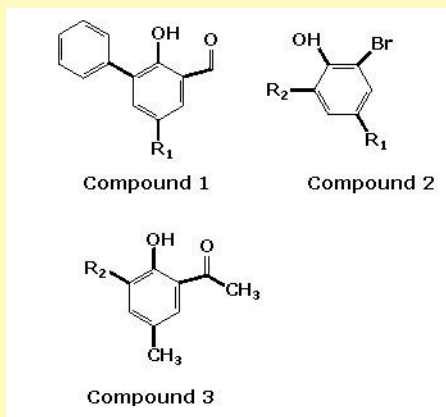
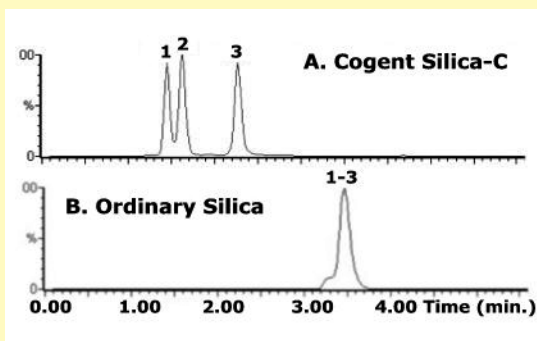




Cogent™ Silica-C™

Substituted phenols are separated
by the Normal Phase mode
on two different columns



Note: With the Cogent Silica-C™ column, almost all of the silanols on the silica surface are substituted with Si-H and water is not strongly associated by the stationary phase. Drying of the MP solvents is not essential and subsequent analyses are very reproducible, day to day as well as run to run.

The identity of the peaks was confirmed using Atmospheric Pressure Chemical Ionization in the positive and negative mode: APCI+, APCI-

Large Substituted Phenolic Compounds

Cogent Silica-C™ vs. Leading Brand by Normal Phase.

Method Conditions

Column A: Cogent Silica-C™, 4μm
Dimensions: 4.6 x 75mm

Column B: Leading brand, Silica column, 5μm
Dimensions: 4.6 x 150mm

Mobile phase: 95:5 Hexane/Ethyl Acetate

Flow rate: 1.0 mL/minute

Injection Volume: 1 μL

Samples: 1 mg/mL of proprietary compounds;
1- phenolic with aldehyde
2- parent phenolic compound
3- phenolic with a ketone

Dissolved in the mobile phase

Detection: Diode Array

Discussion

The Cogent Silica-C™ column was compared with a leading brand Silica HPLC column for separation of three proprietary phenol compounds using normal phase conditions. The Cogent Silica-C™ column provided satisfactory selectivity under isocratic elution conditions. The column displayed typical normal phase elution for the phenols, i.e. retention increased as the amount of the least polar component in the mobile phase increased.

In addition, the separation, when using the Cogent Silica-C™ column is extremely reproducible (%RSD 0.2) even though the solvents were not dried in any special way. This makes normal phase much easier to perform.

For more information visit www.MTC-USA.com

Cat. No.	Description
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40000-75P	Cogent Silica-C™ HPLC Column, un-modified, 100A, 4μm, 4.6mm x 75mm. Standard End Fittings.
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