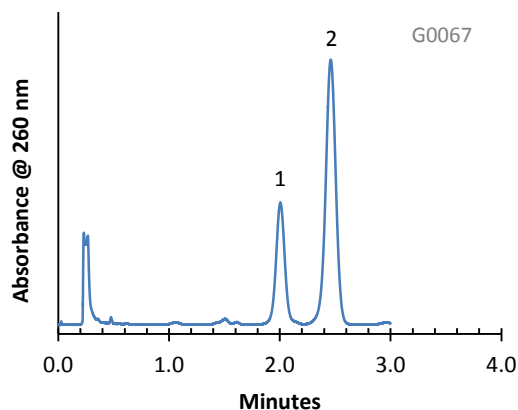


HPLC Separation of Hesperidin and Diosmin on HALO-5 PFP Phase



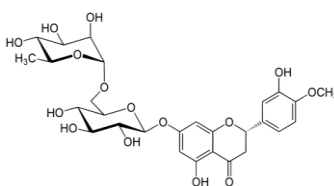
PEAK IDENTITIES:

1. Hesperidin
2. Diosmin

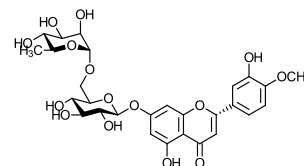
TEST CONDITIONS:

Column: 3.0 x 50 mm, HALO-5 PFP
Part Number: 95813-409
Mobile Phase: 85/15: A/B
A= 0.02 M Potassium phosphate buffer, pH=3
B= Acetonitrile
Flow Rate: 1.0 mL/min.
Pressure: 92 Bar
Temperature: 30°C
Detection: UV 260 nm, VWD
Injection Volume: 0.5 µL
Sample Solvent: Dimethylformamide*
Response Time: 0.02 sec.
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
ECV: ~14 µL

STRUCTURES:



Hesperidin

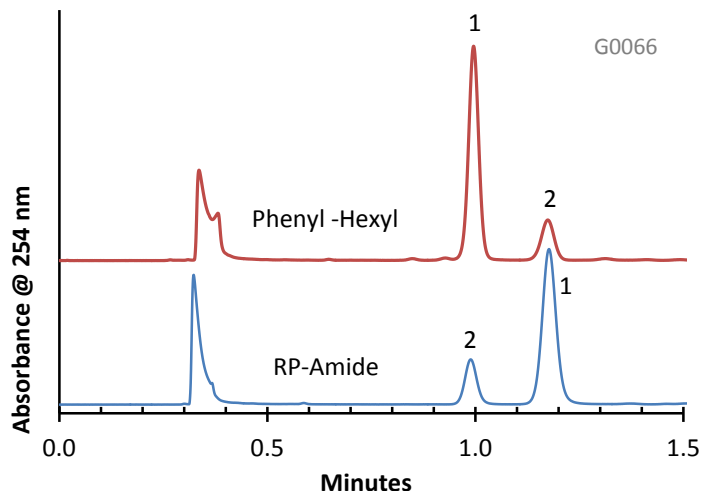


Diosmin

These two semisynthetic flavonoids can be rapidly separated using HALO-5 PFP (pentafluorophenyl) stationary phase at a low pressure. Note that just the addition of a double bond results in a difference that allows these two very similar compounds to be separated.

*Needed for solubility reasons.

Separation of Diosmin and Hesperidin on HALO Phenyl-Hexyl and HALO RP-Amide



PEAK IDENTITIES:

1. Diosmin
2. Hesperidin

TEST CONDITIONS:

Column 1: 4.6 x 50 mm, HALO Phenyl-Hexyl

Part Number: 92814-406

Column 2: 4.6 x 50 mm, HALO RP Amide

Part Number: 92814-407

Mobile Phase: 78/22: Water/acetonitrile

Flow Rate: 1.5 mL/min.

Pressure: 145 Bar

Temperature: 40°C

Detection: UV 254 nm, VWD

Injection Volume: 0.5 µL

Sample Solvent: Dimethylformamide*

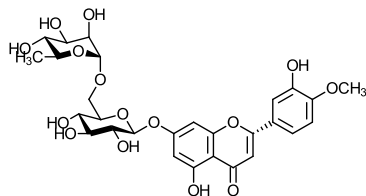
Response Time: 0.02 sec.

Flow Cell: 2.5 µL semi-micro

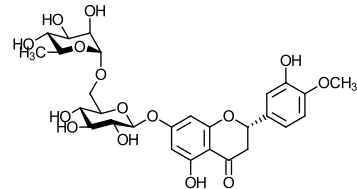
LC System: Shimadzu Prominence UFLC XR

ECV: ~14 µL

STRUCTURES:



Diosmin



Hesperidin

These two semi-synthetic flavonoids are often taken to enhance vascular health. The two compounds may be easily separated using either HALO RP-Amide or HALO Phenyl-Hexyl phases. Note the difference in elution order on the two phases.

*Needed for solubility reasons.