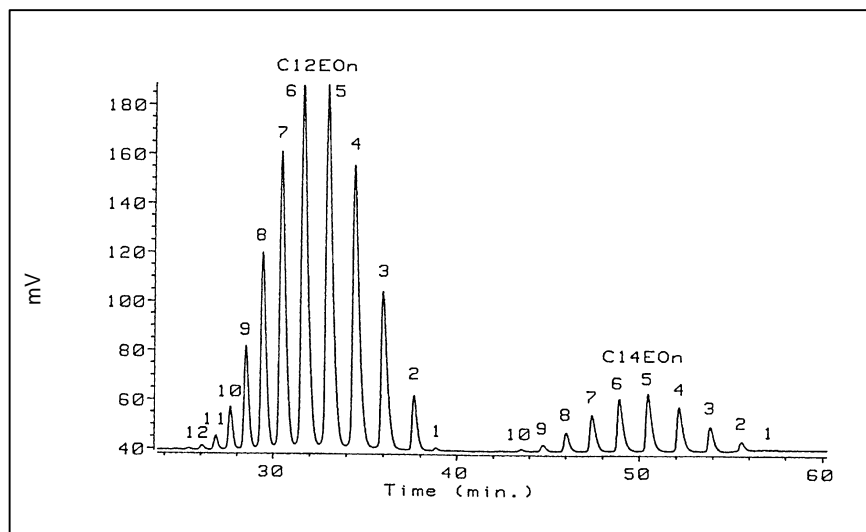


Determination of Ethoxylated Alfol 1214



Separation of ethoxylated Alfol 1214

Witold Miskiewicz and Jan Szymanowski, *Critical Reviews in Analytical Chemistry* 25(4):203-246 (1996)

The determination of surfactants, either ionic or nonionic, is an important application field for ELSD, due to the universality side of this detector which, moreover, allows to use HPLC elution gradients with UV absorbent solvents. Mixtures of several ethoxylated alcohols and fatty acids may be separated using C18 columns connected with weaker and stronger H₂O/CH₃CN gradients. To begin, ethoxylated acids are separated from the alcohols by trapping the latter in a column where the eluant is too weak to elute them but strong enough to separate ethoxylated acids from ethoxylated alcohols.

Chromatographic conditions :

Column : Nucleosil 120-3 C18 (250x4 mm).

Injection Volume : 20µl

Flow Rate : 1 ml/mn

Mobile Phase A : H₂O; B : ACN

Gradient :

46 to 55% B (20 min), 55 to 76% B (30min), 76 to 90% B (15min)

Nebulizer temperature : 35°C

Evaporation temperature : 45°C

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