

**U.S. DEPARTMENT OF AGRICULTURE  
Federal Grain Inspection Service**

CERTIFICATE NO.: FGIS 2023-171

**CERTIFICATE OF CONFORMANCE**

Quantitative test kit for aflatoxins in corn (including dent or field corn, corn meal, cracked corn, corn grits or polenta, and corn screenings) and additional commodities listed under TEST 3.

For: EnviroLogix Inc.  
Method: Lateral Flow Strip

Submitted by: EnviroLogix Inc.  
500 Riverside Industrial Pkwy  
Portland, ME 04103  
Telephone: (207) 797-0300  
Contact: Ms. Carolyn Malloy

**Standard Features and Options**

Model: TotalTox Aflatoxin, Product # AQ 309 BG  
Sample Preparation: Grind sample so that at least 95% passes through a 20 mesh sieve  
Extraction Method: Shake 50-gram sample with two EB17 pouches and 150 mL deionized or distilled water using mechanical shaker at 300 rpm for one minute. For distillers dried grains with solubles, use 200 mL of 50% reagent ethanol instead of two EB17 pouches and 150 mL water.  
Temperature Range: 18 – 30 °C (64 – 86 °F)  
Aflatoxin Level: 5.0 – 300 ppb  
Detection Technique: EnviroLogix QuickScan System and EnviroLogix QuickScan II Reader

Test kits must be operated according to the FGIS-issued instructions.

This test kit underwent an initial verification of performance under the authority of Section 79b (c) of the United States Grain Standards Act, as amended, and was found to meet all test performance criteria as defined in “Design Criteria and Test Performance Specifications for Quantitative Aflatoxin Test Kits,” June 2018 version. Evaluation tests that passed are summarized in Attachment I.

For further information, contact:

USDA, Federal Grain Inspection Service  
Technology and Science Division  
Analytical Chemistry Branch  
10383 N. Ambassador Drive  
Kansas City, Missouri 64153-1394 Telephone: (816) 702-3800

Date: 2/8/2023

Thomas A. Weber, Chief, Analytical Chemistry Branch  
Technology and Science Division

*Certificate Expires Three Year from the Date Signed*

Note: The mention of firm name or trade products does not imply that they are endorsed or recommended by the United States Department of Agriculture over other firms or similar products not mentioned.

Type Evaluation  
Certificate No.: FGIS 2023-171

ATTACHMENT I

Manufacturer: EnviroLogix Inc.  
500 Riverside Industrial Pkwy  
Portland, ME 04103  
Telephone: (207) 797-0300  
Contact: Ms. Carolyn Malloy

TEST 1: TIME REQUIRED FOR COMPLETION OF AN ANALYSIS.

The data submitted by the manufacturer indicated that the analysis time required for one sample was less than the maximum limit of 30 minutes.

TEST 2: COMPARATIVE ACCURACY OF TEST KITS ON CORN SAMPLES NATURALLY-CONTAMINATED WITH AFLATOXINS.

The data submitted by the test kit manufacturer for four corn samples, naturally contaminated at approximately 5, 20, 100, and 300 ppb total aflatoxins, met the performance criteria.

TEST 3: ADDITIONAL COMMODITIES.

The manufacturer submitted data supporting the performance of this kit for the following additional commodities: distillers dried grains with solubles (DDGS) and sorghum

TEST 4: AVOIDANCE OF TOXIC OR HAZARDOUS SUBSTANCES.

The Safety Data Sheets provided by the manufacturer confirmed this test kit meets safety requirements.

TEST 5: SENSITIVITY TO ELECTROMAGNETIC FIELDS (EMF).

A statement of certification has been provided that indicated the EnviroLogix QuickScan System and EnviroLogix QuickScan II Reader met the EMF sensitivity requirements.

TEST 6: TEMPERATURE SENSITIVITY.

The data submitted by the test kit manufacturer supported performance of the kit at 18 °C, 24 °C, and 30 °C.

TEST 7: STABILITY.

The data submitted by the test kit manufacturer supported storage and stability claims.

TEST 8: FGIS PERFORMANCE VERIFICATION.

The data generated by FGIS staff showed the test kit is capable of quantifying aflatoxins in corn in the range of 5.0 – 300 ppb total aflatoxins. The evaluation was conducted using the EnviroLogix QuickScan System and EnviroLogix QuickScan II Reader.