



As a member of the Cork Quality Council (CQC), we adhere to strict standards – but we don't stop there. We strive to deliver products of unmatched quality and to provide customer service, shipment accuracy and follow-through that are consistently outstanding. Every shipment from our facility in Portugal must pass the industry's strictest quality assurance requirements before we will accept it into our inventory. Samples are tested for TCA, aroma characteristics and grade prior to delivery. Third party verification of our processes and quality drives predictable and repeatable performance. Our organization meets or exceeds the quality levels set by the leading European cork standards bodies, APCOR, CELIÈGE, and Systecode.

TCA Testing Adheres to CQC Acceptance Criteria

The CQC protocol* is based on the ISO-2859-1 Level 2 sampling model that accepts or rejects a cork lot with a flag of 1.5 ppt (ng/l) at an Assured Quality Level (AQL) of 2.5. A cork lot is defined as a single grade of cork, from the same supplier batch and shipped on the same container. The minimum sampling and acceptance criteria depend on the size of the lot resp. the number of bales.

Example Application:

- For a cork lot of 100,000 corks there are 20 bales of 5,000 corks.
- For 20 cork bales, Level 2 inspection requires 5 samples of 50 corks. That means we select randomly 50 corks from 5 bales out of 20 bales. The 5 groups of 50 corks will be soaked in wine for 24 hours.
- By soaking whole corks into wine for 24 hours releasable TCA** (RTCA) will migrate to the wine. The wine will be tested for TCA by ETS Laboratories with SPME/GCMS technology. Any RTCA test exceeding 1.5ppt will be flagged as "non-conforming." Currently, nearly 90% of incoming lots of corks pass in the first round of tests.
- If the lot fails on the first testing round, a resampling that's even more rigorous is triggered. For the secondary testing 8 samples of 50 corks are required. If in one of the 8 cork group soaks an RTCA level of 1.5 ppt is detected, the lot will be rejected and returned to Portugal.
- Lot acceptance is based on the number of non-conforming samples which depends on the size of the lot. We use the AQL of 2.5. That means there is a 97.5% probability that an accepted lot will have mean RTCA concentration below the flag of 1.5ppt.

*<https://www.corkqc.com/collections/bulletins/products/copy-of-sales-performance-by-closure-type>

**In 1998, ETS discovered that corks soaked in wine release TCA until an apparent equilibrium is reached within 24h with uncoated corks. This concentration of TCA reached in the soaked wine is called "Releasable TCA" (RTCA). The determination of RTCA is now used in large scale screening programs for corks and has gained international acceptance. ETS has conducted several studies demonstrating that RTCA is a good predictor of TCA transferred in bottled wine. Natural corks with low RTCA scores (group soak tests close to, or below 1 ng/L) were found to have virtually no TCA-affected bottles. (<https://www.etslabs.com/library/46>)

