**VICAM**

34 Maple Street
Milford
MA 01757 USA
+1.417.725.6588
vicam@vicam.com
www.vicam.com

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**VERTU Reader**

With the purchase of a VERTU reader and the test strips, producers, processors and exporters can verify quality in no time at all by being able to accurately read whether the batch or lot contains aflatoxins or ochratoxin A. These test kits save time and money. They allow food and agricultural producers to gain early insight into possible contaminants. An optical sensor collects measurement data along the test strip and converts it into detailed results based on toxin concentrations and a batch-specific calibration curve. Digital quantitative values are clearly displayed on the screen. An absolutely safe and fast procedure. VERTU is ideal for actionable on-site analysis. The tests may be performed on site or in the laboratory, require no special training and are durable. Check, quantify and confirm the mycotoxin levels with absolute certainty.

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**REGULATORY, TECHNOLOGY AND ECONOMIC CONSIDERATIONS**

For tree nut processors and traders, the results of contaminant testing are a key determinant of market share and profitability. Tree nuts that meet the most stringent purity standards command higher prices and fulfill the toughest trade requirements while products that fall short are sold at lower margins and may lose access to the most lucrative markets. Costly mis-calculations are most likely to occur when the contaminant in question is subject to exceptionally tight controls, and the technical challenges of accurately quantifying it are particularly complex. Few contaminants fit this description better than aflatoxins, a toxic threat that looms large on regulatory radar screens in more than 100 Countries.

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**MYCOTOXIN ANALYSIS IN TREE NUTS**

**VICAM SOLUTIONS ENABLE YOU TO**

- Obtain accurate, precise results on-time, every time with AflaTest™, AflaTest™ WB
- AflaTest WB SR or Afla-V™ AQUA
- Manage exports with confidence with results at or below US FDA and EU Regulations
- HPLC, UPLC™ or VERTU & Strip Test assays for rapid screening onsite or in the Lab
- Get reliable results at every stage of production
- Protect the safety and marketability of your products.

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Mycotoxin Analysis in Tree Nuts

Mycotoxins are naturally occurring toxic substances produced by soil-borne molds that can infect a wide variety of crops. The high susceptibility of tree nuts to contamination by Aflatoxins and other Mycotoxin contaminants is a fact of nature. But safety and marketability of your products can be protected!

VICAM offers a comprehensive line of Mycotoxin Test Kits for detecting unsafe levels of Aflatoxin, as well as other co-occurring Mycotoxins of concern, such as Ochratoxin. Whether you need to rapidly screen shipments onsite or perform precise trace analysis of single or multiple Mycotoxins in the Lab, VICAM Test Kits deliver unparalleled levels of accuracy, reliability and efficiency by either HPLC or VERTU and Strip Tests or UPLC Analysis. They provide customers with sensitive results ensuring products are free of contamination every step of the way.

- Sensitive detection at or below European and other global regulatory limits
- HPLC, UPLC or VERTU & Strip Test assays for screening onsite or in the Lab
- Reliable results at every stage of production
- Protection of safety and marketability of your products

VICAM’s comprehensive portfolio of Aflatoxin testing solutions brings versatile and practical testing capabilities to your business and laboratory with the speed to isolate toxins in less than 19 minutes and the sensitivity to detect at low parts-per-billion levels, our technologies can help ensure the safety of your tree nuts products.

**AflaTest**

AflaTest is a quantitative method for the detection of aflatoxin in tree nuts. VICAM's advanced biotechnology permits the measurement of aflatoxins (including AFB₁, AFB₂, AFG₁, AFG₂, and AFM₁).

**BENEFITS**

- **Durable**: long shelf life, requires no refrigeration
- **Versatile**: can be used with a variety of samples
- **Convenient**: no special skills required
- **Quick**: less than 10 minutes to isolate toxin
- **Safe**: requires less toxic materials than other methods

**AflaTest WB**

AflaTest WB is an HPLC-only test for the detection of aflatoxins B₁, B₂, G₁, G₂, and M₁ using wide bore immunoaffinity columns. With a total volume of 3 mL, AflaTest WB allows for a faster flow rate preferred by many laboratories and is the ideal cleanup step for any HPLC.

**BENEFITS**

- **Durable**: long shelf life, requires no refrigeration
- **Versatile**: can be used with a variety of samples specifically for HPLC or UPLC use
- **Exclusive**: no special skills required, test can be performed virtually anywhere
- **Easy**: 10 minutes to isolate toxin
- **Quick**: detects levels as high as 500 pb
- **Wide range**: passes more volume over the column
- **Fast Flow**: passes more volume over the column

**AflaTest WB SR**

AflaTest WB SR is a quantitative method that uses immunoaffinity chromatography to selectively isolates aflatoxins B₁, B₂, G₁, G₂, and M₁ for HPLC analysis. The SR test kit’s fast-flow widebore columns are specially designed to maximize aflatoxin G₂ recovery and accelerate sample throughput.

**BENEFITS**

- **Powerful**: Designed exclusively for laboratory use
- **Enhanced Recovery**: Improved aflatoxin G2 recovery
- **Comprehensive**: Determines individual aflatoxin levels (B₁, B₂,G₁,G₂, and M₁)
- **Durable**: Long shelf life; requires no refrigeration
- **Versatile**: For use with a variety of samples
- **Quick**: 15 minutes to isolate toxin*
- **Wide Range**: Detects levels as high as 500 ng and as low as 0.005 ng for total aflatoxin
- **Fast Flow**: Passes more volume over the column

*excludes preparation and extraction

**Afla-V AQUA**

Afla-V AQUA strip tests utilize the proven sensitivity and selectivity of VICAM’s monoclonal antibodies to accurately detect and measure total aflatoxins B₁, B₂, G₁, G₂, and M₁ at levels as low as 2 ppb and as high as 100 ppb. The single dilution sample preparation procedure saves time and materials, and the test takes 5 minutes* to develop. Digital readings are clearly displayed on the screen of the Vertu Lateral Flow Reader, eliminating any guess work about the results.

**BENEFITS**

- **Fast screening**: Results in 5 minutes*
- **Simple**: No special training required
- **Sensitive**: Limits of detection as low as 2 ppb**
- **Convenient**: Easily performed on-site or in the lab
- **Durable**: Long shelf life
- **Accurate**: Real-time data which can be printed or downloaded to a computer
- **Wide Range**: 0 to 100 ppb

*after extraction