

ABRAXIS[®] Glyphosate in Corn, Soybeans, Dry Pasta, Durum Wheat, Barley, Whole Oats, and Oat Groats

Sample Preparation for Strip Test

1. Intended Use

For the detection of Glyphosate in Corn, Soybeans, Dry Pasta, Durum Wheat, Barley, Whole Oats, and Oat Groats.

2. Sensitivity

10 ppb in matrix

3. Materials and Reagents Required

Analytical balance

20 mL or greater volume size of plastic/glass bottles or vials

Serological pipette or graduated cylinder

Disposable pipettes (optional)

Micropipettes with disposable plastic tips (optional)

Vortex mixer (optional)

Timer

Rotator and/or shaker

Blender or grinder device (i.e. food processor, coffee bean grinder, etc.)

Deionized or distilled water

ABRAXIS[®] Glyphosate Strip Test (PN 500095 [20T]; PN 500098 [5T])

4. Notes and Precautions

This procedure is intended for use with corn, soybeans, dry pasta, durum wheat, barley, whole oats, and oat groats. Samples should be ground into a powder-like consistency using a blender or grinder device (i.e. food processor, coffee bean grinder, etc.). Other matrices should be thoroughly validated before use with this procedure.

5. Sample Preparation Procedure

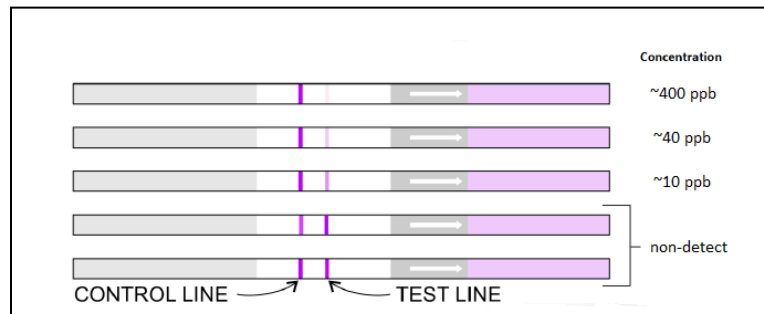
- 5.1 Weigh 0.5 g of sample powder into an appropriately labeled bottle or vial.
- 5.2 Add 10 mL of deionized or distilled water. Vortex or shake to mix.
- 5.3 Place sample bottle/vial onto rotator or shaker for 10 minutes.
- 5.4 Remove sample bottle/vial from the rotator or shaker. Let the sample settle for at least 2 minutes before analyzing with the Glyphosate Strip Test. Proceed to Sections E (Test Preparation) and F (Testing of Samples) in the Glyphosate Strip Test Kit user's guide.

6. Evaluation of Results

Corn, soybean, dry pasta, durum wheat, barley, whole oat, and oat groat sample concentration is determined by comparison of the intensity of the test line to the intensity of the control line on the same test strip. Although control line intensity may vary, a visible control line must be present for results to be considered valid. Test strips with a test line which is darker than or of equal intensity to the control line indicates a result which is below the limit of detection of the test. Test strips with a test line which is lighter than the control line indicates a result which is between 10 ppb and 400 ppb. Test strips with a very faint test line or no test line visible indicates a result which is > 400 ppb. Results should be determined within 5-10 minutes after completion of the strip test procedure. Determination made using strips which have dried for more or less than the required time may be inaccurate, as line intensities may vary with drying time.

<u>Control Line</u>	<u>Test Line</u>	<u>Interpretation</u>
No control line present	No test line present	Invalid result
Control line present	Very faint or no test line present	>400 ng/mL (ppb)
Control line present	Moderate intensity test line present	Between 10 and 400 ng/mL (ppb)

The appearance of test strips may also be compared to the illustration below to determine approximate sample concentration ranges. Please note that the illustration is intended for the demonstration of test line to control line intensity only. Results should not be determined by comparing the intensity of test lines from test strips to the test line intensity of the illustration, as the overall intensity of test strips may vary slightly with different lots of reagents. To obtain semi-quantitative results in the range of 0-400 ppb, solutions of known Glyphosate concentration (control solutions) must be tested concurrently with samples. Sample test line intensities can then be compared with control solution test line intensities, yielding approximate sample concentrations. Do not use strips run previously to determine semi-quantitative sample concentrations, as test line intensities may vary once strips are completely dry.



7. Performance Data

The ABRAXIS® Glyphosate Strip Test for corn, soybean, dry pasta, durum wheat, barley, whole oat, and oat groat samples will detect in the range of 10 ppb or higher due to the 20-fold dilution required during sample preparation. At this level, the test line exhibits moderate intensity. At levels greater than 400 ppb, the test line is faint or not visible.

8. Assistance

For ordering or technical assistance contact:

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