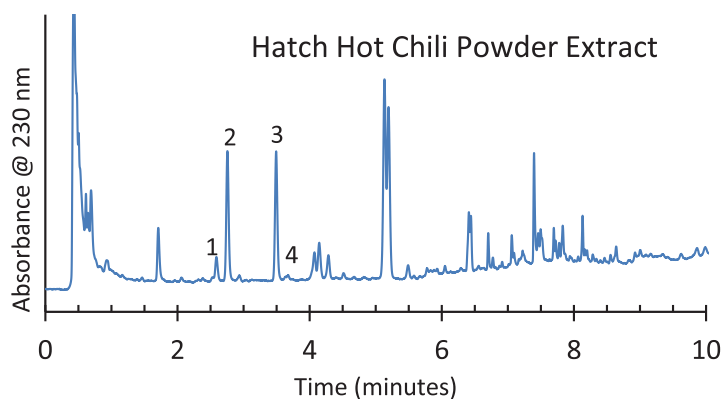
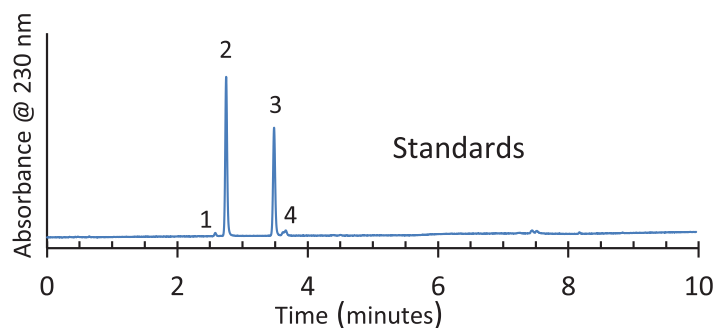




Separation of Capsaicins in Chili Powder on HALO® C18, 2.7 µm

Application Note 209



PEAK IDENTITIES:

1. Capsaicin 1
2. Capsaicin 2
3. Dihydrocapsaicin 1
4. Dihydrocapsaicin 2

Capsaicin and dihydrocapsaicin are two of the main components of chili powder that give it the "heat" when making a batch of "chili". The amount of heat is often measured by a subjective test and then rated in terms of Scoville units that are a dilution factor beyond which the capsaicins and other hot compounds cannot be detected. One can also use HPLC to measure these compounds more objectively. Here these two ingredients are separated from an acetonitrile extract using a HALO® C18 column.

TEST CONDITIONS:

Column: HALO 90 Å, C18, 2.7 µm, 3.0 x 100 mm

Part Number: 92813-602

Mobile Phase: A/B

A= water

B= acetonitrile Gradient:

Time (min)	% B
0.0	40
5.0	60
7.0	100
20.0	100

Flow Rate: 0.8 mL/min.

Pressure: 223 bar starting pressure

Temperature: 40 °C

Injection Volume: 1.0 µL

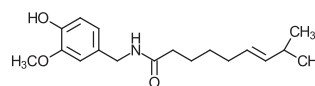
Sample Solvent: acetonitrile Detection: UV 230 nm, VWD

Response Time: 0.02 sec. Data rate: 25 Hz

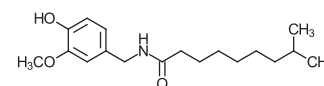
Flow Cell: 2.5 µL semi-micro

LC System: Shimadzu Prominence UFLC XR ECV: ~14 µL

STRUCTURES:



Capsaicin



Dihydrocapsaicin

