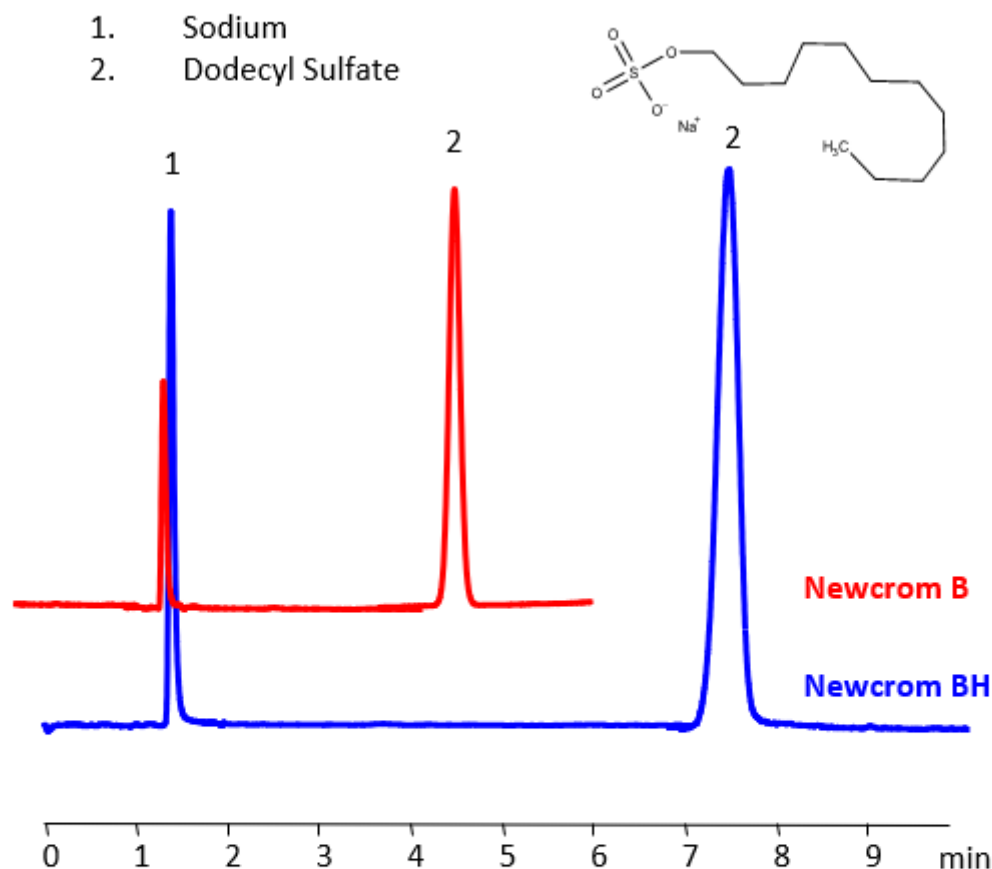


HPLC Determination of Sodium Dodecyl Sulfate on Newcrom BH and Newcrom B Columns

<https://sielc.com/hplc-determination-of-sodium-dodecyl-sulfate-on-newcrom-ah-column-2>

Chromatogram



Column:	Newcrom B, Newcrom BH
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN/H ₂ O – 70/30%
Buffer:	AmFm pH 3.0 – 60 mM
Detection:	CAD
Flow rate:	1.0 ml/min

Description

Sodium dodecyl sulfate (SDS), or sodium lauryl sulfate (SLS), is a surfactant used in cleaning, hygienic, and food products. It has a chemical formula $C_{12}H_{25}NaSO_4$, meaning it has twelve carbon hydrophobic tail attached to a polar sulfate. At low concentrations, it is used as a whipping aid and emulsifier in foods containing egg whites. It has a similar use in pharmaceuticals as an ionic solubilizer and, also, an emulsifier. In laboratory uses, it is used as a component for lysing cells during RNA extraction or DNA extraction. You can find detailed UV spectra of Sodium dodecyl sulfate and information about its various lambda maxima by visiting the following link.

Sodium dodecyl sulfate can be retained and analyzed using the Newcrom B stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with an ammonium formate buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 70/30%
Buffer	AmFm pH 3.0 – 60 mM
Flow Rate	1.0 ml/min
Detection	CAD (Corona) MS- compatible mobile phase
Class of Compounds	Hydrophobic, Base, Ionizable, Anionic surfactant
Analyzing Compounds	Sodium Dodecyl Sulfate

HPLC Column Used

Newcrom B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](http://hplc-shop.de)