"Why one winery switched to artificial cork"
Why one winery switched to artificial cork

St. Francis Winery in Sonoma Valley has completed a one-year program designed to gauge the effectiveness and consumer acceptance of a new synthetic cork as an alternative to natural cork for bottling wine.

Called Cellulkor™, the new stopper is made from an inert material to prevent the tainting and leakage caused by corks cut from natural wood bark.

In June and July of 1992, St. Francis began a trial production run in which 2,700 cases of its most popular vintages—including a 90 Chardonnay, a 91 Cabernet Sauvignon—and 89 Cabernet Sauvignon—were bottled using the synthetic.

Nearly one year later, the winery reports that initial test results are extremely favorable, combining high consumer acceptance of the synthetic cork with excellent field performance, says Joseph Martin, managing general partner. He said that St. Francis is switching to Cellulkor 100% for all bottling in the foreseeable future, amounting to half a million more bottles this year.

The quality problem

The major advantage of using synthetic vs. natural wood bark cork is the elimination of spoilage and over quality problems due to cork tainting.

"A three % quality problem would certainly be unacceptable in any other industry today," says Martin. "For example, could you imagine that for every two dozen eggs you buy, one of them is going to be spoiled?"

"Cork suppliers tell us that natural corks will continue to taint between two and three percent of production, and that there is nothing a winemaker can do but live with," says Martin. "Well, we decided not to live with it."

Synthetic cork the answer

Made from a plastic resin, the synthetic is inert, and has no effect on wine flavor or aroma.

In consumer feedback from the test run of 2,700 cases, there was not a single report of cork tainting.

"The wines bottled with Cellulkor were not only sound but intact," says Martin. "The only negative comment was that somebody found our Zinfandel 'too fresh.' And that's the kind of complaint I can live with.

In 1993, an additional 41,000 cases—almost half a million bottles—of St. Francis wine will be bottled with Cellulkor.

"If we sealed those 41,000 cases with natural cork, and had three % of production spoiled by cork tainting, that would be 14,760 tainted bottles. That's 1,230 cases and 14,760 people who would have been upset with us. They would probably stop purchasing our wine and tell their friends we make bad wine—just because of the cork taint."

"Because the synthetic is made inexpensively from a low-cost plastic resin, it is priced lower than natural wood bark cork. But for us, the cost of the stopper was a secondary concern," notes Martin.

"Our primary concern, by far, was maintaining the integrity of the wine, keeping the wine in the bottle, keeping air out, not adding any off-flavors to the wine, and making sure the wines are kept sound and positive."

Zero leakage

According to its manufacturer, Lerner Packaging Corporation of Garwood, N.J., and Ontario, California, the synthetic does not crack, break, dry-out, or leak, as wood cork does.

The St. Francis field test supports this claim: of the 2,700 cases sealed with Cellulkor in the trial bottling run, "not a single bottle came back as a leaker," says Martin.

In previous years, when natural wood cork was used, St. Francis has had leakage occur in as many as one bottle out of ten, he notes.

After bottling, the synthetic forms a
tight seal in 24 hours vs. three days for wood cork. Once the seal is formed, bottles stopped with synthetic cork can be shipped and stored upright as opposed to point-down. "Our retailers can store and display the wine with the neck up, without the slightest possibility of the wine going bad because of the cork drying out," says Martin.

**Consumer acceptance**

To measure consumer acceptance, each bottle in the initial test run was shipped with a label which told the buyer that the cork was synthetic and gave an 800 number to call with comments and opinions.

"We received approximately 200 calls to the toll-free number; all extremely positive regarding the quality of the wine as well as the appearance of the stopper and the notion of using a synthetic vs. natural cork," says Martin. Consumers liked the idea, found the wine sound, and would not have noticed that a synthetic cork was used had it not been pointed out to them. It was also important to most consumers that Cellukork is recyclable.

"Only one person who called out of 200 respondents said she did not care for its appearance and preferred something more natural," notes Martin.

Response from the trade has been similarly positive, according to Martin, who recently shared his experience using the synthetic with more than 300 winemakers, distributors, salespeople, and wine connoisseurs during an extensive U.S. tour.

"Everyone was extremely positive about Cellukork—no exceptions," says Martin. "One major wine buyer in Milwaukee, for example, said she would not have noticed that this was not a natural cork."

**Quick and easy insertion removal**

The 2,700-case test of synthetic cork also showed that consumers using standard corkscrews found extraction of the synthetic cork as easy as the natural cork, with none of the breakage or fragmentation common to natural cork.

Some customers found slight problems when using two-prong cork pullers: Cellukork’s greater density requires more pressure to insert the prongs between the bottle and the cork.

However, reinsertion of the stopper is easier with the synthetic, due to the slightly smoother exterior surface.

The synthetic cork can be inserted by all standard corkscrews; uniform size (each stopper weighs between 7 and 9 grams) and compressibility increase production and quality.

In a recent bottling of 6,000 cases of St. Francis Cabernet Sauvignon, only 36 out of 72,000 bottles had to be re-corked because the Cellukork would not insert with the corkscrew machine. "That’s 0.0596—comparable to the rejection rate of natural cork and a very livable standard," says Martin.

**Future trends**

St. Francis vintages include Chardonnay, Muscat Canelli, Merlot, Cabernet Sauvignon, and Gewürztraminer, which won a Gold Medal in The Wine & Spirits American Wine Competition. Sales have increased more than 40% over the past two years.

As for the future, Martin expects many other wineries, but not all, to follow in St. Francis’ footsteps and switch from natural to synthetic cork, saying "virtually all important players are keenly aware of Cellukork, and I expect at least one in four of them to be using it within the next three years."

Joseph Martin and winemaker Tom Mackey are accepting questions from winery professionals regarding his experience with synthetic cork, and can be reached at St. Francis Vineyards & Winery, 8450 Sonoma Highway, Kenwood, Calif. 95452, (707) 833-4666.

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