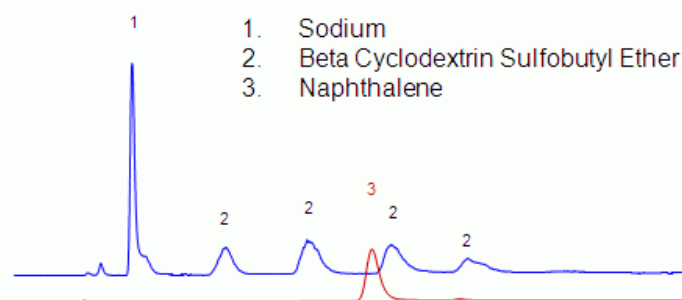


HPLC Separation of Cyclodextrin Sulfobutyl Ether and Hydrophobic Compound

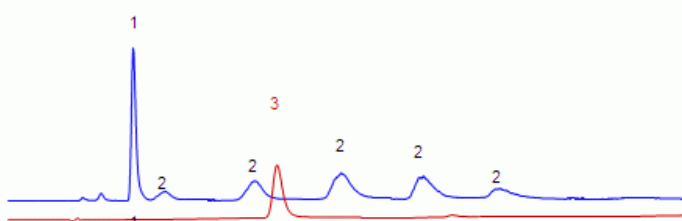
<https://sielc.com/Application-HPLC-Separation-of-Cyclodextrin-Sulfobutyl-Ether-and-Hydrophobic-Compound>

Chromatogram

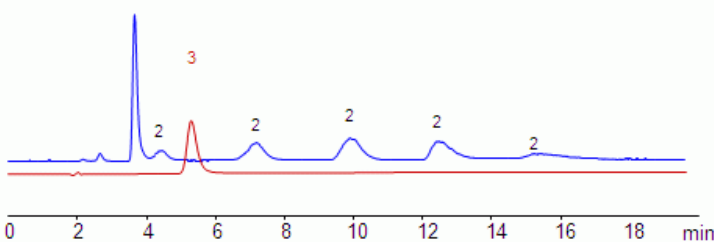


Column: Obelisc N
Size: 4.6 x 150mm
Flow: 1.0 mL/min
Detection: ELSD 60C, UV 270 nm

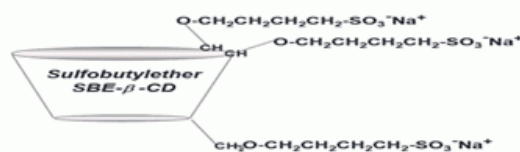
Mobile phase: MeOH/THF(90/10) - 30%,
gradient 60-140 mM AmFm pH 3.0 in 10 min, 8 min hold



Mobile phase: MeOH/THF(90/10) - 35%,
gradient 50-130 mM AmFm pH 3.0 in 10 min, 8 min hold



Mobile phase: MeOH/THF(90/10) - 40%,
gradient 50-120 mM AmFm pH 3.0 in 10 min, 8 min hold



chr_294.gif

Description

Cyclodextrin sulfobutyl ether is sulfonated derivative of cyclodextrin. The degree of sulfobutylation varies, and the compound is a mixture of several components. All compounds are very polar and acidic in nature, and are not retained by traditional reversed-phase chromatography. Separation was achieved on an Obelisc N column in anion-exchange mode. Hydrophobic naphthalene was used as a reference standard. Cyclodextrin was monitored by ELSD.

Method Parameters

Mobile Phase	MeOH, THF
Buffer	AmFm pH 3.0
Flow Rate	1.0 ml/min
Detection	ELSD, 60C UV 270 nm
Class of Compounds	Hydrophobic, Ionizable

Analyzing Compounds

Sodium, Beta Cyclodextrin Sulfobutyl Ether, Naphthalene

HPLC Column Used**Obelisc N2, 4.6×150 mm, 5 µm, 100A**