



## Fast, Precise, and Solvent-Free Fumonisin Test Results

VICAM's Fumo-V® AQUA™ answers one of today's toughest food safety challenges with a new user-friendly lateral flow fumonisin strip test that delivers accurate quantitative results in a matter of minutes while eliminating the risks and expense associated with on-site solvent use and disposal. Fumonisin is a mycotoxin produced by several fusarium mold species. Frequent, almost universal inhabitants of corn, fumonisin B<sub>1</sub> and fumonisin B<sub>2</sub> are present in most corn samples tested, often at greater than 1 parts per million (ppm). Fumonisin is thought to cause equine leukoencephalomalacia in horses, swine pulmonary edema, and human esophageal cancer.

The United States Food and Drug Administration/United States Department of Agriculture (US FDA/USDA) Working Group on fumonisin advises levels of less than (<) 4 ppm for products consumed by humans, < 5 ppm in horse feed, < 20 ppm for swine feed, and < 30 ppm for cattle feed.

The European Union (EU) recommends levels of fumonisin at or below: 0.8 ppm for maize-based breakfast cereal and snacks, 1 ppm for maize grits/flour/meal and refined maize semolina, 1 ppm for other maize-based foods for direct human consumption, and 4 ppm for unprocessed maize not intended for wet milling.

Fumo-V AQUA test strips use the proven sensitivity and selectivity of VICAM's monoclonal antibodies to accurately detect and measure total fumonisin B<sub>1</sub>, B<sub>2</sub>, and B<sub>3</sub> at levels as low as 0.2 ppm and as high as 100 ppm. Fumo-V AQUA eliminates the need for hazardous solvents using a water-based dilution-free extraction. The sample preparation procedure saves time and materials, and the test strip develops in just 5 minutes.\* Digital results are displayed on the Vertu® Lateral Flow reader, eliminating the need for subjective visual interpretation.

### BENEFITS

**Sustainable** – Safe, solvent-free testing

**Fast screening** – Results in 5 minutes\*

**Simple** – No special training required

**Sensitive** – Limits of detection as low as 0.2 ppm\*\*

**Convenient** – Easily performed onsite 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 ppm†

### HERE'S HOW SIMPLE VICAM TESTS ARE TO USE:

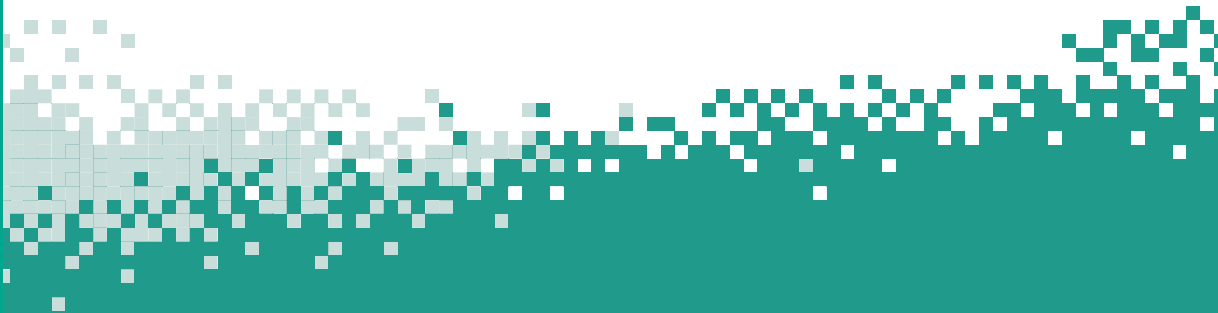
- Weigh sample
- Add AQUA Solution, mix
- Filter
- Transfer to the Fumo-V AQUA Test Strip
- Incubate the Test Strip for 5 minutes
- Insert the Fumo-V AQUA Test Strip into the Vertu Reader
- Read results

\*after extraction

\*\*limits of detection will vary based on procedure. Refer to manual

† with dilution

This procedure has been validated for corn.



## ORDERING INFORMATION

**FUMO-V AQUA CORN KIT ..... 176003952**  
(25 tests)

### KIT CONTENTS

Fumo-V Strip Tests ..... 100000264  
Micro-Pipette Tips, 100 µL ..... 600001109  
Filter Paper ..... 600001106  
Extraction Tubes, 40 mL ..... 600000827  
Fumo-V AQUA Corn Barcode ..... 715005262

### REQUIRED BUT NOT INCLUDED

AQUA Premix Solution ..... 100000339  
(900 mL)  
AQUA Premix Solution (4 L) ..... 100000345  
AQUA Premix Solution (20 L) ..... 100000347  
OR  
AQUA Solution A ..... 100000336  
AQUA Solution B ..... 100000337

**Strip Test vials (25) ..... 600000813**  
(for samples over 20ppm)  
**Vertu Mycotoxin BEQ, 110V ..... 176002078**  
**Vertu Mycotoxin BEQ, 220V ..... 176002079**

### EQUIPMENT PACKAGE CONTENTS

Vertu Reader, 110V & 220V ..... 725000574  
Vertu Bar-Code Scanner ..... 725000576  
Printer, 110V & 220V ..... 725000577  
Vortex Mixer ..... 23040  
Digital Timer ..... G4036  
Micro-Pipettor, 100 µL ..... 600001108  
Filter Funnel, 65 mm, (4 pack) ..... 36020  
Strip Test Vial Rack ..... 600001107  
Graduated Cylinder, 25 mL ..... 600000937  
Vertu Basic Instruction Guide ..... 715002426  
Extraction tubes ..... 600000827  
Micro-pipette tips ..... 600001109  
Strip test filters ..... 600001106  
Vortex sample holder ..... 600001136

\*Included with Fumo-V AQUA Corn Kit: Fumo-V Strip (25); Strip Test Filters (25); Micro-Pipette Tips, 100 µL (25); Extraction Tubes, 40 mL (50); Fumo-V AQUA Barcode Set; Fumo-V AQUA Instruction Guide

\*\*Included with Vertu Mycotoxin BEQ: Vertu Reader w/Barcode Scanner, Filter funnel, 65 mm (10); Graduated Cylinder, 25 mL; Micro-Pipettor, 100 µL; Strip Test Vial Rack (1); Digital Timer; Micro-Pipette Tips, 100 µL (25); Strip Test Filter (25); Extraction Tubes, 40 mL (25); Vortex Mixer, 100 V or 220 V; Vertu Instruction Manual; Optional: Printer offered with Order #176002078 and Order #76002079.

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