USE OF SOME POROUS POLYMERS IN SOLID PHASE EXTRACTION OF TOCOPHEROLS

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Abstract: Six porous polymers (Chromosorb 101, Chromosorb 102, Porapak P, Porapak Q, Porapak QS, Porapak N) for solid phase extraction (SPE) of tocopherols were tested. For elution of tocoferols from cartridges, three solvents and two solvent mixtures (hexane, acetone, chloroform, Folch mixture and hexane: ethyl: acetate 85:15, v/v) were studied. The analysis of tocoferols without any derivation step was performed by gas chromatography. The biggest recoveries (98.3-105.6%) were found for Chromosorb 101 and Porapak P in elution with hexane: ethyl acetate (85:15, v/v). The lowest recoveries were found for Chromosorb 102 and Porapak N for all solvents and these could be the result of strong adsorbtion of tocopherols on these polimers. Non polar porous polimers could be used for SPE of tocopherols from diferent matrix.

Key words: tocopherols, SPE, recovery, GC.

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