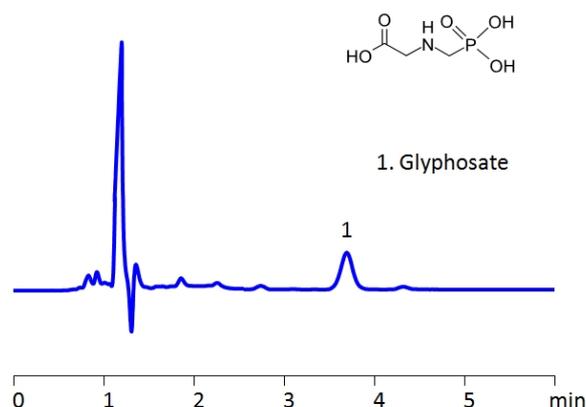


HPLC Determination of Glyphosate on Newcrom B Column



Column:	Newcrom B
Column size:	3.2 × 100 mm, 5 µm
Mobile phase:	MeCN/H ₂ O – 10/90%
Buffer:	H ₃ PO ₄ – 0.08%
Detection:	UV 200 nm
Flow rate:	0.5 ml/min

High Performance Liquid Chromatography (HPLC) Method for Analysis of Glyphosate .

Glyphosate is a broad-spectrum herbicide. It works through inhibiting the plant enzyme 5-enolpyruvylshikimate-3-phosphate synthase. The enzyme is essential for producing amino acids within the plant. Glyphosate is used across agriculture and forestry, as well as rare aquatic environments. It's chemical formula is C₃H₈NO₅P .

Glyphosate can be retained in HPLC with a Newcrom B mixed-mode column using a mobile phase of acetonitrile (ACN, MeCN), water and phosphoric acid (H₃PO₄) buffer allowing the use of a UV detector at 200 nm.

Method Parameters

Column	Newcrom B, 3.2 x 100 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 10/90%
Buffer	H ₃ PO ₄ – 0.08%
Flow Rate	0.5 mL/min
Detection	UV 200 nm

Quelle: <https://sielc.com/hplc-determination-of-glyphosate-on-newcrom-b-column>