Refer to Current Operator's Manual for Complete Test Procedure

ROSA® FAST5 Fumonisin Quantitative Test Flow Chart

See Approved Commodities Below

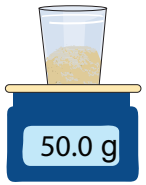
Test Ranges: 0 to 1.5 ppm
0 to 6 ppm

Charm-Validated Commodities:

[A]**2:1 Extraction Ratio:** Barley, Corn, Corn Gluten Meal, Flaking Corn Grits, Millet, Oats, Rough Rice, Sorghum, Wheat

[B]**3:1 Extraction Ratio:** Distillers Dried Grain with Solubles (DDGS)
[C]**3:1 Extraction Ratio:** Corn Germ Meal

Sample Preparation



(1) Weigh

Ground sample[D]

50 g
or 10 g

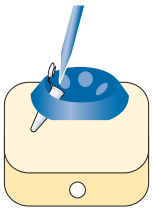
(2) Add Solvent

70% Methanol

100 mL[A]/ 150 mL[BC]
or 20 mL[A]/30 mL[BC]

(3) Extract

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



(4) Clarify

Centrifuge, filter or allow sample to settle

100 µL Extract*
+
1.0 mL FUM Dilution Buffer

*158 µL Extract for Corn Germ Meal

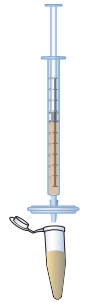
Mix

Diluted Extract

(5) Dilute[E]
Prepare **Diluted Extract**

Filter for:

Barley and Wheat



Pass Diluted Extract through RC15 filter

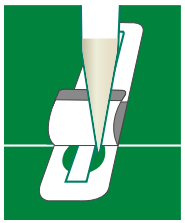
[D]**50 g is the Charm recommended sample weight, 10 g is an optional sample weight**
[E]**Diluted Extract for corn germ meal samples cannot be assayed, continue to prepare and assay 2nd Diluted Extract**

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.

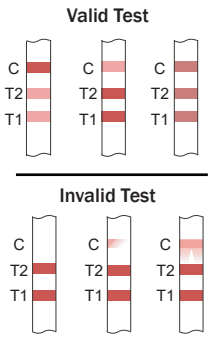
(3)

Close lid.

Incubate for 5 minutes.

Read Result

(1) Inspect test strip



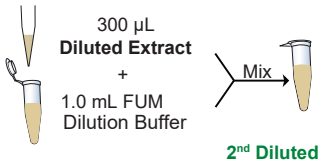
(2) Read result with ROSA-M Reader or Charm EZ-M system

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	0.5 to 1.5 ppm	0.25 ppm
	2nd Diluted Extract (2ND DE)	01	1 to 5.4 ppm	-
3:1[B]	Diluted Extract (DE)	03	0.5 to 1.5 ppm	0.25 ppm
	2nd Diluted Extract (2ND DE)	04	1 to 5.4 ppm	-
3:1[C]	2nd Diluted Extract (2ND DE)	01	1 to 5.4 ppm	-

For quantitation of 1 to 5.4 ppm:



(1) Prepare 2nd Diluted Extract

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

(3) Read Result

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