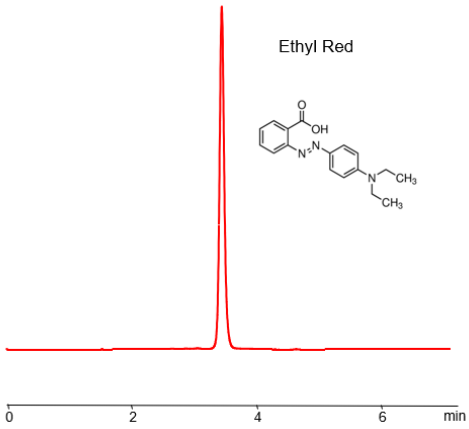
HPLC Method for Analysis of Ethyl Red on Primesep 100 Column



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 µm
Column part number:	100-46.150.0510
Mobile phase:	MeCN/H_2O – 80/20%
Buffer:	H_2SO_4 - 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 550 nm

Ethyl Red is a pH indicator with C17H19N3O2as its molecular structure. When the pH transitions from acidic to neutral, Ethyl red turns from yellow to red, hence the name. Outside of experiments, it is occasionally used as a dye in textiles and foods . You can find detailed UV spectra of Ethyl red and information about its various lambda maxima by visiting the following link.

Ethyl red can be retained and analyzed on a Primesep 100 mixed-mode stationary phase column using an isocratic analytical method with a simple isocratic mobile phase of water, Acetonitrile (MeCN), and a sulfuric acid (H2SO4) buffer. This analysis method can be UV detected at 600 nm with high resolution and peak symmetry.

Method Parameters

Column	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 80/20%
Buffer	H3PO4 – 0.2%
Flow Rate	1.0 mL/min
Detection	UV, 550 nm

Quelle: https://sielc.com/hplc-determination-of-ethyl-red-2