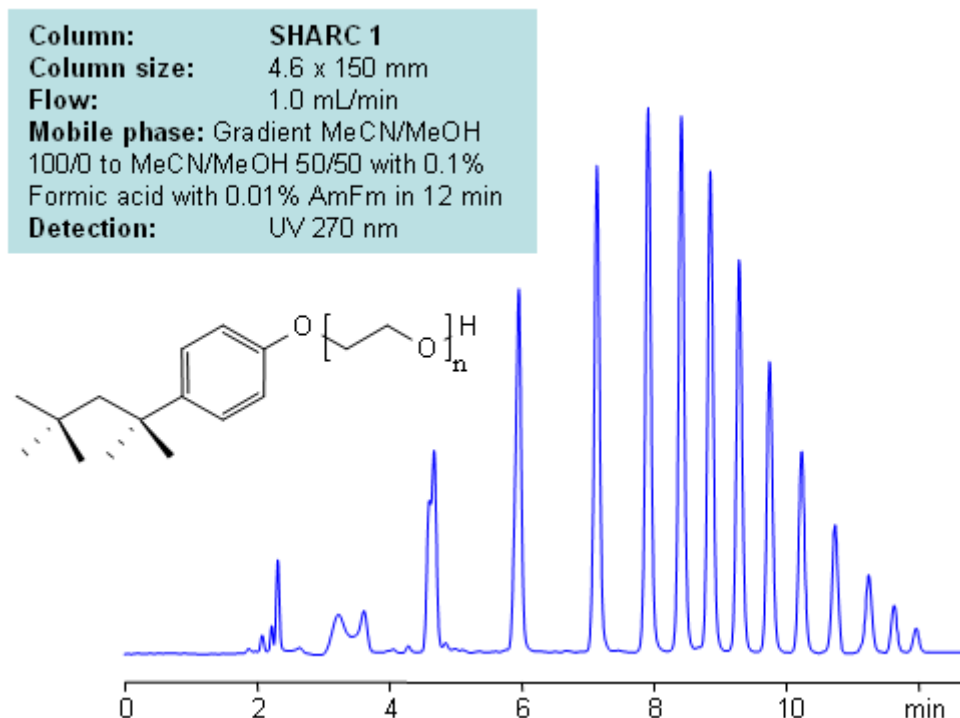


HPLC Separation of the Nonionic Surfactant Triton-X-100

<https://sielc.com/HPLC%20Separation%20of%20the%20Nonionic%20Surfactant%20Triton-X-100>

Chromatogram



Description

Triton X-100 is a non-ionic surfactant which has a hydrophilic polyethylene oxide group (on average it has 9.5 ethylene oxide units), and a hydrocarbon lipophilic or hydrophobic group. SHARC 1 HPLC columns are used to separate oligomers of Triton X-100. Separation is achieved in anhydrous conditions by hydrogen bonding using acetonitrile (ACN) and methanol (MeOH) as the mobile phase with formic acid and ammonium formate (AmFm) as buffer. This method can be used in determination of oligomers of Triton X-100 in detergents, liquid, paste, and powdered cleaning formulations. This separation can be monitored with almost any detection technique (UV, ELSD, LC/MS, RI, CAD, etc.)

Method Parameters

Mobile Phase	Gradient MeCN/MeOH – 100/0- 50/50%, 12 min
Buffer	Formic Acid 0.1% , AmFm – 0.01%
Flow Rate	1.0 ml/min
Detection	UV, 270 nm
Class of Compounds	Nonionic Surfactant, Hydrophobic, Ionizable
Analyzing Compounds	Triton-X-100

HPLC Column Used

Sharc 1, 4.6×150 mm, 5 µm, 100A

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