



Vertu™ TOUCH

Lateral Flow Reader

Reference Guide



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1.0 Introduction

The Vertu™ TOUCH reference guide gives additional details on running the Vertu TOUCH lateral flow strip test methods that are not included in the instructional posters. The information below applies to all VICAM Vertu TOUCH lateral flow mycotoxin testing methods.

2.0 Storage Recommendations

Afla-V and and T2/HT2-V strips can be stored at 2–30 °C (36–86 °F). Fumo-V, DON-V, Ochra-V and Zearala-V strips must be refrigerated; store at 2–8 °C (36–46 °F).

Store AQUA solution at room temperature between 20 °C (68 °F) and 25 °C (77 °C).

Strip test and sample extract should be at room temperature between 20 °C (68 °F) and 25 °C (77 °F) before use. If strips have been refrigerated, leave strips at room temperature to equilibrate. Individual strips may equilibrate to room temperature in 20 minutes, whole packs of strips may require up to 1 hour.

3.0 Sampling

Mycotoxins tend to occur in scattered locations in large grain loads and may be detectable in only a small percentage of kernels in a lot. This uneven distribution of contaminated kernels can cause test results to vary significantly from sample to sample. It is therefore essential to take a representative sample from the lot. Product must be collected from different locations in a static lot based on a probing pattern. The probe must draw from the top to the bottom of the lot. The samples obtained from the probes must be ground and mixed well and a subsample taken for testing. Grind samples so that 95% passes through a 20 mesh sieve.

For further information on grain sampling, refer to the following United States Federal Grain Inspection Service (FGIS) and European Community publications:

1. FGIS Mycotoxin Handbook
<https://www.ams.usda.gov/sites/default/files/media/MycotoxinHB.pdf>
2. FGIS Grain Inspection Handbook, Book 1, Grain Sampling
<https://www.ams.usda.gov/sites/default/files/media/Book1.pdf>
3. European community sampling procedures can be found in Commission Regulation EC No 401/2006 of 23 February 2006.

4.0 Understanding the Barcode

The Vertu TOUCH barcode contains important information to allow the reader to be calibrated precisely for the commodity, sample preparation and detection limits required by the procedure being performed. The information stored by the Vertu TOUCH barcodes include items such as test name, lot number, expiration date, parameters for measurement and algorithms for result calculation.

During the manufacturing process each test kit is calibrated, and a unique barcode is produced. Some test kits may include several calibrations for alternative sample preparations, range specifications, or sample types. Each calibration will be represented using a different physical barcode. The different Vertu TOUCH barcodes are identified using a system of letters.

The barcode letter corresponds to the method, type of sample, and assay range as shown in the table below:

Vertu TOUCH Barcode	Method	Sample Type	Range
Afla-V (A)	Afla-V AQUA	Corn	2-40 ppb
Afla-V (B)	Afla-V AQUA dilution	Corn	10-300 ppb
DON-V (A)	DON-V AQUA	Corn	0.25-16 ppm
Fumo-V (A)	Fumo-V AQUA	Corn	0.2-100 ppm
Ochra-V (A)	Ochra-V AQUA	Corn	2-30 ppb
T2/HT2-V (A)	T2/HT2 AQUA	Corn	10-800 ppb
Zearala-V (A)	Zearala-V AQUA	Corn	0.1-5 ppm

Once you have calibrated your Vertu TOUCH reader, the method will be stored in the reader for future use. You will be able to navigate directly to and select your desired method and lot number from the list of stored methods. Once the expiration date for a lot of strips has passed, that method will automatically be removed from the Vertu TOUCH's interface preventing accidental readings of an expired test strip.

It is important to always check that the lot number displayed on the reader's interface matches the lot number of the strips being tested.

5.0 AQUA Extraction Solutions

AQUA Premix solutions available for purchase from VICAM:

- 900 mL (for 25 tests) p/n: 100000339
- 3.6 L (for 140 tests) p/n: 100000345
- 18 L (for 700 tests) p/n: 100000347

Alternatively, to make 900 mL of AQUA Premix Solution, combine the following reagents in a glass or plastic container in the order listed below:

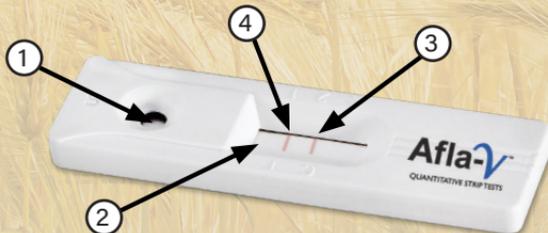
1. 540 mL purified water (reverse osmosis purified, distilled, or deionized water)
2. 180 mL AQUA Solution A (one bottle VICAM p/n: 100000336)
3. 180 mL AQUA Solution B (one bottle VICAM p/n: 100000337)

Mix well.

Product Features

Strip Test Cassette

- ① Sample Well
- ② Results Window
- ③ Control Line
- ④ Test Line



6.0 How to use Vertu PREP mixer

- a. Connect the power adapter to Vertu PREP and plug into outlet.
- b. Use up or down arrows to set time.



- c. Press the capped PrepTUBE down onto mixer and immediately twist clockwise to lock. Mixer will start and stop automatically.
- d. After mixer has stopped, twist the PrepTUBE counterclockwise and lift to remove.



- e. To clean tube, rinse under hot running water for 30 to 60 seconds turning upside down a few times to remove all AQUA solution and sample. For samples with high oil or residue, clean with hot soapy water. Rinse the soap off under running water.

7.0 How to Use The Two-Stage 100 μ L Fixed Pipette

Pipette Terms

Aspirate – to draw the sample up into the pipette tip

Blow out – to empty the tip completely

Pipetting Techniques

1. Press the operating button to the first stop.
2. Dip the tip into the solution and slowly release the operating button to "wet" the tip.
3. Press the operating button to the first stop again and slowly release the operating button. Wait 1–2 seconds and then withdraw the tip from the liquid, touching it against the edge of the reservoir to remove excess liquid.
4. Dispense the liquid into the receiving vessel by gently pressing the operating button to the first stop and then press the operating button to the second stop. This action will empty the tip. The tip can touch the bottom of the sample well to remove all the liquid.
5. Release the operating button to the "Ready" position.
6. Please consult the chart for visual instructions on operating the pipette. Be sure to always hold the pipette in a vertical position.

Pipette Positions

1. Press pipette button down to first stop and place the tip into liquid.



2. With tip in liquid, slowly aspirate (draw up) by letting button return to "Ready" position.



3. Dispense liquid into receiving vessel by pressing button to first stop and then to second stop. This will blow out the tip.





8.0 General Precautions

1. Do not open the strip test package until ready to put extract on the strip.
2. Do not run test in a location where air from an air conditioner, heater or window will blow directly on the strips.
3. Prolonged exposure of the test strips to high temperatures may adversely affect the test results. Protect strips from direct sunlight.
4. Pressing and holding the power button on Vertu TOUCH will turn the power off.



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