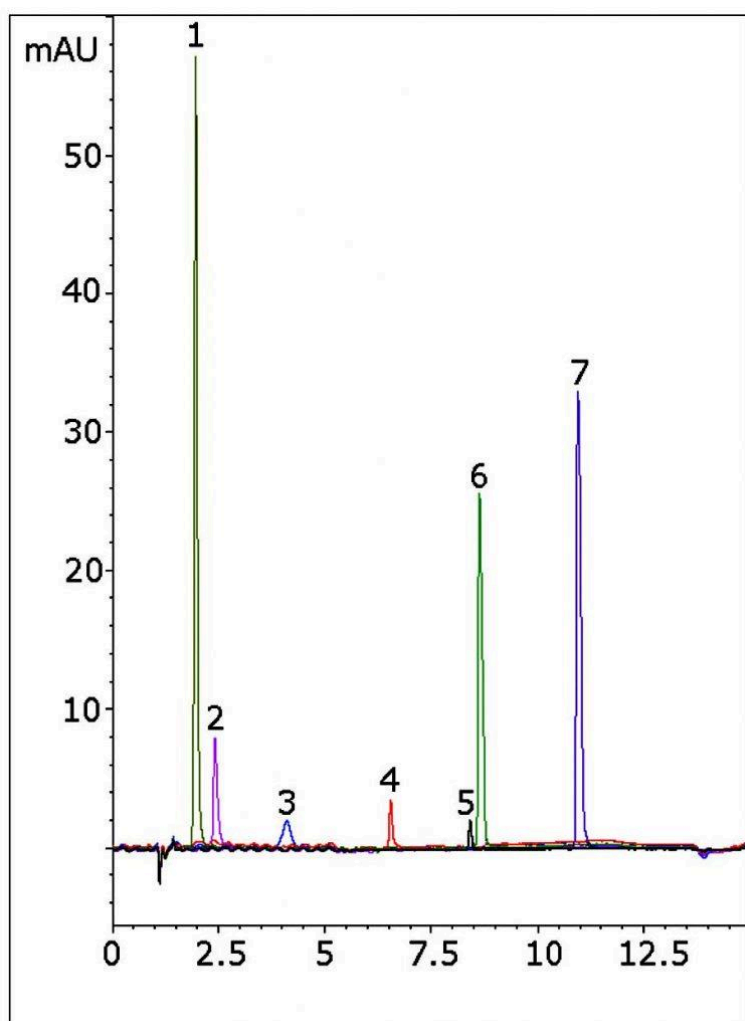
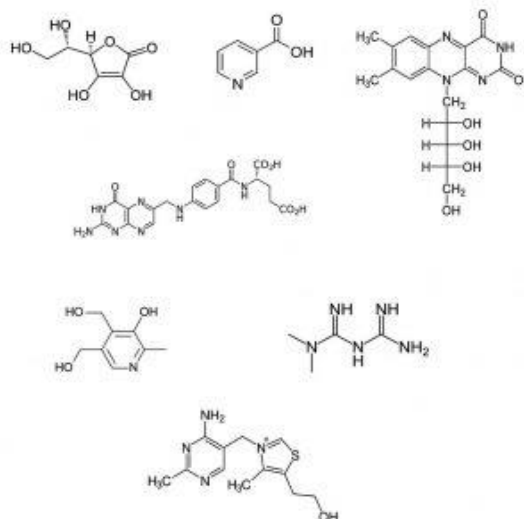


## Separation of Polar Solutes with HPLC - AppNote

### Niacin, Riboflavin, Folic Acid, Pyridoxine, Metformin, Thiamine

The Cogent Diol Column is a good addition to the TYPE-C™ Silica line of HPLC stationary phases. Here, a variety of common polar analytes are well-retained and separated.





### Peaks:

1. Ascorbic acid
2. Niacin
3. Riboflavin
4. Folic acid
5. Pyridoxine
6. Metformin
7. Thiamine

### Method Conditions

**Column:** Cogent Diol™, 4μm, 100Å

**Catalog No.:** [40060-15P-3](#)

**Dimensions:** 3.0 x 150mm

**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
3	95
10	40
12	40
13	95

**Post Time:** 5 minutes

**Flow rate:** 0.7 mL/minute

**Detection:** UV @ 254 nm

**Injection vol.:** 1μL

**Sample Preparation:** Mixture of reference standards in diluent of 50 / 50 Solvent A / Solvent B.

**t<sub>0</sub>:** 0.7 minutes

**Note:** B and C Vitamins are hydrophilic and therefore may be difficult to retain in Reversed Phase methods. Metformin is a highly polar compound used for treatment of type 2 diabetes.



## Attachment

**No 291 Separation of Polar Test Solutes pdf** 0.3 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2025, 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](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)