.

To the best of our knowledge, universally accepted or industry standard ice bucket and refrigeration test methods do not exist. Current methods vary widely among material suppliers and label printers.

However, there is one area where current test methods all align. If a label remains adhered to a

bottle after a few hours in an ice bucket, so long as it sticks, it's given a "passing grade". Even if it's discolored, bubbling up or the print is partially illegible. We believe these poor results and the low expectations they set are unacceptable. So we made the test more challenging.

Our new ice bucket test was designed with the product lifecycle in mind. We believe beverage labels should not only stay on the bottle but look good throughout their entire use. Passing our more rigorous ice bucket and refrigeration tests ensures your labels will do just that.

Our test method meets all label packaging requirements for beverage bottle refrigeration and ice bucket immersion, in most cases far exceeding the conditions any label will be subjected to. This is truly a major breakthrough for wine, spirits, beer, and beverage label materials.

### 5 Reasons to Test Your Label Materials

1. To observe label performance and adhesion under submersion, condensation, and cold temperature conditions.
2. To determine whether your label application environment will effect performance or adhesion.
3. To assess defects or incompatibilities with the bottles you intend to label.
4. To discover if any label treatments, varnishes, or embellishments will impede label or adhesive performance.
5. To learn whether your label applicator may require adjustments or alterations.





## Standard Ice Bucket Test

**This is the current method used by most printers and material suppliers and the currently acceptable results:**

1. Apply printed or varnished labels to bottles and rub down to ensure full adhesive contact with the glass surface.
2. Let the labels rest for at least 24 hours to form a full adhesive bond with the bottle surface.
3. Fill the test bottles with water so they do not float and submerge them in a mixture of equal parts ice and water sufficient to last between two to four hours.
4. Inspect the submerged bottles at 20 minute, one hour, and two hour intervals. Record the condition of the labels during these intervals.

## Interpretation of Standard Results

### **Evaluating the success or failure of your labels based on the standard ice bucket test method**

The label must remain adhered to the bottle for at least two hours. It should not slip or fall off the bottle's surface when slight pressure is applied and the bottle is twisted. No edge lifting or major bubbling should occur during this two hour period. Some minor label bubbling can be expected.

In this test the labels will receive a passing grade if they remain largely adhered to the bottle and require some force to separate from the bottle surface after two hours in ice water.

The test is considered a failure if the label has separated completely from the bottle in less than two hours.

Record the time of the label failure and provide the information to your label provider.

Unfortunately, the standard ice bucket test does not take into account the visual appeal of the label as a result of the ice water immersion. Face stock deterioration, discoloration, and ink and foil flaking are considered common occurrences during the standard test. Yet, paper labels with these issues would still receive a passing grade!

With our new Ice Breaker label material, results such as these are no longer acceptable. We have seen a great demand for a paper label that will not show any sign of deterioration after extended water immersion. We now offer a comprehensive range of new Ice Breaker estate papers and coated beverage label materials that pass the most demanding ice bucket and moisture requirements and *exceed* the previously accepted standard test requirements.

Our new ice bucket test protocol is expected to more than adequately cover normal beverage bottle use, as well as label aesthetics. This will enable printers and designers to evaluate label performance within the context of real end use customer expectations.



# ICE BREAKER

With AquaLoc™ 100 Waterproof Adhesive

Standard ice bucket and refrigeration testing methods are now obsolete.

Finally a paper beverage label material that works, with no bubbling, edge lifting, discoloration, or floating off the bottle when submerged. Ice Breaker is truly an amazing break through for craft beer, spirits, and wine label packaging.

Apply labels in temperatures as low as

**25°F**

Labels withstand temperatures as low as

**-10°F**





## Ice Breaker Test 1: Submersion (Ice Bucket)

### Submersion Test for Paper Labels

1. Apply labels to clean, dry, room temperature bottles. If hand applied, use gentle, consistent pressure across the entire label to avoid any bubbles or wrinkles.
2. Let the labels rest (this is called dwell time) for at least 24 hours to form a full adhesive bond with the bottle surface.
3. Fill the test bottles with water so they do not float. Submerge the labeled bottles to cover the entire label in a constant temperature bath of less than 40°F for a period of 12 hours. You can also submerge only half the label and observe the difference between the two portions. Periodic observation is recommended in order to gauge at what point the label begins to fail, if at all.
4. At the end of the submersion period, gently rotate the bottles back and forth 5 to 10 times while still submerged.
5. Remove the bottles one at a time from the bath. Grip the label around the bottle and try to move the label vertically and horizontally on the bottle while inspecting for any label slippage. Repeat the procedure for each labeled bottle. The label should not slip, bubble, wrinkle, discolor, exhibit corner lifting, or float off the bottle.
6. Record the results found as acceptable or unacceptable for each label on each bottle and contact your label provider with your detailed results.

Ice Breaker paper labels will outperform any other paper material on the market today.







## Ice Breaker Test 2: Refrigeration

### Refrigeration Test for Paper Labels

1. Apply labels to clean, dry, room temperature bottles. If hand applied, use gentle, consistent pressure across the entire label to avoid any bubbles or wrinkles.
2. Let the labels rest for at least 24 hours to form a full adhesive bond with the bottle surface.
3. Place labeled bottles into a standard refrigerator at less than 40°F for 24 hrs.
4. Inspect after 24 hours. The label should not slip, bubble, wrinkle, discolor, or exhibit corner lifting.
5. Record the results found as acceptable or unacceptable for each label on each bottle and contact your label provider with your detailed results.

