

# Refer to Current Charm® Operator's Manual for Complete Test Procedure

## ROSA® FAST Aflatoxin Quantitative Test (5 Minutes)

FAST FAST FAST

See Approved Commodities Below

**Test Ranges:** 0 to 30 ppb  
0 to 150 ppb

### FGIS-Approved Commodities:

**A<sup>2</sup>:1 Extraction Ratio:** Barley, Brown Rice, Corn Gluten Meal, Corn/Soy Blend, Hominy, Millet, Popcorn, Rough Rice, Rye, Sorghum, Soybean Meal, Wheat

**B<sup>3</sup>:1 Extraction Ratio:** Corn Germ Meal, Distillers Dried Grain, Distillers Dried Grain with Solubles, Oats, Soybean Hulls, Soybeans

### Charm-Validated Commodities:

**A<sup>2</sup>:1 Extraction Ratio:** Milled Rice

Sample Preparation



### (1) Weigh

Ground sample<sup>C</sup>

50 g  
or 10g



### (2) Add Solvent

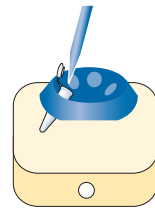
70% Methanol

100 mL<sup>A</sup> / 150 mL<sup>B</sup>  
or 20 mL<sup>A</sup>/30 mL<sup>B</sup>



### (3) Extract

Shake vigorously or blend for 1 minute; do not exceed 2 minutes

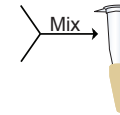


### (4) Clarify

Centrifuge or allow sample to settle



100 µL Extract +  
1.0 mL AFQ Dilution Buffer

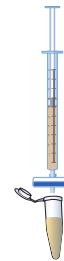


Diluted Extract

### (5) Dilute

Prepare Diluted Extract

**Filter for:**  
Barley, Corn Gluten Meal, Corn/Soy Blend, Oats, Popcorn, Rye, and Wheat



Pass diluted extract through RC15 Filter

<sup>C</sup>50 g is the official FGIS required / Charm recommended sample weight, 10 g is an unofficial / optional sample weight

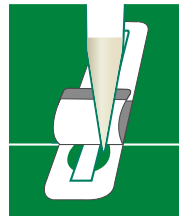
Test Procedure



### (1)

Place test strip in ROSA Incubator or Charm EZ<sup>®</sup>-M system.

For Charm EZ-M system select appropriate test, commodity and dilution if prompted.



### (2)

Peel tape.

Pipet 300 µL **Diluted Extract** into sample compartment.

Reseal tape.



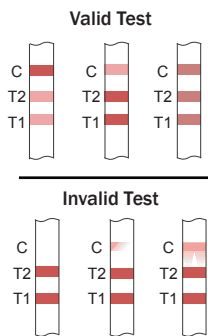
### (3)

Close lid.

Incubate for 5 minutes.

Read Result

### (1) Inspect test strip



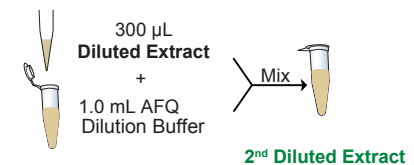
### (2) Read result with ROSA-M Reader or Charm EZ-M system

**ROSA-M Reader:** Select AFLA SL channel in 3-line mode (blinking) and appropriate MATRIX.

**Charm EZ-M system:** Select appropriate test, commodity and dilution if prompted.

Extraction Ratio	Sample (Dilution)	MATRIX	Quantitation Range	LOD
<b>A<sup>2</sup>:1</b>	Diluted Extract (DE)	02	5 to 30 ppb	2 ppb
	<b>2<sup>nd</sup> Diluted Extract (2ND DE)</b>	03	<b>20 to 100 ppb</b>	-
<b>B<sup>3</sup>:1</b>	Diluted Extract (DE)	04	5 to 30 ppb	2 ppb
	<b>2<sup>nd</sup> Diluted Extract (2ND DE)</b>	05	<b>20 to 100 ppb</b>	-

### For quantitation of 20 to 100 ppb:



### (1) Prepare 2<sup>nd</sup> Diluted Extract

### (2) Repeat Test Procedure (steps 1, 2, 3) with 2<sup>nd</sup> Diluted Extract

### (3) Read Result