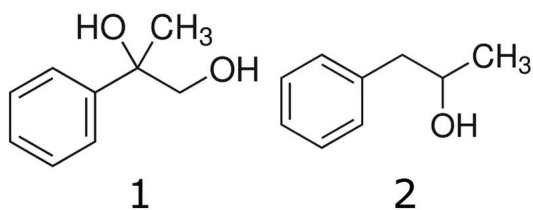
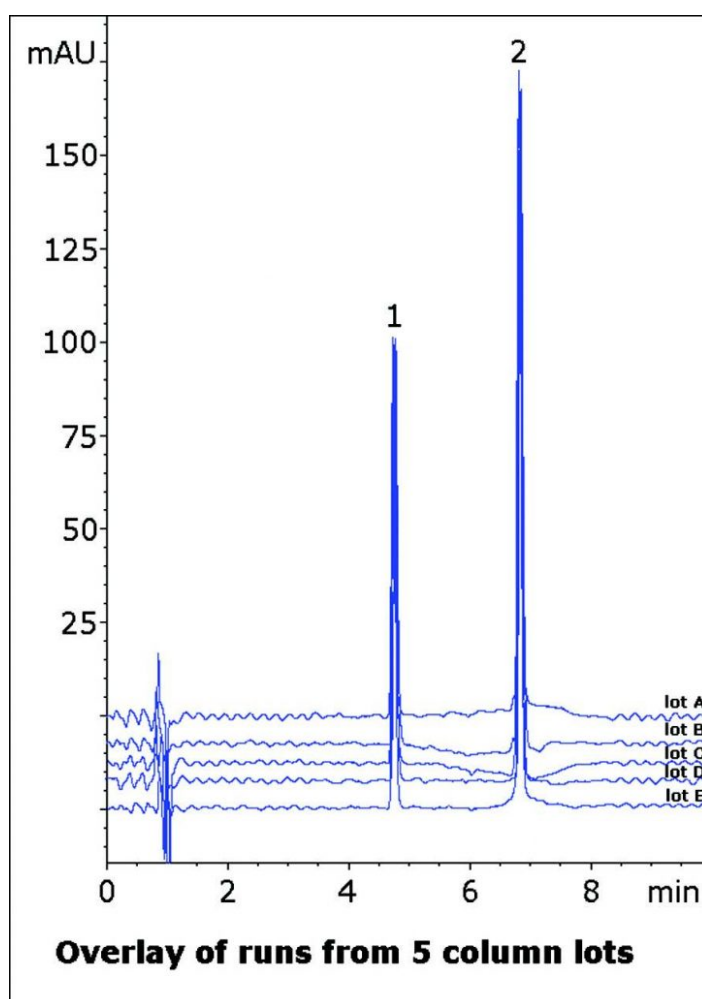


Organic Alcohols Analyzed with HPLC – AppNote

Separation of 1-Phenyl-2-Propanol and 2-Phenyl-1,2-Propanediol

In this Method, Separation is obtained between two structurally similar Organic Alcohols. The Method illustrates the type of Retention and Selectivity that can be obtained for these kinds of compounds. Furthermore, the Mobile Phase Solvents are simple to prepare and LCMS compatible.

The overlay of the 5 Figures demonstrates how the Method is Precise and Reliable when the Column is changed with lot-to-lot, which is a critical feature. RSD values of 0.5% and 0.3% were obtained for the two Peaks between the 5 lots.



Peaks:

1. 1-Phenyl-2-Propanol

2. 2-Phenyl-1,2-Propanediol

Method Conditions:

Column: Cogent Bidentate C18™, 4µm, 100Å

Catalog No.: 40018-75P

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	10
2	10
6	50
7	10

Injection vol.: 5 µL

Flow rate: 1.0ml / minute

Detection: UV @ 220nm

Post time: 3 minutes

Sample Preparation: 0.1µL / mL 1-Phenyl-2-Propanol and 0.1mg / mL 2-Phenyl-1,2-Propanediol in Diluent of 50:50 Solvent A / Solvent B.

t₀: 0.9 minutes

Note: These two compounds are used as starting materials in organic syntheses. As such, the Method has relevance in impurities testing of finished products to ensure no starting materials are present.



Attachment

No 226 Organic Alcohols Analyzed with HPLC pdf 0.4 Mb [Download File](#)

Printed from the Chrom Resource Center

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

Date: 05-05-2024