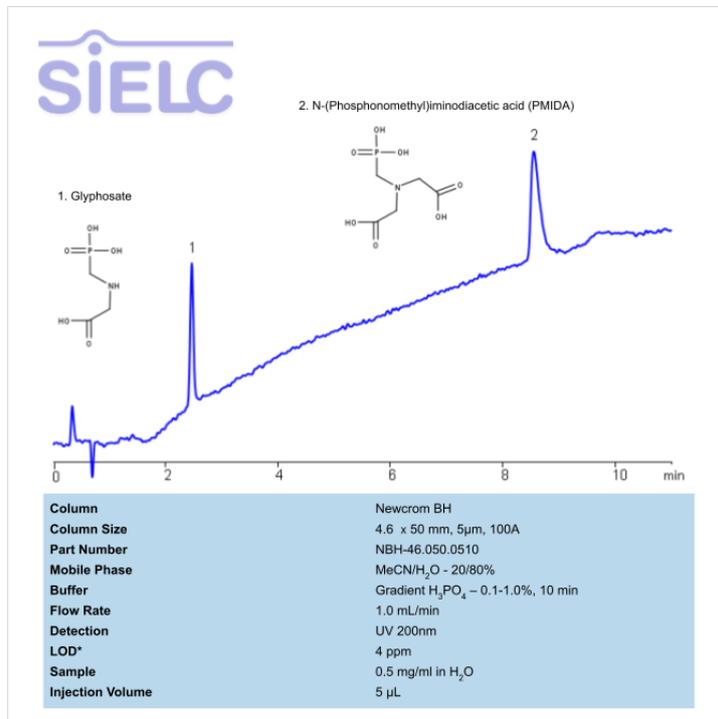


## HPLC UV Method for Simultaneous Analysis of Glyphosate and N-(Phosphonomethyl)iminodiacetic acid (PMIDA) on Newcrom BH Column



High Performance Liquid Chromatography (HPLC) Method for Analysis of PMIDA (Phosphonomethyliminodiacetic acid) , 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 C<sub>3</sub>H<sub>8</sub>NO<sub>5</sub>P . You can find detailed UV spectra of Glyphosate and information about its various lambda maxima by visiting the following link.

N-(Phosphonomethyl)iminodiacetic acid , also known as PMIDA , is a key intermediate in the making of glyphosate. It has the chemical formula (HO) <sub>2</sub> P(O)CH<sub>2</sub>N(CH<sub>2</sub>CO<sub>2</sub>H) <sub>2</sub> . You can find detailed UV spectra of PMIDA and information about its various lambda maxima by visiting the following link.

PMIDA (Phosphonomethyliminodiacetic acid) , Glyphosate can be retained and analyzed using the Newcrom BH stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a phosphoric acid buffer. Detection is performed using UV.

## Method Parameters

<b>Column</b>	Newcrom BH, 4.6 x 50 mm, 5 µm, 100 Å, dual ended
<b>Mobile Phase</b>	MeCN/H2O
<b>Buffer</b>	Gradient H3PO4 – 0.1-1%, 10 min
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	UV, 200 nm

Quelle: <https://sielc.com/hplc-method-for-glyphosate-and-pmida>