

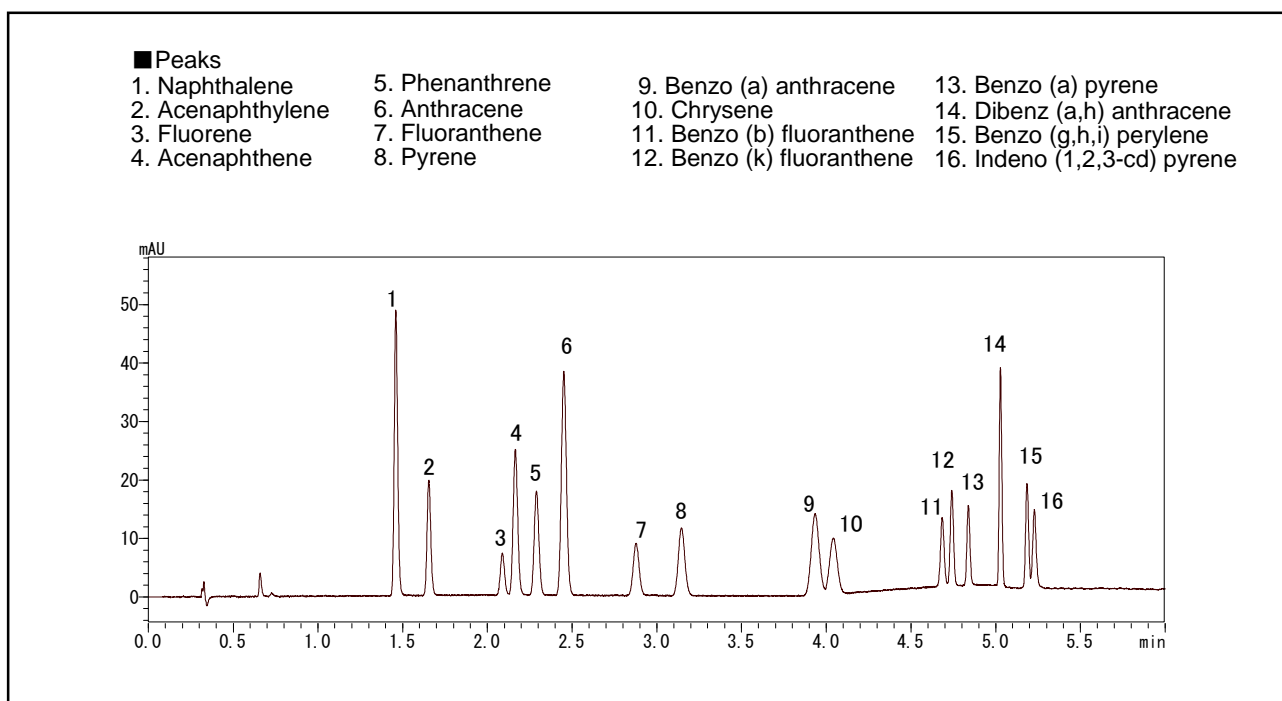
Application Data Sheet

High Performance Liquid Chromatography

No. 53

High Speed Analysis of Polynuclear Aromatic Hydrocarbons (PDA Detection) (2)

We presented a high-speed analysis of polynuclear aromatic hydrocarbons (PAHs) using a specialized column in Data Sheet No. 12. Here we show an example of a high-speed analysis of PAHs using a Shimadzu UFLC column, the Shim-pack XR-ODS II.



Analysis of Standard Solution of PAHs (Max Plot 220 to 350 nm)

[Sample Preparation]

AccuStandard's PAH solution mix (0.2 mg/mL) was diluted 100 times using acetonitrile.

Analytical Conditions

Instrument	: Prominence UFLCXR system
Column	: Shim-pack XR-ODS II (150 mm × 3.0 mm <i>i.d.</i>)
Mobile Phase	: A) Water / Acetonitrile (1/1 v/v) B) Acetonitrile B. conc; 32% to 40% (0 to 1.5 min), 40% (1.5 to 3.5 min), 40% to 85% (3.5 to 4.5 min), 85% (4.5 to 5.5 min), 32% (5.51 to 6.8 min)
Flow Rate	: 1.6 mL/min
Column Temperature	: 55 °C
Detection	: Absorbance at 220 to 350 nm with semi-micro flow cell
Sample Volume	: 4 µL