

ROSA® FAST5 Fumonisin Quantitative Test Flow Chart

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: Corn Germ Meal, Distillers Dried Grain with Solubles (DDGS)

Sample Preparation

(1) Weigh
Ground sample
50 g

(2) Add Solvent
70% Methanol
100 mL^A/ 150 mL^B

(3) Extract
Shake vigorously or blend for 1 minute; do not exceed 2 minutes.

(4) Clarify
Centrifuge or allow to settle

(5) Dilute^C
Prepare **Diluted Extract**

(6) Dilute
Prepare **2nd Diluted Extract**

^CDiluted 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** or **2nd 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 | - |