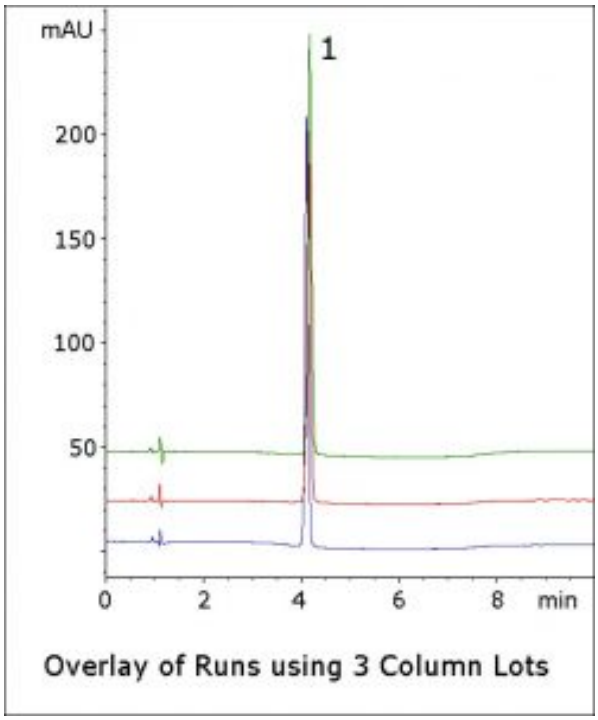
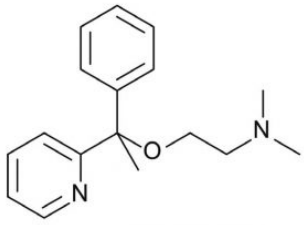
Doxylamine Succinate Tablet Analyzed by HPLC – AppNote

Shorter Run Time than USP Method

The USP Assay Method for Doxylamine Succinate tablets uses Triethylamine and Sodium Lauryl Sulfate in the Mobile Phase. These reagents are slow to fully load onto the Column, resulting in long run times and poor Robustness. This Method uses Trifluoroacetic Acid to get an excellent Peak Shape. An overlay of injections from three different lots is shown in order to illustrate the Reproducibility of this Method.





Peak:

Doxylamine

Method Conditions

Column: Cogent Diamond Hydride™, 4µm, 100Å

Catalog No.: 70000-7.5P

Dimensions: 4.6 x 75mm

Mobile Phase:

A: DI Water / 0.1% Trifluoroacetic Acid (TFA)

B: Acetonitrile / 0.1% Trifluoroacetic Acid (TFA)

Gradient:

Time *(minutes)*	%B
0	95
1	95
6	50
7	95

Injection vol.: 2µL

Flow rate: 1.0mL / minute

Detection: UV @ 254nm

Sample Preparation: 25mg strength Doxylamine Succinate tablet was ground and added to a 50mL volumetric flask containing a portion of 50:50 Solvent A / Solvent B diluent. Solution was then sonicated for 10 minutes and diluted to mark. A portion was filtered with a 0.45µm Nylon Syringe Filter (MicroSolv Tech Corp.).

t0: 0.9 minutes

Note: *Doxylamine is an antihistamine with sedative properties. It is used to treat insomnia and as a sleep aid for this reason. It is found in many common Over-The-Counter drug formulations.*

Attachment

No 198 Doxylamine Succinate Tablet Analyzed by HPLC pdf 0.5 Mb Download File

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