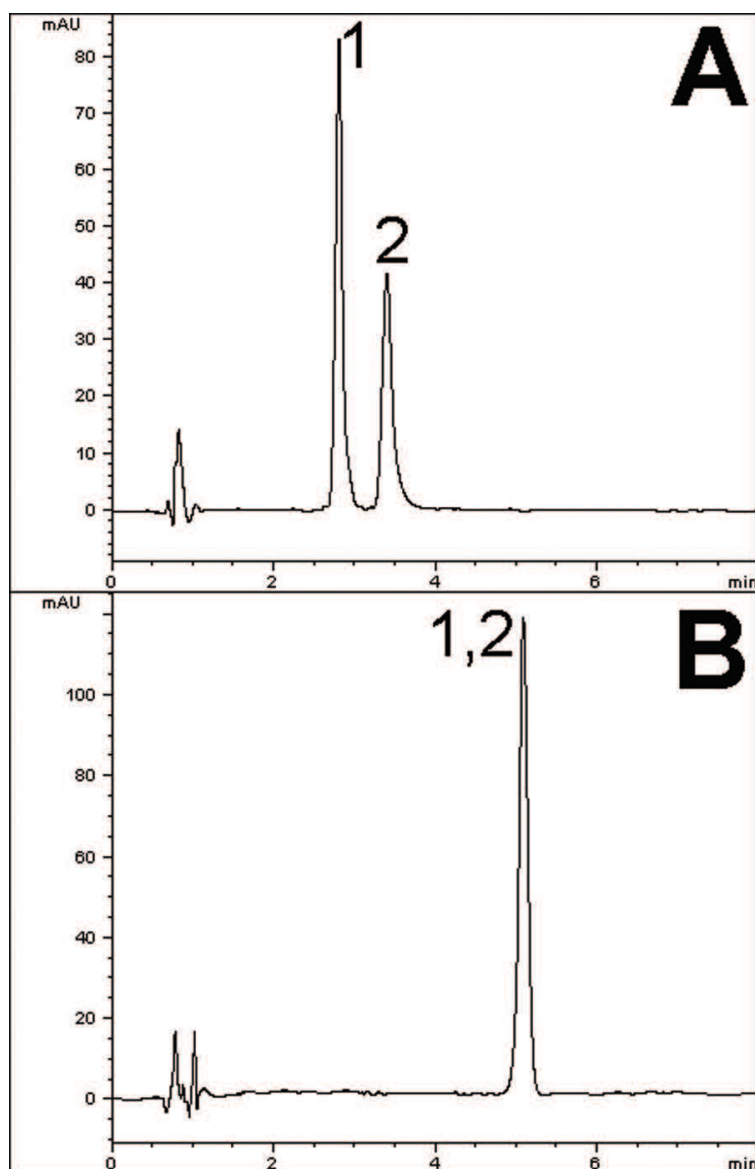


Pyrilamine & 4-Amino-3-Chloropyridine analysis with HPLC – AppNote

Unique Selectivity on a Cogent Amide Stationary Phase

The Cogent Amide column offers unique selectivity that may not be readily attainable with other phases. Two test solutes shown in this application note (*Pyrilamine* and *4-Amino-3-Chloropyridine*) were baseline separated on the Cogent Amide column (*Figure A*), but they co-eluted with no resolution on a different Cogent column using otherwise equivalent method conditions (*Cogent Diamond Hydride™*, *Figure B*). The presence of the Amide ligand provides additional selectivity that can make a significant difference in resolving closely-eluting compounds such as these.



Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

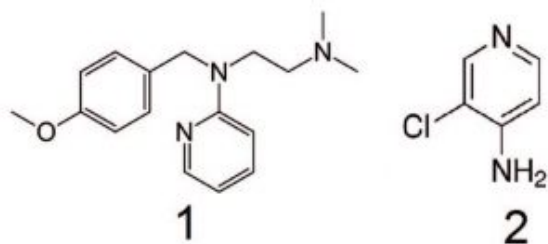
MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com



Peaks:

1. Pylamine
2. 4-Amino-3-Chloropyridine

Method Conditions

Column: Cogent Amide™, 4μm, 100Å

Catalog No.: 40036-05P

Dimensions: 4.6 x 50mm

Mobile Phase:

A: 90% DI Water / 10% Acetonitrile / 0.1% Formic Acid (v/v)

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

Gradient:

Time (Minutes)	%B
0	90
1	90
7	50
8	90

Post Time: 3 minutes

Flow rate: 1.0 mL/minute

Detection: UV 244 nm

Injection vol.: 2μL

Sample Preparation:

100 mg/L Pylamine and 4-Amino-3-Chloropyridine reference standards in diluent of 50/50 solvent A/solvent B. Peak identities confirmed with individual standards.

Note: Amine-containing compounds such as Pylamine and 4-Amino-3-Chloropyridine can be difficult to analyze using conventional silica-based stationary phases. These columns have residual silanol groups on the surface that can interact electrostatically with Amines, causing peak tailing. Chromatographers use a number of strategies to avoid these issues, such as use of ion pair agents or endcapping. However, Cogent TYPE-C Silica phases are virtually free of silanols, and therefore good peak shapes can be obtained without these work-around method strategies.

Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply



Attachment

No 352 Pyrilamine and 4-Amino-3-Chloropyridine.pdf 0.4 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com