

SFCによる薬物の分離

SunShell SFC 2-EP 2.6 μm , 150 x 3.0 mm i.d.

Separation of Pharmaceutical Compounds by Supercritical Fluid Chromatography (SFC)

Comparison between SunShell SFC 2-EP and 1.7 μm fully porous 2-EP

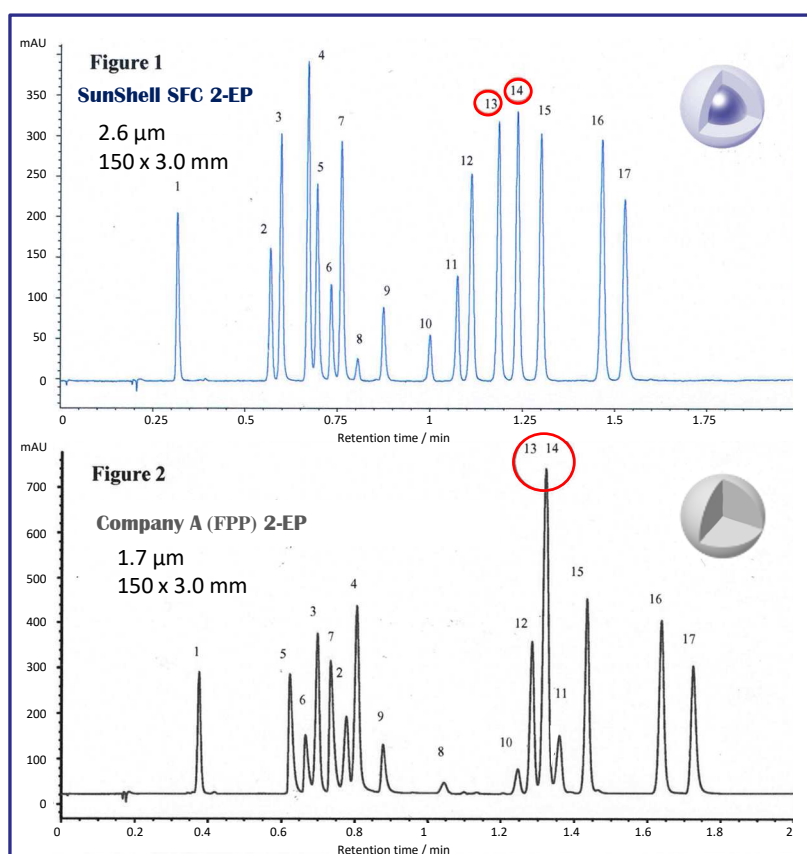


Figure 1: Chromatogram of the separation for the 17-component mix using the Sun Shell 2-EP 150 x 3.0 mm column. A methanol gradient of < 2 minutes was used on the Agilent 1260 Infinity SFC system. SFC conditions: flow rate: 4.0mL/min; outlet pressure 160 bar; column temperature 55°C. Gradient program: 5.0-7.5% in 0.20 min, then 7.5-20% in 1.3 min and held at 20% for 0.2 min.

Figure 2: Chromatogram of the separation for the 17-component mix using Acquity UPC² Viridis 2-EP 100 x 3.0 mm column. 16 of the 17 components were resolved. A methanol gradient of < 2 minutes was used on the Agilent 1260 Infinity SFC system. SFC conditions: flow rate 3.5 mL/min; outlet pressure 160 bar; and column temperature 70°C. Gradient program: 5.0-12.5% in 1.0 min, 12.5% for 0.25 min, then 12.5-20% in 0.75 min.

Samples:

- 1 = Caffeine, 2 = Etophylline, 3 = Thymine, 4 = Uracil, 5 = Flurbiprofen, 6 = Naproxen, 7 = Ketoprofen, 8 = Cortisone, 9 = Warfarin, 10 = Hydrocortisone, 11 = Prednisolone, 12 = Acetamidophenol, 13 = Sufamethazine, 14 = Sulfamethoxazole, 15 = Sulfadimethoxine, 16 = Sulfaquinolaxine, 17 = Sulfamethizole

Courtesy of Pfizer Inc.

Samples :

1. Caffeine	2. Etophylline	3. Thymine	4. Uracil	5. Flurbiprofen	6. Naproxen	7. Ketoprofen	8. Cortisone	
9. Warfarin	10. Hydrocortisone	11. Prednisolone	12. Acetamidophenol	13. Sufamethazine	14. Sulfamethoxazole	15. Sulfadimethoxine	16. Sulfaquinolaxine	17. Sulfamethizole