Unfortunately, most beverage label materials on the market today will exhibit some bubbling, wrinkling, lifting, and minor discoloring. After drying, most labels will return to their original state if left untouched.

Ice Breaker defies these expectations, providing unbeatable refrigeration performance for your beverage label needs.

With Ice Breaker, paper labels  
can be applied in temperatures  
as low as 25° Fahrenheit!



## Interpretation of Ice Breaker Submersion and Refrigeration Test Results

After one to two days of submersion or refrigeration at less than 40°F, the labels should not bubble, lift, float free, or slide on the bottle. They should look like new, just as they did prior to application.

**When testing paper labels other than Ice Breaker, labels may fail to meet these performance standards for the following reasons:**

1. The adhesive used may not be acceptable for the end use or may be defective.
2. The bottles used may contain deformities, defects, or heavily pronounced seams.
3. The bottles were not clean and dry when the labels were applied.
4. The bottles, their contents, and labels were not at room temperature when the labels were applied.
5. Condensation was present on the bottles during label application.
6. The label embellishments, such as embossing, may be creating air pockets that cause a poor adhesive seal, allowing moisture to migrate beneath the label.
7. If auto applied, the label applicator pads or brushes may not apply enough pressure to fully anchor the adhesive to the bottle.







## Bottling Line Test

### Simple Method for Testing Labeled Bottles Directly Off the Bottling Line

After the labels have been applied, use a hand spray bottle to mist the labels with water for 10 to 20 seconds. Wait 5-10 minutes and look for any bubbling on the surface of the label. Bubbling may also be seen from behind by looking through the back of the bottle at the back of the label. There should not be any bubbling where the label is cleanly adhered to the bottle if there are no defects in the glass or embellishments in the label that might cause false bubbling. If bubbling

does occur, review the cleanliness of the bottle, the environmental conditions in which the labels and bottles have been stored, the environmental conditions in which the labels were applied, and the machine applicator pressure. After the labeled bottles have set up, the bubbles should dissipate as the adhesive cures.

Record the results found for your labeled bottle as acceptable or unacceptable as well as the application date, time, and environment, and contact your label provider with your detailed results.





## Conclusions

### Ice Breaker Labels redefine beverage label performance in every measurable way

Following our new more rigorous test protocols, Ice Breaker labels passed inspection in every aspect of label performance for adhesion and cosmetic appearance.

And, unlike existing standard tests, our ice bucket and refrigeration tests actually take into account the visual appeal of the label. Face stock deterioration, discoloration, and ink and foil flaking are no longer present. If your labels do not maintain an appearance reflective of your brand messaging under these testing methods they are not doing the job they have been designed to do. Conventional thinking, that you cannot print on a paper label that would not show any sign of deterioration after extended water immersion, is no longer true.

Our new test protocol utilizing Ice Breaker Labels with AquaLoc™ 100 Waterproof Adhesive takes labeling beverage bottles to a whole new level. This material allows for extended water immersion and moisture exposure well beyond the normal useful life of most beverage label applications and

customer expectations. Our internal test results have shown full label adhesion to bottles without bubbling, edge lifting, deterioration, discoloration, or ink and foil flaking after more than 72 hours of full submersion. The same successful results were experienced under our refrigeration test. Ice Breaker is truly a breakthrough for ice bucket and water immersion applications.

### A Note On Cold Weather & Winter Labeling

Typically, when labeling bottles and glass during cooler winter months, extra care should be taken to make sure that all components involved including the applicator room, the labels, and the bottles and their contents are at the same temperature. That temperature is preferably above the dew point, but ideally as close to 50° to 60°F as possible for optimum label adhesion results. Not doing so will likely result in poor label adhesion and ultimately label failure.

Now, with Ice Breaker, your labels can be applied in temperatures as low as 25° Fahrenheit!





## The Ice Breaker Challenge

# ICE BREAKER

### “The New Normal” In Ice Bucket Performance & Testing

We challenge you to test your own existing wine, beer or spirit labels in an ice bucket test against our new Ice Breaker Labels with AquaLoc™ 100 Waterproof Adhesive. We guarantee that our Ice Breaker paper labels will outperform any other paper material on the market when applied as outlined in the previous sections. Take the challenge and discover for yourself “The New Normal” in wine, beer spirits, and beverage label performance!

Contact us today to receive free printed test samples  
of our revolutionary Ice Breaker label material.

## Additional Resources

### Trysk Print Solutions

2201 3rd Ave, #2704  
Seattle, Washington 98121

(877) 605-1164  
Fax (206) 324-0303

info@tryskprintsolutions.com  
www.tryskprintsolutions.com

**Our goal is simple:** Deliver the best value for your time and money in every single aspect of print, packaging and promotion. With a team of professionals dedicated to the cause, Trysk is your turn-key solution to bring concepts and products to market. We offer decades of beverage label printing experience which means that we know how to get the job done on time, on task and on budget. Our deep industry knowledge and tireless service have resulted in a long track record of success.



If your labels do not maintain an appearance reflective of your brand messaging under testing they are not doing the job they have been designed to do.