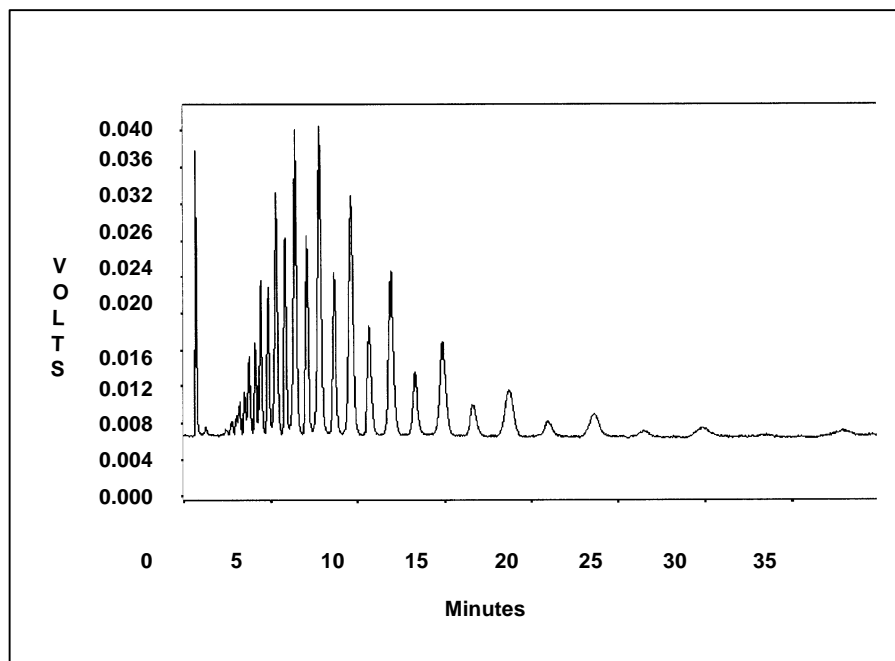


Determination of Nonionic Surfactants by HPLC-ELSD



Separation of Tween 80 (2000; Esa Inc. - USA)

Surfactants are widely used in agricultural, industrial and pharmaceutical products. Nonionic surfactants are typically produced by reaction of fatty acids, alkylphenol etc. with ethylene oxide. By-products such as polyethylene glycols can also be formed, they can diminish the usage properties of a formulation. Analytical characterization of these products involves separation and detection of complex mixtures of compound that have poor UV-vis absorbing capabilities. Therefore the UV detection is not an appropriate method to analyse this kind of compounds, while ELSD is a method of choice for this kind of determination.

Chromatographic conditions :

Column : MD-150 (3x150 mm) ESA

Injection Volume : 10 μ l

Flow Rate : 0.5 ml/mn

Mobile Phase : H₂O/MeOH (65/35)

Nebulizer temperature : 30°C

Evaporation temperature : 50°C

EUROSEP Instruments

Tel. : +33(0)1 34 22 95 22 - Fax : +33(0)1 34 22 95 32

E-Mail: eurosep@eurosep.com - Internet <http://www.eurosep.com>