

While Cafe Imports does not label their products as “Mold Free,” we take numerous steps to ensure our coffees are free of mold and/or mycotoxins.

Green coffee can have yeasts, molds, and subsequently, ochratoxin. However, the physical requirements for proliferation of these yeasts and molds are such that the large part of specialty coffee is not impacted. We do not perform regular direct testing for these. We have tested for these directly once, on a coffee that we selected to be most likely to test positive, and the tests came back negative.

The only time that we tested for mycotoxins in green coffee directly we selected a standard Sumatran coffee. We selected this coffee because of the higher water activity (Aw), and because of the relative prevalence of mill damage to beans that occurs with wet hulling. The results for all molds and mycotoxins came back below detectable limits.

Mycotoxins can occur at any point along the coffee farm to French press chain. Fortunately, the base requirements remain the same: for a mold to produce a mycotoxin it must be both present and supported environmentally. Assuming presence in all cases, we'll focus on environmental support. High on this list are having a suitable substrate and appropriate water activity for proliferation. Coffee is a suitable substrate, so let's return to the topic of water activity (Aw).

Specifically, water activity is used across food and beverage industries as one of the primary process monitoring standards for microorganism control. This is because every microorganism has a water activity level below which it cannot proliferate (and therefore create ochratoxin/mycotoxins). The majority of microorganisms are inhibited below 0.7000 Aw. A very select few can operate down to the low 6s. The ochratoxin creating strains are inhibited in the 7s. The very large majority of coffee that we've measured over the last 5 or 6 years has been below the 0.60 level. Only a small handful of samples (less than 10 out of 25,000 or 30,000) were measured above 0.70.

Even when a coffee has an Aw level appropriate for microbial growth, other conditions must be met and those must all be sustained over some period of time.

Cafe Imports' coffee has a mean Aw of around 0.5500. Our higher Aw coffees tend to be Decafs and Wet Hulleds and these can have water activity levels into the lower mid 6s.

A rough estimate for 0.6100 water activity (Aw) is 12% moisture. Coffees below 12% MC are very unlikely to have mycotoxins. Those in GrainPro are even less likely. Well-handled Specialty coffees in GrainPro that have MC into the mid 12s are still unlikely to have mycotoxins.

The difference between specialty and commodity coffee is not just in the cup, but importantly also extends to production and handling throughout the entire chain. In general, commercial coffees and commercial adjacent specialty coffees are the coffees that are at risk as these are more likely to have the Aw conditions along with the poorer handling and processing that introduce and help sustain microbial activity.

The Aw levels that we have observed are not the Aw levels for all of coffee. They are the Aw levels for a select niche of high-end specialty coffee, which in this conversation easily includes the lowest grade coffees that we import. At the end of the day, an assertion of mold free coffee is either baseless as 99% of specialty coffee will be effectively free of mold, or it is humorously a claim of meticulous or special processing and handling applied to notably lower grade coffee than we deal with.