

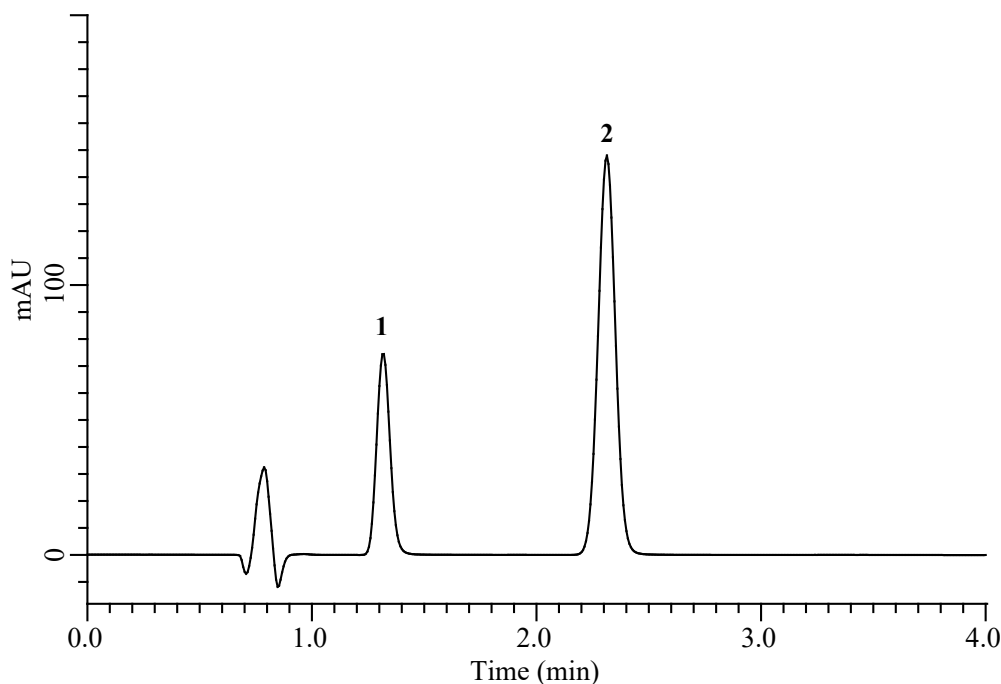
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Inertsil® Applications

Analysis of Sulfamethoxazole and Trimethoprim

(Under the Condition of USP43-NF38)

Data No. LB751-7111



Conditions

System : Chromaster HPLC system (HITACHI)
Column : Inertsil WP300 C18 (GL Sciences Inc.)
(5 μ m, 150 x 4.0 mm I.D.)
Column Cat. No. : 5020-05835
Eluent : Solution*
Flow Rate : 2.0 mL/min
Col. Temp. : 40 °C
Detection : UV 254 nm
Injection Vol. : 5 μ L
Sample : Standard

Analyte:

1. Trimethoprim 0.032 mg/mL
2. Sulfamethoxazole 0.032 mg/mL

Relative retention times

Trimethoprim : 1.31/1.31 (1.0)
Sulfamethoxazole : 2.31/1.31 (1.8)

Resolution : 7.80 (\geq 5.0)

Tailing factor

peak area of 1 : 1.11 (\leq 2.0)
peak area of 2 : 1.01 (\leq 2.0)

RSD of the

peak area of 1 (%) (n=6) : 0.73 (\leq 2.0)
peak area of 2 (%) (n=6) : 0.69 (\leq 2.0)

* Mix 1400 mL of water, 400 mL of acetonitrile, and 2.0 mL of triethylamine in a 2000-mL volumetric flask. Allow to equilibrate to room temperature, and adjust with 0.2 N sodium hydroxide or dilute glacial acetic acid (1 in 100) to a pH of 5.9 ± 0.1 . Dilute with water to volume, and pass through a filter of 0.45- μ m pore size.