

Polycyclic Aromatic Hydrocarbons  
Pinnacle® II PAH

1. naphthalene
2. acenaphthylene
3. acenaphthene
4. fluorene
5. phenanthrene
6. anthracene
7. fluoranthene
8. pyrene
9. benzo(a)anthracene
10. chrysene
11. benzo(b)fluoranthene
12. benzo(k)fluoranthene
13. benzo(a)pyrene
14. benzo(ghi)perylene
15. dibenzo(a,h)anthracene
16. indeno(1,2,3-cd)pyrene
- \* contaminant

**Sample:**  
Inj.: 10µL  
Conc.: 10µg/mL each component  
Sample diluent: methanol

**Column:** Pinnacle® II PAH  
Cat.#: 9219463  
Dimensions: 150mm x 3.2mm  
Particle size: 4µm  
Pore size: 110Å

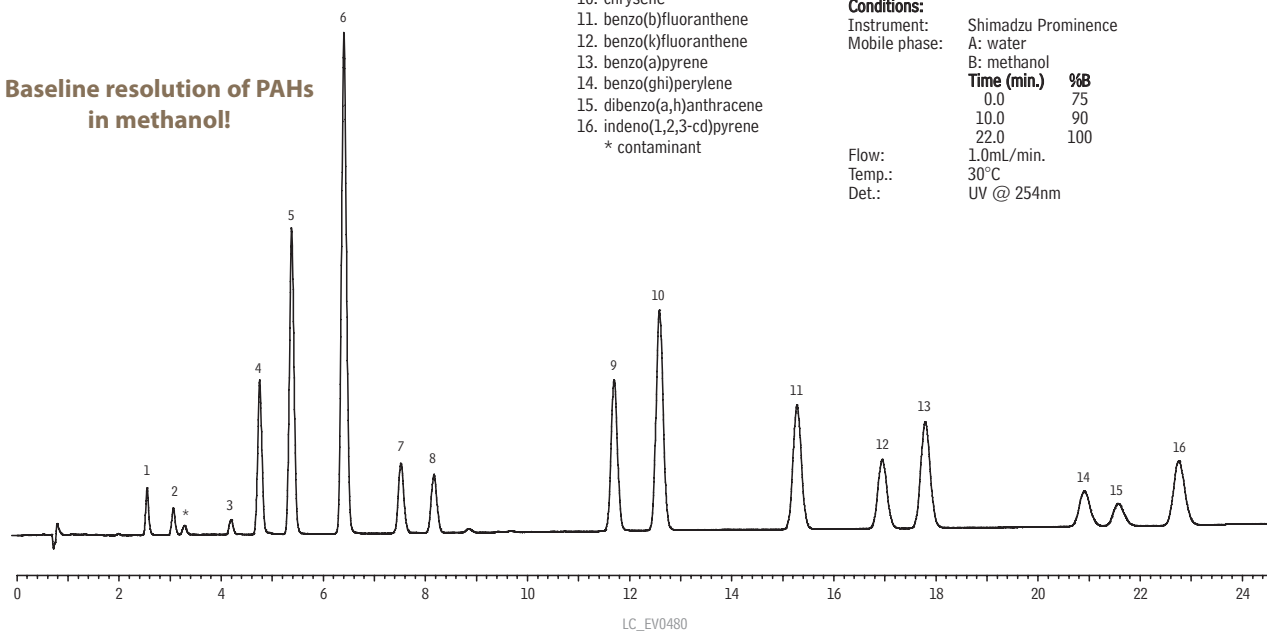
**Conditions:**  
Instrument: Shimadzu Prominence  
Mobile phase: A: water  
B: methanol

Time (min.)	%B
0.0	75
10.0	90
22.0	100

Flow: 1.0mL/min.  
Temp.: 30°C  
Det.: UV @ 254nm



Baseline resolution of PAHs  
in methanol!



Polycyclic Aromatic Hydrocarbons on Pinnacle® II PAH  
EPA 8310 – 18 component standard + benzo(j)fluoranthene

Peak List:	Retention Time
1. naphthalene	6.19
2. acenaphthylene	7.16
3. 1-methylnaphthalene	7.78
4. 2-methylnaphthalene	8.17
5. acenaphthene	8.46
6. fluorene	8.82
7. phenanthrene	9.64
8. anthracene	10.39
9. fluoranthene	11.22
10. pyrene	11.75
11. benzo(a)anthracene	13.55
12. chrysene	13.91
13. benzo(j)fluoranthene	14.92
14. benzo(b)fluoranthene	15.27
15. benzo(k)fluoranthene	15.82
16. benzo(a)pyrene	16.35
17. dibenzo(a,h)anthracene	17.10
18. benzo(ghi)perylene	17.67
19. indeno(1,2,3-cd)pyrene	17.99

**Sample:**  
Inj.: 10µL  
Conc.: 20µg/mL each component  
Sample diluent: acetonitrile

**Column:** Pinnacle® II PAH  
Cat.#: 9219463  
Dimensions: 150mm x 3.2mm  
Particle size: 4µm  
Pore size: 110Å

**Conditions:**  
Instrument: Shimadzu Prominence HPLC  
Mobile phase: A: purified water  
B: acetonitrile

Time (min.)	%B
0	40
7	60
16	100
18.9	100
19	40

Flow: 1.2mL/min.  
Temp.: 30°C  
Det.: UV @ 254nm

