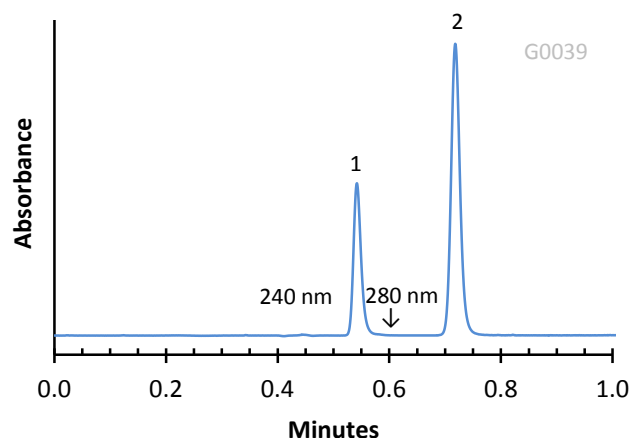


Application Note: 57-AM

Isocratic Separation of Amphenicols on HALO Phenyl-Hexyl Phase



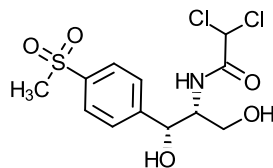
PEAK IDENTITIES:

1. Thiamphenicol
2. Chloramphenicol

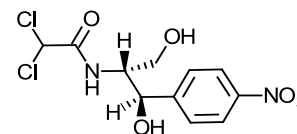
TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO Phenyl-Hexyl
Part Number: 92814-406
Mobile Phase: 55/45-A/B
A= 0.025 M Ammonium acetate buffer, pH=5.8
B=Acetonitrile
Flow Rate: 1.0 mL/min.
Pressure: 94 Bar
Temperature: 35 °C
Detection: UV 240/280 nm, VWD
Injection Volume: 0.3 µL
Sample Solvent: Acetonitrile
Response Time: 0.02 sec.
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra column volume: ~14 µL

STRUCTURES:



Thiamphenicol



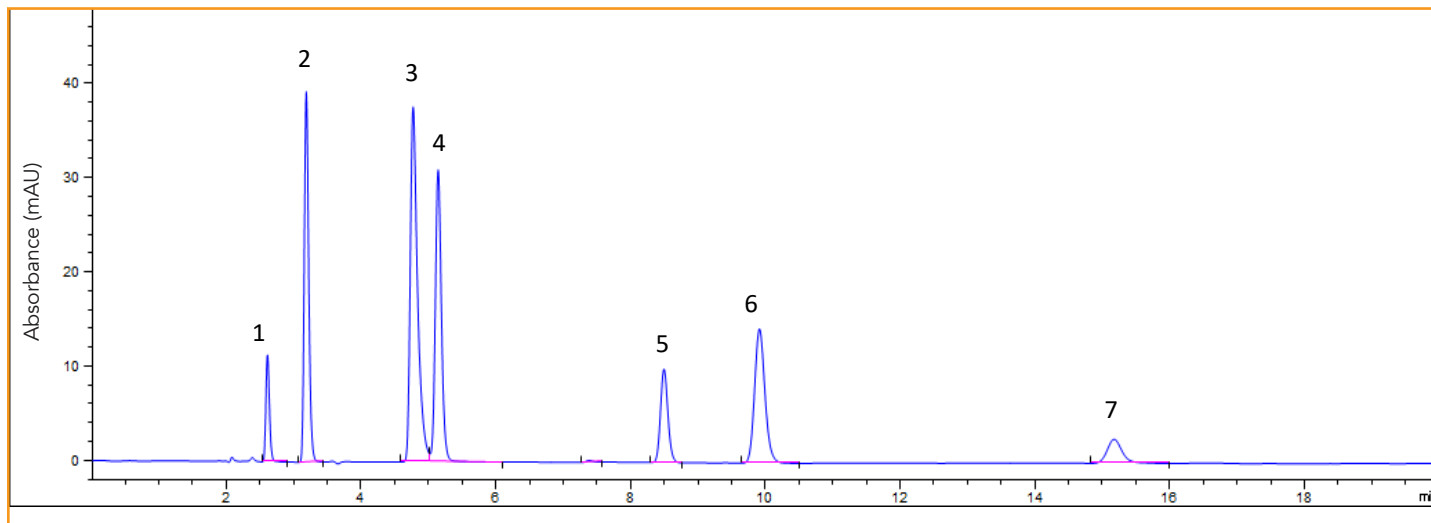
Chloramphenicol

This separation shows a rapid HPLC method for the analysis of amphenicols on HALO Phenyl-Hexyl stationary phase. To improve the sensitivity of detection the first peak was monitored @ 240 nm and the second @ 280 nm.



Chloroquine Phosphate Assay and Impurity Profiling

252-P



PEAK IDENTITIES

1. Phenol
2. Chloroquine related compound G (RCG)
3. Chloroquine related compound D (RCD)
4. Hydroxychloroquine sulfate
5. Chloroquine related compound A (RCA)
6. Chloroquine Phosphate
7. Chloroquine related compound E (RCE)

TEST CONDITIONS:

Column: HALO 90 Å C18, 5 µm, 4.6 x 250mm
Part Number: 95814-902
Mobile Phase: 70/30 Methanol/buffer/0.4% triethylamin
 buffer: 1.4 g K₂HPO₄ in 1000 mL, adjust to pH 3.0
 using H₃PO₄

Isocratic

Flow Rate: 1 mL/min
Pressure: 237 bar
Temperature: 30 °C
Detection: UV @ 260 nm
Injection Volume: 20 µL
Sample Solvent: mobile phase
Flow Cell: 10 µL

Chloroquine Phosphate is in a class of drugs called antimalarials/ amebiasis and is used to prevent and treat malaria. A quick and easy HPLC method is used for the chromatographic purity of Chloroquine Phosphate. These conditions follow the USP43-NF38 monograph methods for Chloroquine Phosphate Assay and Impurity Profiling with minor modifications in the sample concentration. The isocratic method shows excellent resolution and peak shape using a HALO® 5 µm C18 column. A 6.0 resolution value between chloroquine phosphate and chloroquine related compound A is well over the USP requirement. (> 2.0)

