

Distinct Selectivity of ZORBAX SB-Phenyl and SB-C18 Bonded Phases

Application

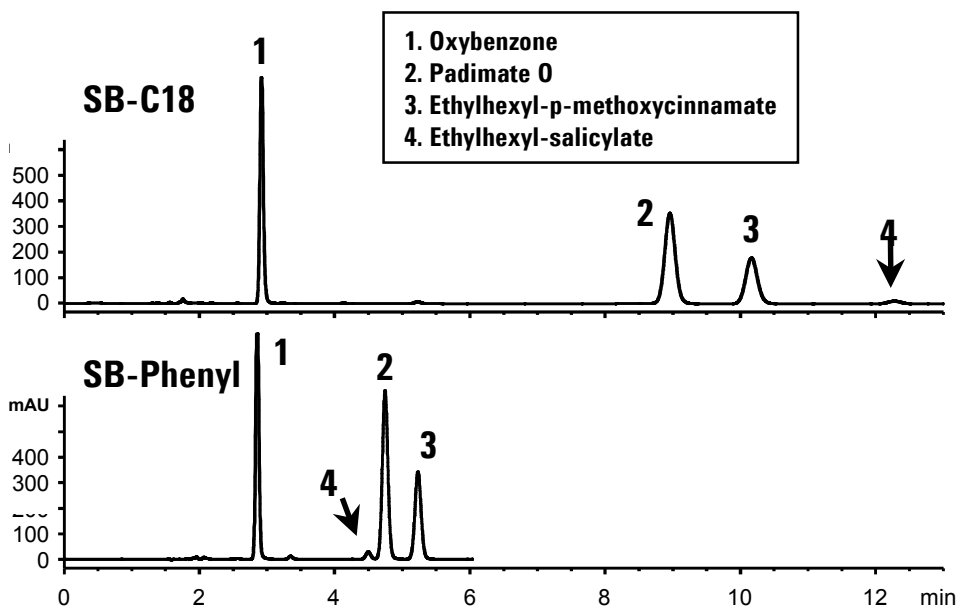
Technical

Robert Ricker

Below is a comparison of analyses of UV absorbers in sunscreen lotion. Note, peak 4 elutes last when sunscreen extract is resolved on ZORBAX SB-C18. Peak 4, however, elutes second when separated on ZORBAX SB-Phenyl. In this example, change in selectivity (α) is not due to mobile phase or temperature (constant), but is due to use of a different stationary phase. Distinct selectivity of stationary phases is useful especially in method development, or, for example, when a specific mobile phase is favored to keep the sample soluble after injection.

Highlights

- *Change of bonded phase is a quick method development tool for changing resolution and selectivity (see peak #4).*
- *ZORBAX StableBond columns are unsurpassed in stability at low pH, including 0.1% TFA (pH 2.1).*
- *Symmetrical peaks provide for rugged quantitation.*



Conditions: LC: Agilent 1100
Columns: ZORBAX SB-Phenyl, 4.6 x 150 mm (3.5 μ m), Agilent P/N: 863953-912
ZORBAX SB-C18, 4.6 x 150 mm (3.5 μ m), Agilent P/N: 863953-902
Mobile Phase: MeOH : H₂O, 84:16, 0.1% TFA; pH 2.0
UV: 310 nm; Flow: 1.0 mL / min.; 30°C



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*Robert Ricker is an application chemist
based at Agilent Technologies, Wilmington,
Delaware.*

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