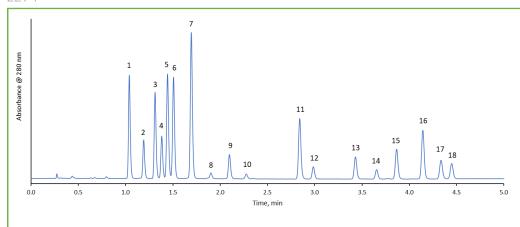


## **ENVIRONMENTAL**



## Separation of 16 PAH Compounds Specified in EPA 610 + 2 additional PAH Compounds using HALO® PAH

229-P



## **PEAK IDENTITIES**

- 1. Naphthalene
- 2. Acenaphthylene
- 3. 1-methylnaphthalene
- 4. 2-methylnaphthalene
- 5. Acenaphthene
- 6. Fluorene
- 7. Phenanthrene
- 8. Anthracene
- 9. Fluoranthene
- 10. Pyrene
- 11. Benzo(a)anthracene
- 12. Chrysene
- 13. Benzo[b]fluoranthene
- 14. Benzo[k]fluoranthene
- 15. Benzo[a]pyrene
- 16. Dibenzo[a,h]anthracene
- 17. Benzo[g,h,i]perylene
- 18. Indeno[1,2,3-cd]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 0.0 50 4.0 100 5.0 100

5.01 50

Flow Rate: 1.8 mL/min Pressure: 256 bar Temperature: 30 °C Detection: 280 nm Injection Volume: 2 µL Sample Solvent: Methanol

**Data Rate:** 100 Hz **Response Time:** 0.025 sec

Flow Cell: 1 µL

LC System: Shimadzu Nexera

Polycyclic Aromatic Hydrocarbons (PAHs) are a group of more than 100 chemicals released from the combustion of coal, oil, gasoline, tobacco, and wood. They can also be found in cooked food. PAHs are persistent chemicals and must be closely regulated for early detection/monitoring to minimize hazardous exposure in the environment and/or use of contaminated raw materials in different industries. A rapid separation of the 16 compounds specified in EPA 610 and an additional 2 PAH compounds that are regularly analyzed is demonstrated on the HALO® PAH column showing excellent speed and resolution.