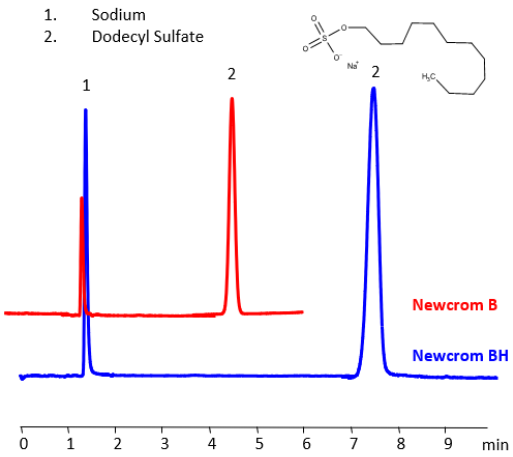
HPLC Determination of Sodium Dodecyl Sulfate on Newcrom B Column



Column:	Newcrom B, Newcrom BH
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN/H_2O – 70/30%
Buffer:	AmFm pH 3.0 – 60 mM
Detection:	CAD
Flow rate:	1.0 ml/min

High Performance Liquid Chromatography (HPLC) Method for Analysis of Sodium dodecyl sulfate .

Sodium dodecyl sulfate (SDS) , or sodium lauryl sulfate (SLS), is a surfactant used in cleaning, hygienic, and food products. It has a chemical formula C12H25NaSO4 , 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 pharmaceutics 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.

Sodium dodecyl sulfate can be retained and analyzed using the Newcrom BH 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

Column	Newcrom BH, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 70/30%
Buffer	AmFm pH 3.0 – 60 mM
Flow Rate	1.0 mL/min
Detection	CAD (Corona) MS- compatible mobile phase

Quelle: https://sielc.com/hplc-determination-of-sodium-dodecyl-sulfate-on-newcrom-bh-column