

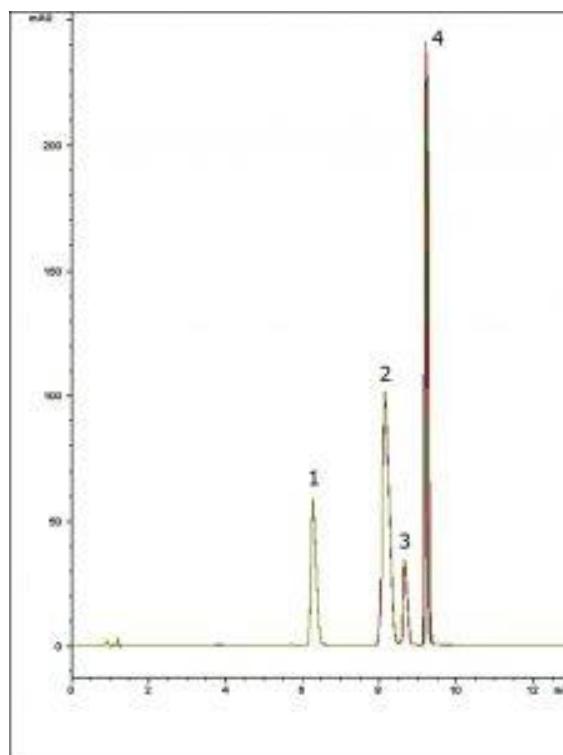


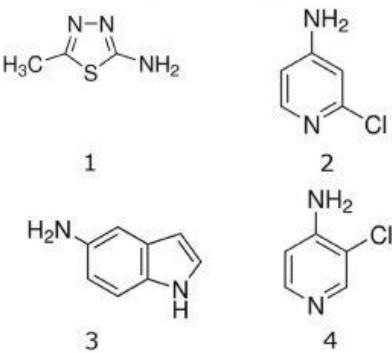
Thiazole, 4-Amino-2-Chloropyridine, 5-Amino-1H-Indole, 4-Amino-3-Chloropyridine - AppNote

Separation of Four Amine Containing Test Solutes Organic Bases and Isomers at a Low pH

The four test solutes selected for this application are both well-retained and well-resolved. In particular, the separation between the two isomers is readily accomplished, which may be difficult to achieve in Reversed Phase.

This Method uses only Formic Acid as the Mobile Phase additive and is LCMS compatible. This is in contrast with many Reversed Phase methods, which may require Ion Pair Agents in the Mobile Phase.





Peaks:

1. 2-Amino-5-Methyl-1,3,4-Thiazole
2. 4-Amino-2-Chloropyridine
3. 5-Amino-1H-Indole
4. 4-Amino-3-Chloropyridine

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% Formic Acid (v/v)
B: Acetonitrile / 0.1% Formic Acid (v/v)

Gradient:

Time (minutes)	%B
0	95
2	95
9	65
10	95

Post Time: 3 minutes

Flow rate: 1.0 mL/minute

Detection: UV @ 254 nm

Injection vol.: 1 μ L

Sample Preparation: 1mg/mL stock solutions of the four test solutes were prepared using a 50 / 50 Solvent A / Solvent B diluent. 100 μ L Aliquots of each were mixed and diluted with 600 μ L of the diluent

t₀: 0.9 minutes

Note: Organic bases have a tendency to tail using many HPLC Columns due to interactions with residual silanols on the stationary phase surface. With TYPE-C™ Silica based columns these silanols are mostly replaced with Si-H groups, which often leads to more symmetrical peak shapes for these kinds of analytes.



Attachment No 170 Organic Bases and Isomers pdf 0.5 Mb [Download File](#)

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