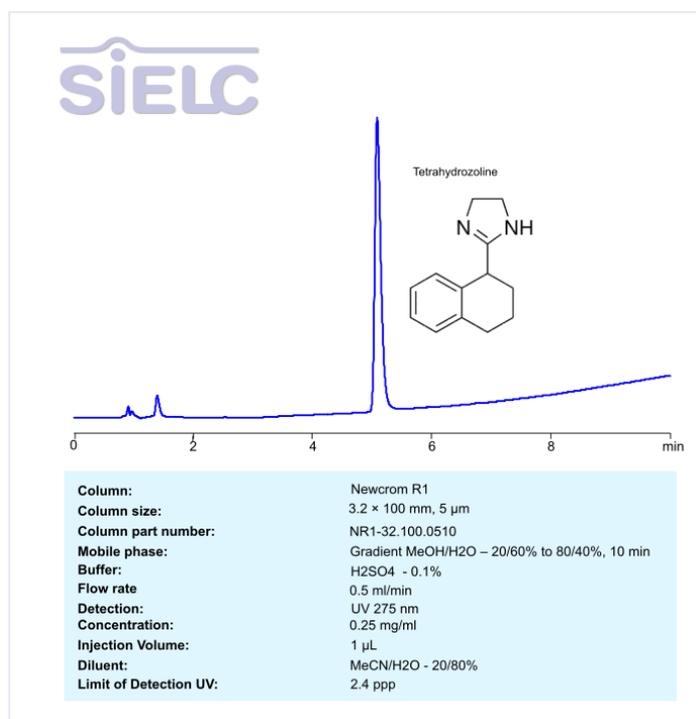


HPLC Method for Analysis of Tetrahydrozoline Hydrochloride in Redness Relief Eye Drops on Newcrom R1 column



High Performance Liquid Chromatography (HPLC) Method for Analysis of Tetrahydrozoline

Tetrahydrozoline is a medication primarily used as a topical decongestant. It is commonly found in over-the-counter eye drops (e.g., Visine) and nasal sprays to relieve redness in the eyes or nasal congestion.

Tetrahydrozoline can be retained and analyzed using the Newcrom R1 stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water, methanol (MeOH), and sulfuric acid. Detection is performed using UV at 275 nm.

*LOD was determined for this combination of instrument, method, and analyte, and it can vary from one laboratory to another even when the same general type of analysis is being performed.

Method Parameters

Column	Newcrom R1, 3.2 x 100 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Gradient MeOH – 20-60%, 10 min
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	0.5 mL/min
Detection	UV 275 nm
Limit of Detection	2.4 ppb

Quelle: https://sielc.com/hplc_method-for-analysis-tetrahydrozoline