

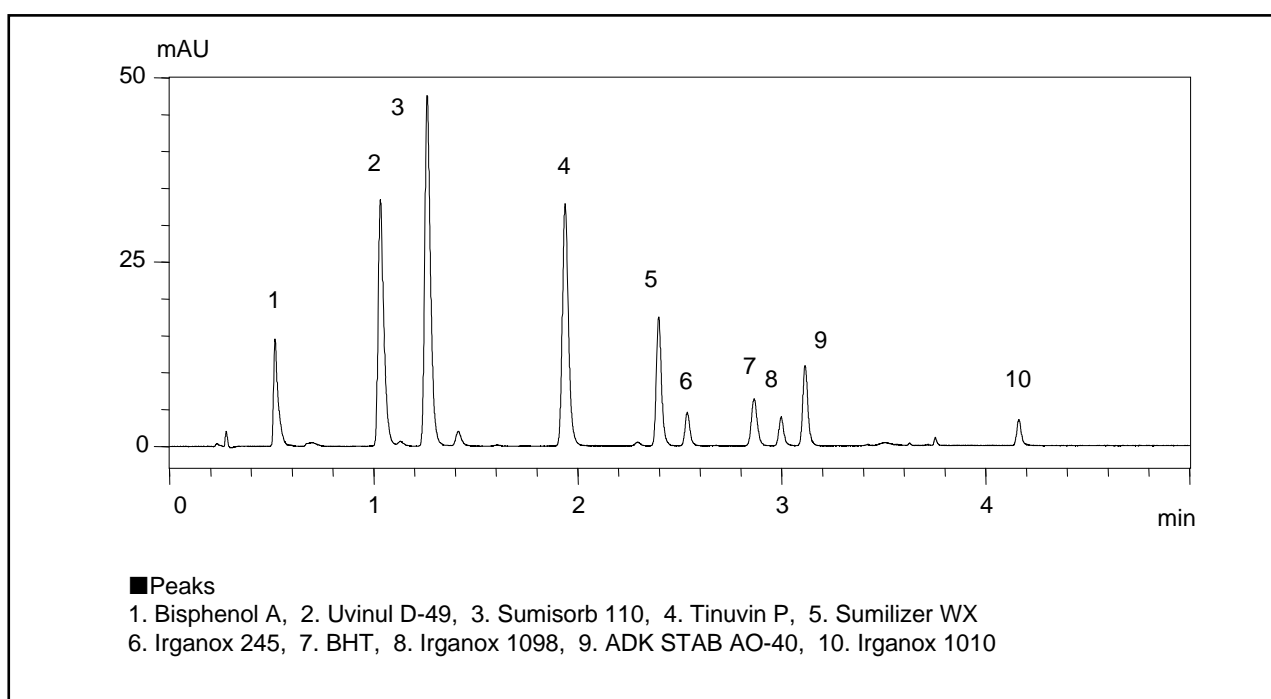
Application Data Sheet

High Performance Liquid Chromatography

No. 68

High-Speed Analysis of Polymer Additives (1)

Polymer materials such as plastics contain a lot of additives to enhance the characteristics and functionality. This chromatogram shows a high-speed analysis of 10 polymer additives.



Analysis of Polymer Additives

[Sample Preparation]

10 Polymer additives were dissolved with acetonitrile to prepare concentrations of 10 mg/L respectively.

Analytical Conditions

Instrument	: Prominence UFLC system
Column	: Shim-pack XR-ODS (50 mm × 3.0 mm <i>i.d.</i>)
Mobile Phase	: A) Water B) Acetonitrile B Conc. 50 % (0 min) → 80 % (3 min) → 100 % (3.01 min) → 100 % (4.5 min) → 50 % (4.51 min) → 50 % (6 min)
Flow Rate	: 1.0 mL/min
Column Temperature	: 60 °C
Detection	: Absorbance at 280 nm with Semi-micro flow cell
Sample Volume	: 4 μL