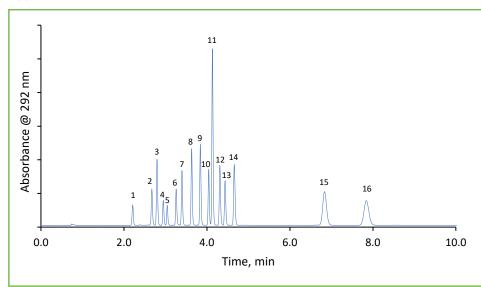


ENVIRONMENTAL



Separation of EU 15 + 1 using HALO® PAH





PEAK IDENTITIES

- 1. Benzo[c]fluorene
- 2. Cyclopenta[cd]pyrene
- 3. Benzo[a]anthracene
- 4. Chrysene
- 5. 5-Methylchrysene
- 6. Benzo[j]fluoranthene
- 7. Benzo[b]fluoranthene
- 8. Benzo[k]fluoranthene
- 9. Benzo[a]pyrene
- 10. Dibenzo[a,l]pyrene
- 11. Dibenz[a,h]anthracene
- 12. Benzo[ghi]perylene
- 13. Indeno[1,2,3-cd]pyrene
- 14. Dibenzo[a,e]pyrene
- 15. Dibenzo[a,i]pyrene
- 16. Dibenzo[a,h]pyrene

TEST CONDITIONS:

Column: HALO 90 Å PAH, 2.7 μm, 4.6 x 50 mm

Part Number: 92844-412
Mobile Phase A: Water
B: Acetonitrile
Gradient: Time %B
0.00 50
4.00 100

15.00 100 15.01 50

Flow Rate: 1.8 mL/min Temperature: 30 °C Detection: 292 nm

Injection Volume: $10 \mu L$ Data Rate: 100 Hz

LC System: Shimadzu Nexera X2

The EU 15 + 1 list of PAH compounds was established by the European Commission in 2005 specifically for food analysis. The list contains eight of the EPA's priority PAHs along with eight other compounds that are known carcinogens. The separation is completed on a 4.6×50 mm HALO® PAH column in less than ten minutes with excellent resolution between the critical pairs 4 and 5 which only differ by the presence of a methyl group.

