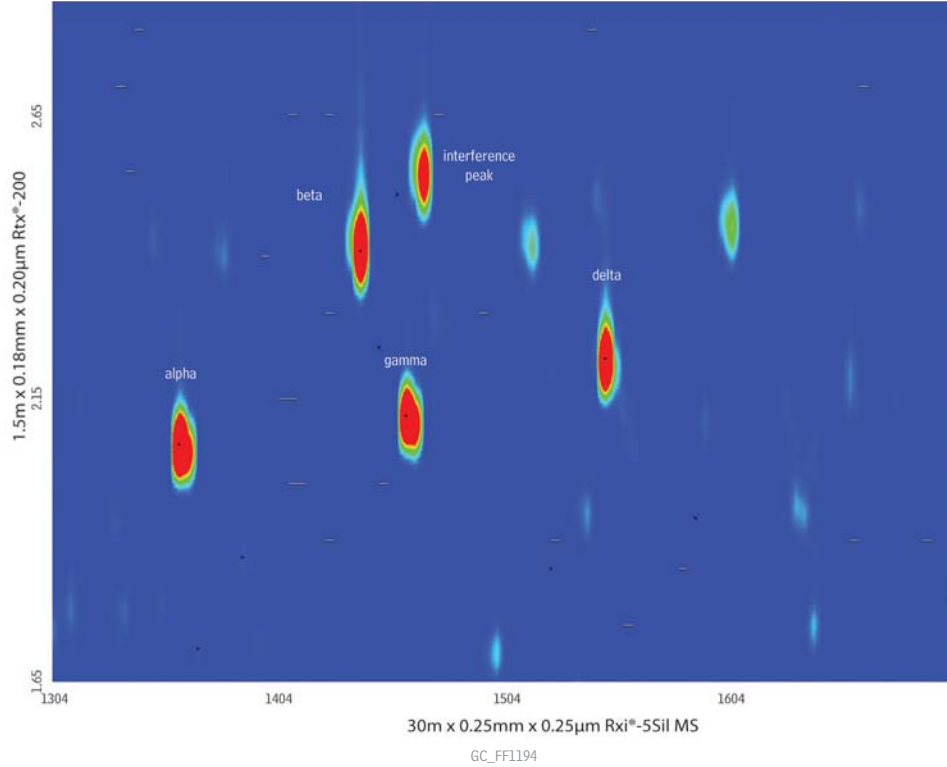


Hexachlorocyclohexanes in Sage QuEChERS Extract (Zoom of GCxGC-TOFMS Contour Plot)

GCxGC with orthogonal Rxi®-5Sil MS and Rtx®-200 columns is a powerful way to handle complex samples like dietary supplement extracts. Note separation of gamma-HCH from the isobaric interference above.



Column Rxi®-5Sil MS 30 m, 0.25 mm ID, 0.25 µm (cat.# 13623)
Rtx®-200 1.5 m, 0.18 mm ID, 0.20 µm (cat.# 45001)

Sample
Diluent: Toluene

Injection
Inj. Vol.: 1 µL splitless (hold 1 min.)
Liner: Gooseneck Splitless (4mm) w/Wool (cat.# 22405)
Inj. Temp.: 250 °C
Purge Flow: 40 mL/min.

Oven
Oven Temp: Rxi®-5Sil MS: 80 °C (hold 1 min.) to 310 °C at 4 °C/min. (hold 1.5 min.)
Rtx®-200: 90 °C (hold 1 min.) to 320 °C at 4 °C/min. (hold 1.5 min.)
He, constant flow

Carrier Gas
Flow Rate: 1.8 mL/min.

Modulation
Modulator
Temp. Offset: 25 °C
Second Dimension
Separation Time: 4 sec.
Hot Pulse Time: 1.2 sec.
Cool Time between Stages: 0.8 sec.

Detector
TOFMS
Transfer
Line Temp.: 290 °C
Analyzer Type: TOF
Source Temp.: 225 °C
Electron Energy: 70 eV
Mass Defect: -20 mu/100 u
Solvent Delay
Time: 4 min.
Ionization Mode: EI
Acquisition Range: 45 to 550 amu
Spectral
Acquisition Rate: 100 spectra/sec

Instrument LECO Pegasus 4D GCxGC-TOFMS

Notes See application note PHAN1251 for extraction and cleanup details. A 1.5 m length of the Rtx®-200 column was trimmed from a 10 m column. Columns were connected with a Universal Press-Tight® Connector (cat.# 20429).