MICROS

Ivermectin Analyzed with HPLC – AppNote

A Robust Method for Analysis of an Antiparasitic Medication

A robust and reproducible Method has been developed for this anthelmintic agent. The data below (an overlay of 10 chromatograms) illustrates both excellent Peak Shape and Retention using this easy Method.



1. Ivermectin

Method Conditions

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



Catalog No.: 69020-15P

Dimensions: 4.6mm x 150mm

Mobile Phase:

A: DI Water with 0.1% Formic Acid

B: Acetonitrile with 0.1% Formic Acid

Time (minutes)	%B
0	30
1	30
5	75
6	75
7	30
10	30

Injection vol.: 5μL Flow rate: 1.0mL / minute Detection: UV @ 254nm Diluent: 50:50 DI Water / Acetonitrile Sample Preparation: Ivermectin prepared as 6μg / mL Standard Solution in Diluent. to: 1.6 Minutes K: 4.53 %RSD of 10 injections: <0.1%

Notes: Ivermectin is a semi-synthetic Antiparasitic Medication derived from Avermectins, a class of highly-active broad-spectrum Antiparasitic Agents isolated from the fermentation products of Streptomyces avermitilis. This drug is used in the treatment of Onchocerciasis, but may also be effective against other worm infestations (such as Strongyloidiasis, Ascariasis, Trichuriasis and Enterobiasis). Applied topically, it may be used in the treatment of head lice infestation.

Notes: Calculation for *Capacity Factor* – *Relative Retention* $\mathbf{k} = (tR-t0)/t0$



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