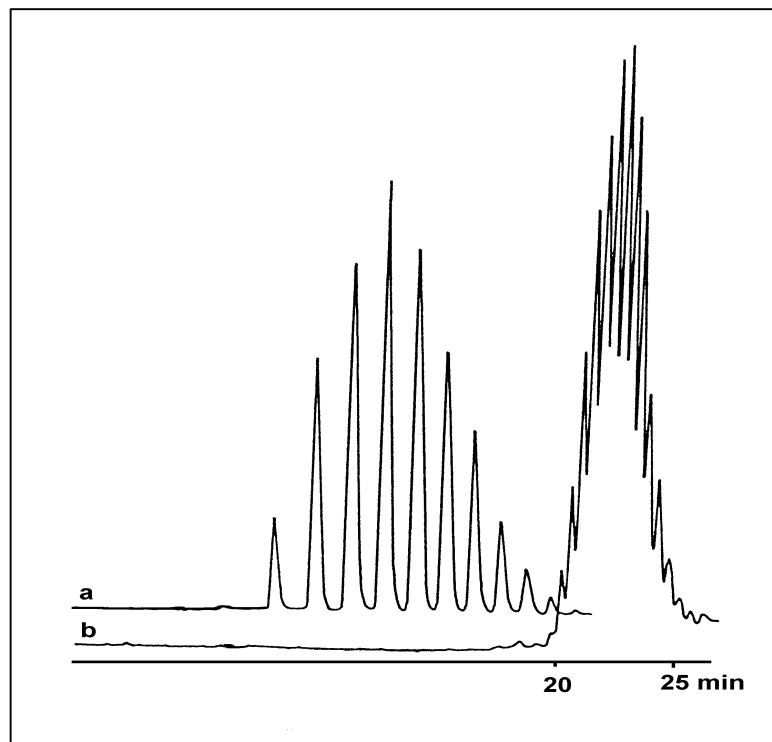


POLYETHYLENE AND SURFACTANT ANALYSIS BY HPLC WITH ELSD



Poly (ethylen glycols) (PEG) are used as stabilizers in emulsions and are useful as water-miscible bases for ointments, particularly when skin penetration is desired. Their chromatographic analysis reveals a Gaussian distribution of the oligomers centered on the average of the molar mass as defined by the brand name, and is, in general, performed by reversed phase chromatography with gradient elution.

The figure illustrates well-resolved PEG 400 on ODS-bonded silica.

Chromatographic conditions :

Column : 150 x 4.6 mm Zorbax TMS

Flow Rate : 1.5 ml/min

Mobile phase gradient : methanol-water 1:9 to 9:1 in 30 min

ELSD Temperature : 40°C

a) PEG 400

b) TRITON X100

Journal of High Resolution Chromatography, Vol. 15, May 1992

Laposse, Elfakir, Morin-Allary, Dreux

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>