

Label Application Help Guide

Company Name

Ensure you discuss your project with the appropriate area of expertise, (your applicator/bottler, bottle manufacturer, case packer, storage facility, or label designer), prior to ordering labels to avoid these issues. It is Client's responsibility to verify all label specs required for the project with the appropriate area of expertise and provide to Label Innovators.

Symptom	REFER TO YOUR		
	Bottler/Applicator	Bottle Mfr.	Storage/Label Design
A. Labels don't stick to the bottle	Label pressure may be off on label dispenser	Verify bottle is not out of round	Ensure labels are stored at the proper temp. <i>See Ref# 4</i>
	Check synchronization of labels to dispenser		Ensure labels are stored in low humidity. <i>See Ref# 5</i>
	Ensure the bottles are clean of debris and oils		
	Ensure the label is not placed on the bottle seam		
B. Labels stay on the liner	Web tension not properly adjusted		Improper storage of labels causing defects on the liner. <i>See Ref# 6</i>
	Label dispensing tool isn't setup correctly		
	Label dispenser not adapted for the label shape		
C. Labels are pre-dispensing during bottling	Web tension not properly adjusted		Non-std rounded corner radius (RCR) Label, wound liner facing out. <i>See Ref #1</i>
			Labels exceeded expiration date. <i>See Ref #5</i>
D. The web breaks during bottling	Tension on the web is too high, making the web tight		Micro tears on the liner. <i>See Ref# 6</i>
	Label dispenser speed is too high		Web Width is too narrow Bottling design requirement
	Too much speed variation on the label dispenser		
	Label dispenser not adapted for the label shape		
	Label dispensing tool isn't setup correctly		
E. The web doesn't stop between labels during application	Bad label detection: cleanliness, settings or material transparency of the face material		
F. Label is stuck on the backside of the liner			The roll has been subjected to high humidity. <i>See Ref# 5</i>
G. Label is incorrectly placed on the bottle	Bottling guide or label dispenser is unsuitable for the label		Verify a label set is not being applied on a tapered bottle
	The web and dispensing plate are not parallel		
H. Labels are removing [flagging] after bottling			A rectangle shaped label on a tapered bottle can cause flagging.
			Labels have not had the proper time to dwell/bond to bottle. <i>See Ref# 6</i>

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I. There are creases on the label	Humidity is too high	Cheaper glass tends to have higher seams	The label covers too much surface area, finding bottle defects
	Worn pressure roller (non-contact zone between the bottle and the label)	The bottle is at high or low mfg. tolerance	Large areas of emboss will cause the label to wrinkle during application from web to bottle
			A slightly smaller bottle was used and the label was not resized to fit
J. V-Tears and material penetrations on the top edge of the label piercing thru the label surface. (not scuffing)	Check the bottling line for sharp edges		
	Tears may occur while placing bottles in packaging. Discuss with your packer.		
	Check label placement height on the bottle		
	If label sits too high on a bottle, it becomes susceptible to damage when placed in cartons		
K. Labels wrinkle when wet or cold	Ensure labels were applied with proper pressure to the bottle and no bubbles between adhesive and bottle.	Larger labels may find the imperfections of the bottle, causing bubbles	Improper material was chosen for the application that was not wet strength nor humidity resistant
	Ensure the bottles are clean of debris and oils		Ensure labels have rested 24 hours after being applied to the bottle
	Ensure labels were not placed over the bottle seam		Label emboss may affect adhesion. See Ref# 1
L. Foil is tarnishing on labels			Labels have been improperly stored. Ensure labels are stored in low humidity area. See Ref# 5

Ensure your Bottler / Label applicator has followed the troubleshooting suggestions above.
Once all troubleshooting tasks have been attempted and the symptom/issue still persists, contact:
Label Innovators Quality Department at (925) 449-1419 x109

IMPORTANT INFORMATION ABOUT SCUFFING:

Label scuffing is defined as: smeared ink, excessive text or graphics removed on the label, and has not penetrated the paper (substrate). If you are experiencing any of the scuffing symptom/s listed, please contact Label Innovators quality department.

Client Acknowledgement: _____ Date: _____

	<u>Ref.</u>	<u>Symptom</u>
<p>Label Shape can affect adhesion to a bottle</p> <p>The shape of the substrate, along with the size and stiffness of the label, must be considered to insure proper end use performance. If a stiff label is being applied to a curved surface, the stiffness or memory of the label may cause the label to lift from the substrate before the adhesive has had a chance to adhere to the surface. Smaller label size on thicker substrates may cause flagging. A medium to heavy embossed texture on your label may cause gaps between the label and bottle. These gaps will allow wrinkles to form when there's high humidity or when the label is submerged.</p>	#1	C, K
<p>Bottle Cleanliness can affect label adhesion to a bottle</p> <p>The cleanliness of the surface of the substrate when the label is applied will affect the ultimate adhesion of the label and the success of the application. Contamination from dirt, oils, frost and other foreign elements prevent the adhesive from contacting the surface. All substrates should be clean and free of all contamination.</p>	#2	
<p>Temperature during bottling</p> <p>The temperature of the substrate at the time the label will be applied can affect the ability of the label to adhere to the substrate. Pressure sensitive labels require the adhesive to flow into the pores of the substrate. If the temperature at the time of application is below the freezing point of the adhesive, the adhesive will lose its ability to grab the surface and will edge lift or fall off.</p>	#3	
<p>Environmental Conditions after bottling</p> <p>Paper label materials are affected by moisture or humidity. Moisture can cause the paper to deteriorate resulting in a loss of print contrast and barcode scanning. Labels requiring moisture resistance should look at Weld substrates. The adhesive on your labels expire one year after manufacturing, when stored at 72°F / 50% RH. Fluctuating temperatures/RH above or below will reduce the life of your label.</p>	#4	A
<p>Labels after bottling</p> <p>Labels exposed to excessive levels of abrasion may require a stronger coating. Long term exposure to high humidity (above 55% RH²) will cause most label materials to deteriorate and may cause foils placed on carbon based ink to tarnish. Even short exposure to 40° F is enough, in some cases, to cause the adhesive to become brittle; causing label to lift or fall off. Damage to the paper liner while stored, may cause small tears along the edge or bends and creases. Small liner tears can break the web during bottling, while creases or bends may cause the label to stay on the liner.</p>	#5	A, C, F, M
<p>Adhesive Properties</p> <p>The maximum holding power the label will achieve as the adhesive fully bonds to the surface. How long it takes for an adhesive to gain ultimate adhesion varies and depends on factors like the adhesive's stiffness, the roughness of the receiving surface and environmental conditions. Depending on those factors, it can take anywhere from 2 – 24 hours for ultimate adhesion to happen.</p> <p>Minimum Application Temperature: When an adhesive isn't designed for cold temperatures, it will stiffen and lose its adhesive strength as the temperature decreases. Most adhesives have a minimum application temperature of 40-50 °F before they crystallize and become solid. Cold temperature adhesives can work in temperatures as low as -20 °F.</p> <p>Service Temperature Range: The temperature range the adhesive can function in after the label has been applied and built up to its ultimate adhesion. Most pressure sensitive adhesives have a range of -65 °F to 200 °F with a paper label stock, or up to 300 °F with a film label stock.</p>	#6	B, D H

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