



**FOX IV Technologies, Inc.**

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## Did you know that storing your labels and ribbons improperly can lead to label or even equipment failure?

Many times, label users think that they have equipment operational issues when, in reality, they have label usage or storage environment issues. Improperly storing labeling supplies can be a big (and expensive) problem. Recently, one of our service technicians answered a call from a customer that was having equipment issues. After servicing the equipment, the labels were still failing. Why? Because the labels were being stored in a non-temperature controlled, open warehouse in temperatures in excess of 100°F (38°C). The extreme heat caused the label adhesive to ooze and labels to stay on the label liner, not peel. Not only was that customer now up for the cost of a service call, but also new labels! In another recent case, our service technician asked the operations manager where his labels were being stored. The manager pointed to the top of their warehouse rack. A thermometer mounted on that same rack read 130°F (54.5°C)! YIKES!



## Extreme Temperature Conditions Will Negatively Affect Pressure Sensitive Labels

In order to keep your labels and labeling equipment operating properly, care must be taken with the storage and usage conditions of your pressure sensitive labels. Extreme temperatures (either high or low) can affect the performance of your labels and potentially your labeling equipment. In the case of extreme heat, label adhesives can ooze or change the adhesive's properties. Labels may not peel properly or stick to the product/substrate. The edges of the label roll and gap between labels may become tacky and transfer adhesive to the printer/applicator rollers, sensors, print head, or even the applicator pad. This can lead to equipment downtime, unscheduled cleaning/maintenance or even a service call - PLUS the cost of new labels. If the labels happen to be heat sensitive (direct thermal) labels, the face stock may turn, or begin to turn, grey.

In the case of an extremely cold environment, the adhesive can become brittle unless the label adhesive is specifically designed for use in cold environments. Labels can "pop" off of the liner prematurely or refuse to adhere. The cold can cause lack of tackiness with the label adhesive and labels may not initially adhere to the product/substrate or fall off later.

Temperature swings can also cause label issues. Going from a cold environment to a hot environment may cause the label to "sweat." Basically, the adhesive begins to liquefy and lose its adhesion properties and paper face stock may collect environmental condensation and cause the label edges to expand.

**Automated Labeling Systems and Solutions ❖ We Solve the Tough Ones...Globally**



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## So, What is the Ideal Environmental Conditions for Most Labels?



For most pressure sensitive labels, **the ideal temperature range is between 60 - 80° F (15.5 - 27°C) with a relative humidity range of 50-60%.** This goes for both storage and application conditions. Additionally, labels should be kept covered as well to avoid contamination from dust or dirt in the environment, which can also lead to equipment operational issues.

If conditions regularly diverge from these guidelines, you may want to consider moving the label storage to a climate controlled area, moving labeling equipment to a climate controlled area, and/or investing in an environmental enclosure for labeling equipment.

**FOR MORE INFORMATION ON PROPER STORAGE AND USE OF LABELS, CONTACT:**  
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