

## Glyphosate (incl. AMPA), and Glufosinate in Soil Technical Data Sheet

<b>Analytes:</b>	AMPA (Glyphosate Metabolite), Glufosinate, Glyphosate
<b>Scope:</b>	Soil
<b>Method Description:</b>	A homogenized portion of sample is shaken in an aqueous base. The extract is cleaned using anion exchange column chromatography to remove matrix interferences. An aliquot is derivatized and analyzed using reverse-phase liquid chromatography, tandem mass-spectroscopy (LC-MS/MS). Analyte quantification uses a multi-level calibration. Batch QC includes a matrix spike fortified with the tested analytes. Multiple MS-MS (MRM) transitions or alternate chromatography may be used for result confirmation. Isotopic analogue(s) are used to correct for variations in analyte, recovery, derivatization efficiency, and/or instrument response due to matrix type. Analytes are measured as a methylated, N-acetyl derivative.
<b>Limit of Detection:</b>	0.01 - 0.05 ppm (ug/g)
<b>Sample Size Requirements:</b>	A minimum of 120 grams of homogeneous sample is needed for analysis.
<b>Turn Around Time:</b>	7 business days; Rush service (3-5 days) is available. Turnaround times may be subject to change dependent on analytes detected, additional verification may be required.
<b>Method Reference(s):</b>	OMIC USA, Internally developed method based on J. Agric. Food Chem, 2004, 52, 4057-4063 modified for LC/MS/MS
<b>Additional Information:</b>	Please specify if results need to be corrected for soil moisture content (moisture analysis will be required). Soil samples from outside the continental United States can only be accepted through prior arrangement with our laboratory and the United States Dept. Agriculture (USDA). Please contact <a href="mailto:sales.us@omicusa.com">sales.us@omicusa.com</a> for more information.