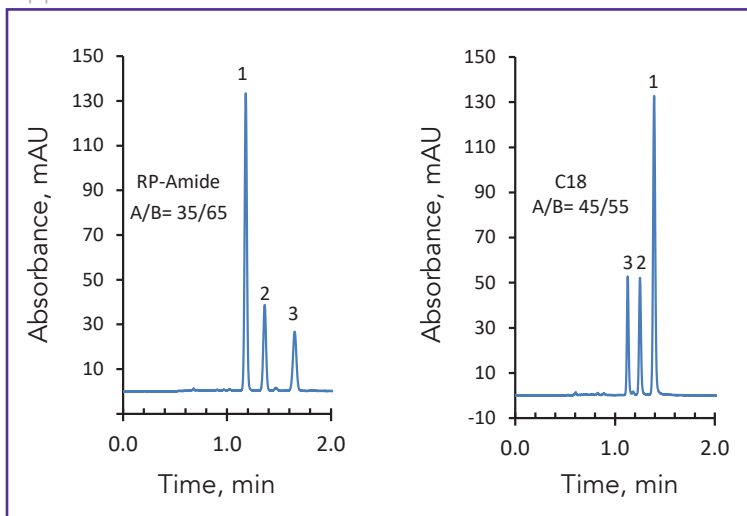




Analysis of Curcumins on HALO® RP-Amide and HALO® C18

Application Note 148-F



PEAK IDENTITIES:

1. Curcumin
2. Desmethoxycurcumin
3. bis-Desmethoxycurcumin

Turmeric spice contains curcumins that are used as dietary supplements. A methanolic extract of turmeric powder was filtered and analyzed on both HALO® C18 and RP-Amide columns, showing the different selectivity for curcumin and two derivatives.

TEST CONDITIONS:

Columns:

1) HALO 90 Å C18, 2.7 μm , 4.6 x 100 mm

Part Number: 92814-602

2) HALO 90 Å RP-Amide, 2.7 μm , 4.6 x 100 mm

Part Number: 92814-607

Mobile Phase: A/B - See chart for ratios

A: 0.025 M phosphate buffer in water,
pH 3.0

B: Acetonitrile

Flow Rate: 1.8 mL/min

Pressure: 215 bar

Temperature: 35 °C

Detection: UV 420 nm, VWD

Injection Volume: 1.0 μL

Sample Solvent: Methanol

Response Time: 0.02 sec

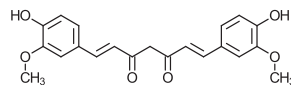
Data Rate: 25 Hz

Flow Cell: 2.5 μL semi-micro

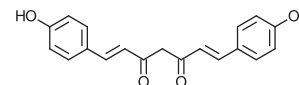
LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 μL

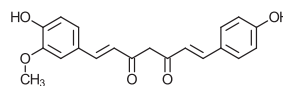
STRUCTURES:



Curcumin



bis-Desmethoxycurcumin



Desmethoxycurcumin

