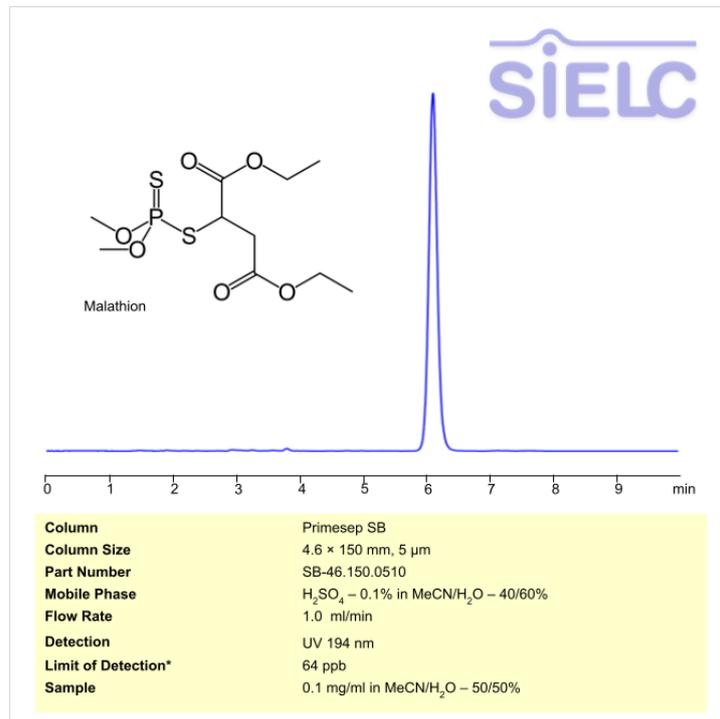


## HPLC Method for Analysis of Malathion on Primesep SB Column



### High Performance Liquid Chromatography (HPLC) Method for Analysis of Malathion

Malathion is the most widely used organophosphate pesticide with the chemical formula C<sub>10</sub>H<sub>19</sub>O<sub>6</sub>PS<sub>2</sub>. In the US, it is used heavily in residential landscaping and in public recreation areas, especially for fruit fly and mosquito eradication. While not considered toxic to humans, malathion metabolizes to a far more toxic malaoxon. The EURL (European Union Reference Laboratory), included malathion as a target pesticide for the EUPT-CF9 a proficiency test for cereals and feedingstuff that require multi-residue methods. You can find detailed UV spectra of Malathion and information about its various lambda maxima by visiting the following link.

Malathion can be retained and analyzed using the Primesep SB stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

### Method Parameters

<b>Column</b>	Primesep SB, 4,6 x 150 mm, 5 µm, 100 Å, dual ended
<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O – 40/60%
<b>Buffer</b>	H <sub>2</sub> SO <sub>4</sub> – 0.1%
<b>Flow Rate</b>	1.0 mL/min
<b>Detection</b>	UV 194 nm

Quelle: <https://sielc.com/hplc-ms-separation-of-malathion>