

ROSA® FAST5 Fumonisin Quantitative Test Flow Chart

FAST5 FAST5 FAST5

See Approved Commodities Below

Quantitation Ranges: 0 to 1.5 ppm
0 to 6 ppm

GIPSA-Approved Commodities:

A2:1 Extraction Ratio: Barley, Corn, Flaking Corn Grits, Millet, Oats, Rough Rice, Sorghum, Wheat

Charm-Validated Commodities:

A2:1 Extraction Ratio: Corn Gluten Meal

B3:1 Extraction Ratio: Distillers Dried Grain with Solubles (DDGS)

Sample Preparation



(1) Weigh

Ground sample^c

50 g
or 10 g



(2) Add Solvent

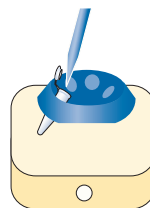
70% Methanol

100 mL^A/ 150 mL^B
or 20 mL^A/30 mL^B



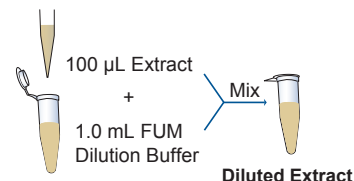
(3) Extract

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



(4) Clarify

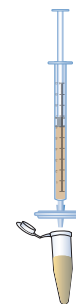
Centrifuge, filter or allow sample to settle



(5) Dilute

Prepare **Diluted Extract**

Filter for:
Barley and Wheat



Pass Diluted Extract through RC15 filter

^c50 g is the official GIPSA required/Charm recommended sample weight, 10 g is an unofficial/optional sample weight

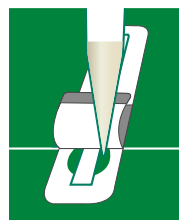
Test Procedure



(1)

Place test strip in ROSA Incubator or Charm EZ[®]-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.

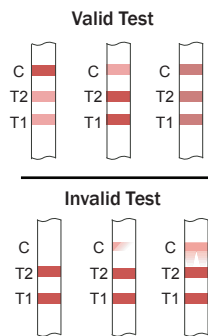


(3)

Close lid.
Incubate for 5 minutes.

Read Result

(1) Inspect test strip



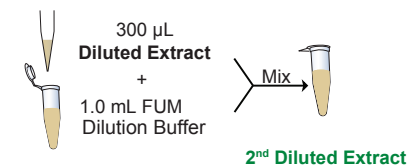
(2) Read result with ROSA-M Reader or Charm EZ-M system

ROSA-M Reader: Select FUM 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 |
|------------------------|--|-----------|---------------------|-----------------|
| 2:1^A | Diluted Extract (DE) | 00 | 0 to 1.5 ppm | 0.25 ppm |
| | 2nd Diluted Extract (2ND DE) | 01 | 1 to 6 ppm | - |
| 3:1^B | Diluted Extract (DE) | 03 | 0 to 1.5 ppm | 0.25 ppm |
| | 2nd Diluted Extract (2ND DE) | 04 | 1 to 6 ppm | - |

For quantitation of 1 to 6 ppm:



(1) Prepare 2nd Diluted Extract

(2) Repeat Test Procedure (steps 1, 2, 3) with 2nd Diluted Extract

(3) Read Result