

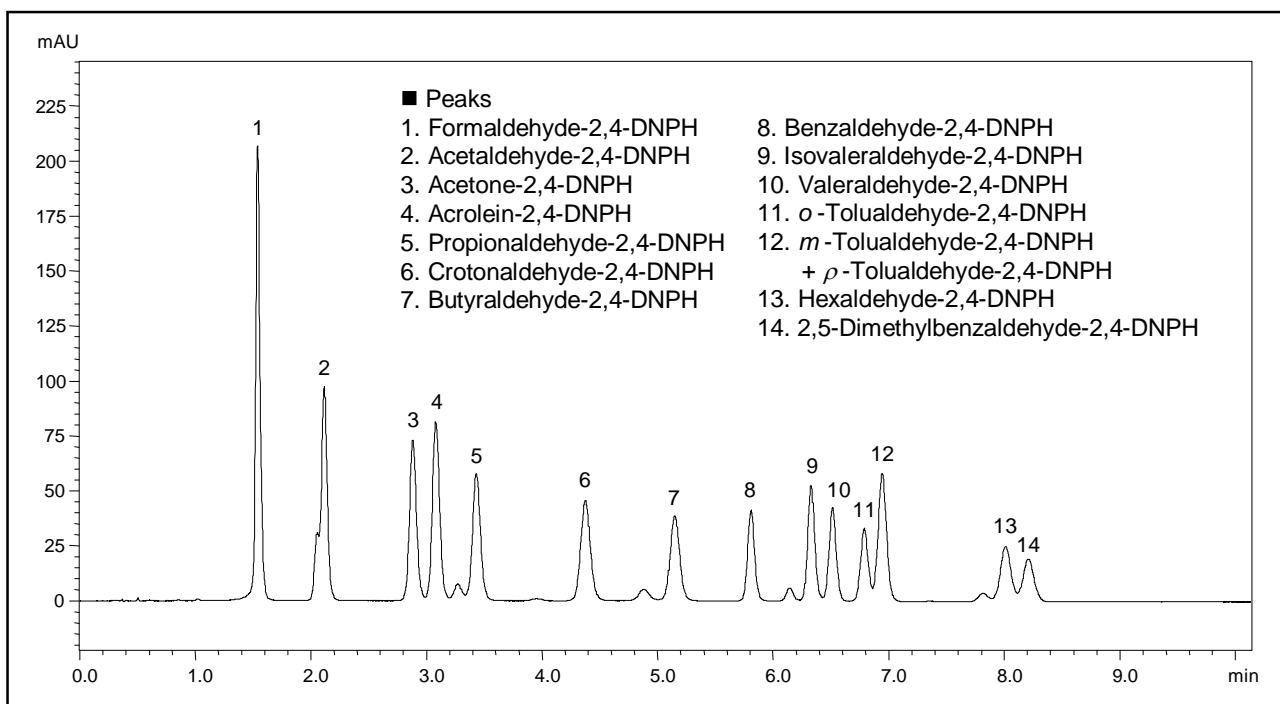
Application Data Sheet

High Performance Liquid Chromatography

No. 31

High-Speed Analysis of Aldehydes and Ketones

This is an example of simultaneous analysis of a mixture of 15 aldehydes and ketones.



Analysis of Standard Sample Mixture of Aldehydes and Ketones

[Sample Preparation]

T011/IP-6A Aldehyde/Ketone-DNPH Mix (SUPELCO Analytical, concentration of 15 µg/mL/component) was diluted with 2 times that amount of distilled water.

Analytical Conditions

Instrument	: Prominence UFLC system
Column	: Shim-pack XR-ODS (75 mm x 3.0 mm <i>i.d.</i>)
Mobile Phase	: A) Water / Tetrahydrofuran / Methanol = 7 / 2 / 1 (v/v/v) B) Water / Acetonitrile = 4 / 6 (v/v) B.conc; 45% to 60% (0 to 4.1 min), 60 to 100% (4.1 to 5.4 min), 100% (5.4 to 9.6 min) , 45% (9.7 to 13 min)
Flow Rate	: 1.0 mL/min
Column Temperature	: 50 °C
Detection	: Absorbance at 360 nm with Semi-micro flow cell
Sample Volume	: 4 µL