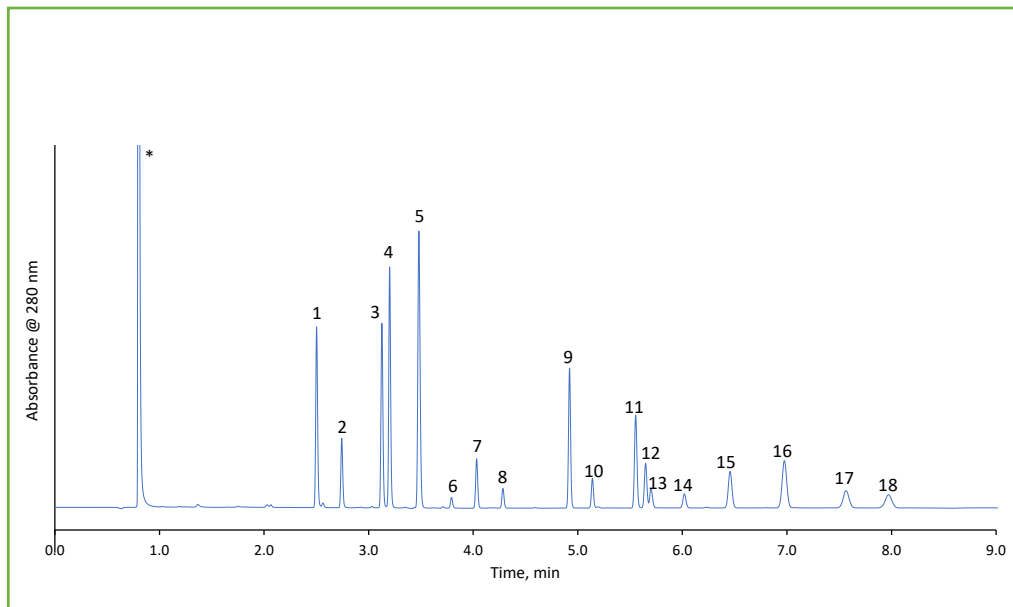




Separation of EPA 610 + Benzo[e]pyrene + Perylene using HALO® PAH

304



PEAK IDENTITIES:

1. Naphthalene
 2. Acenaphthylene
 3. Acenaphthene
 4. Fluorene
 5. Phenanthrene
 6. Anthracene
 7. Fluoranthene
 8. Pyrene
 9. Benzo[a]anthracene
 10. Chrysene
 11. Benzo[e]pyrene
 12. Benzo[b]fluoranthene
 13. Perylene
 14. Benzo[k]fluoranthene
 15. Benzo[a]pyrene
 16. Dibenzo[a,h]anthracene
 17. Benzo[g,h,i]perylene
 18. Indeno[1,2,3-c,d]pyrene
- * acetone from sample solvent

TEST CONDITIONS:

Column: HALO 90 Å PAH, 2.7 μm , 4.6 x 150 mm

Part Number: 92844-712

Mobile Phase A: Water

B: Acetonitrile

Gradient:	Time	%B
	0.0	50
	4.5	100
	9.0	100
	9.5	50
	14.0	50

Flow Rate: 1.8 mL/min

Initial Back Pressure: 416 bar

Temperature: 30 °C

Detection: 280 nm

Injection Volume: 5 μL

Sample Solvent: 80/20 Methanol/Acetone

Data Rate: 40 Hz

Response Time: 0.05 sec.

Flow Cell: 1 μL

LC System: Shimadzu Nexera X2

Polycyclic Aromatic Hydrocarbons (PAHs) are a group of more than 100 chemicals generated from the combustion of coal, oil, gasoline, tobacco, and wood. They can also be found in grilled food. These compounds are ubiquitous and exposure to them can cause irritation, mutation, and cancer. Due to the negative health effects, government agencies have established methods for detection and reporting. This rapid separation of the 16 compounds specified in EPA 610 along with benzo[e]pyrene and perylene demonstrates excellent speed and resolution with the HALO® PAH column.

