

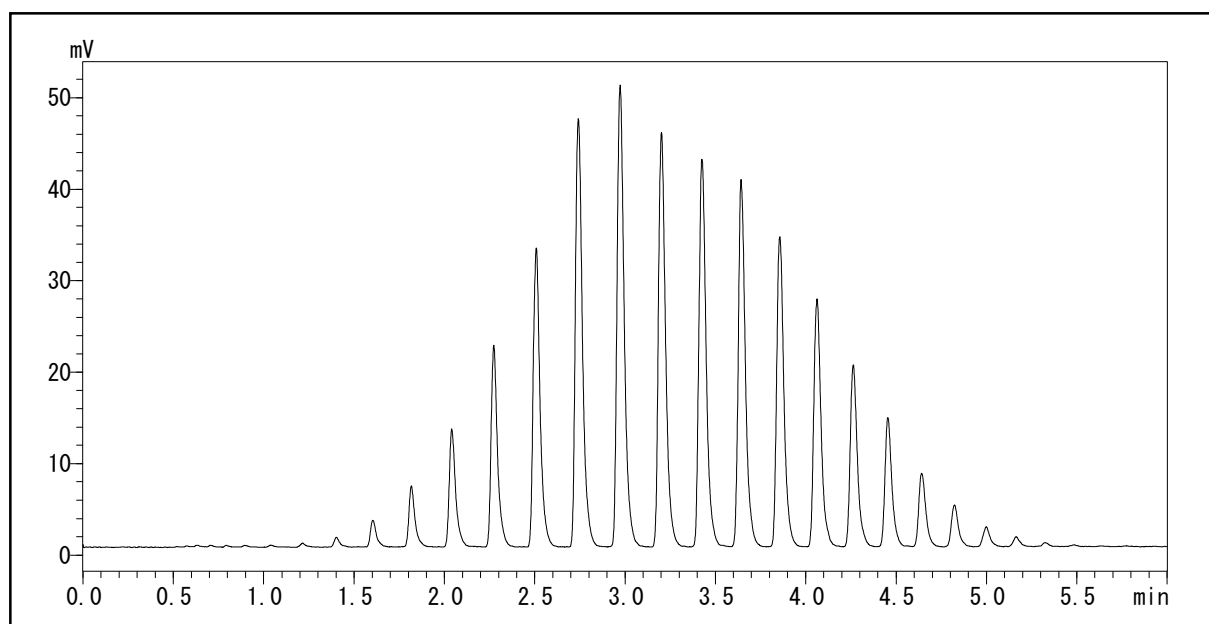
Application Data Sheet

High Performance Liquid Chromatography

No. 43

High-Speed Analysis of PEG 1000

Polyethylene glycol (PEG) is widely used as a moisturizer in cosmetic products. This describes an example of using an evaporative light scattering detector (ELSD) to analyze a sample of polyethylene glycol (PEG 1000) with a mean molecular weight of 1000.



Analysis of PEG 1000

[Sample Preparation]

0.2 g of polyethylene glycol 1000 was dissolved in 20 mL of ultrapure 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 B) Acetonitrile B conc.: 20% to 30% (0 to 5.0 min.), 20% (5.0 to 7.0 min.)
Flow Rate	: 1.0 mL/min.
Column Temperature	: 40°C
Detection	: Evaporative Light Scattering Detector (ELSD)
Sample Volume	: 1 µL