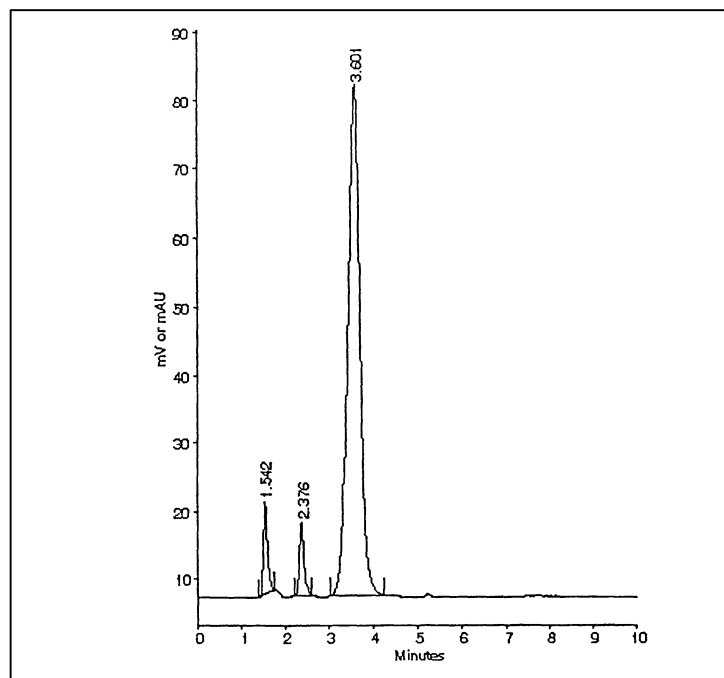


Analysis of Quaternary Ammonium Compounds by HPLC with ELSD



Analysis of Varisoft 2TD Standard (200 ppm).
J.liq. Chrom.& Rel. Technol. , 20(7), 1037-1047 (1997)

Quaternary ammonium compounds (quats) comprise a great number of materials used primarily as surfactants and antimicrobials. Chemically, these compounds are substituted ammonium salts. The associated component of a quat can be bromide, chloride or methosulfate ion. Many methods for determination of quaternary alkylammonium compounds have been reported. To minimize the hydrophobic interactions and solvation effects between compounds and mobile phase, authors use a cation exchange separation with non-aqueous solvent as mobile phase. Due to their lack of suitable chromophore groups, the authors use a ELS detector to quantify such compounds.

Chromatographic conditions :

Column : Metachem Spherisorb SCX (150x4.6 mm, 5 μ m)

Flow Rate : 1 ml/mn

Mobile phase : 0.06 M ammonium formate in MeOH

Nebulizer temperature : 35°C

Evaporation temperature : 40°C

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