

SFCによる薬物の分離

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

Separation of Pharmaceutical Compounds by Supercritical Fluid Chromatography

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

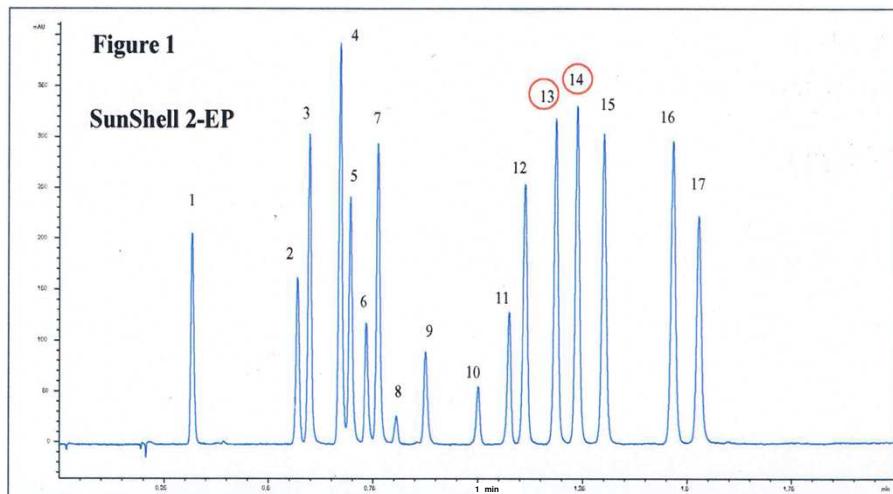


Figure 1: Chromatogram of the separation for he 17-component mix using the Sun Shell 2-EP 150 x 3.0 mm column. A methanol gradient of < 2 minutes was used on the Agilent 1260 Infinity SFC system. SFC conditions: flow rate: 4.0mL/min; outlet pressure 160 bar; column temperature 55°C. Gradient program: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

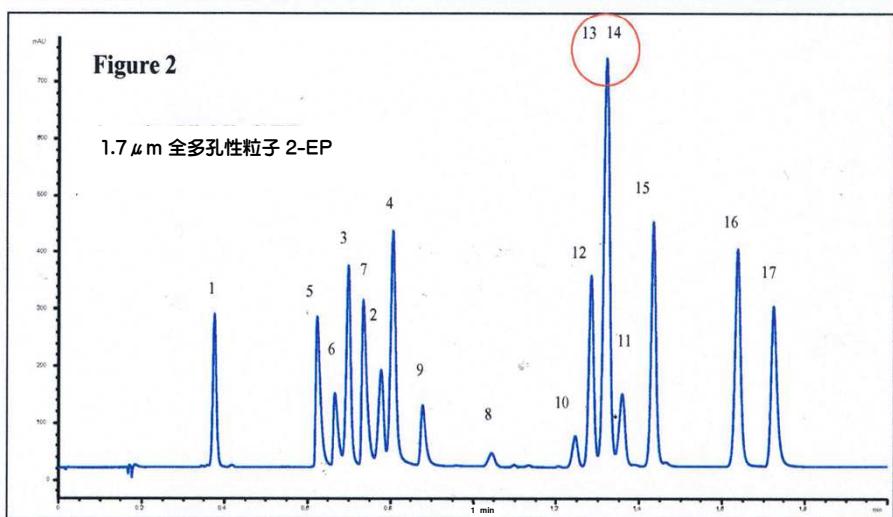


Figure 2: Chromatogram of the separation for the 17-component mix using Acuity UPC² Viridis 2-EP 100 x 3.0 mm column. 16 of the 17 components were resolved. A methanol gradient of < 2 minutes was used on the Agilent 1260 Infinity SFC system. SFC conditions: flow rate 3.5 mL/min; outlet pressure 160 bar; 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.

Courtesy of Pfizer Inc.

(1) Flurbiprofen	(2) Naproxen	(3) Ketoprofen	(4) Caffeine	(9) Acetamidophenol	(10) Cortisone	(11) Sulfamethoxazole	(12) Sulfadimethoxine
(5) Warfarin	(6) Thymine	(7) Etopythiline	(8) Uracil	(13) Hydrocortisone	(14) Sulfamethazine	(15) Prednisolone	(16) Sulfaquinoxaline
(17) Sulfamethizole							