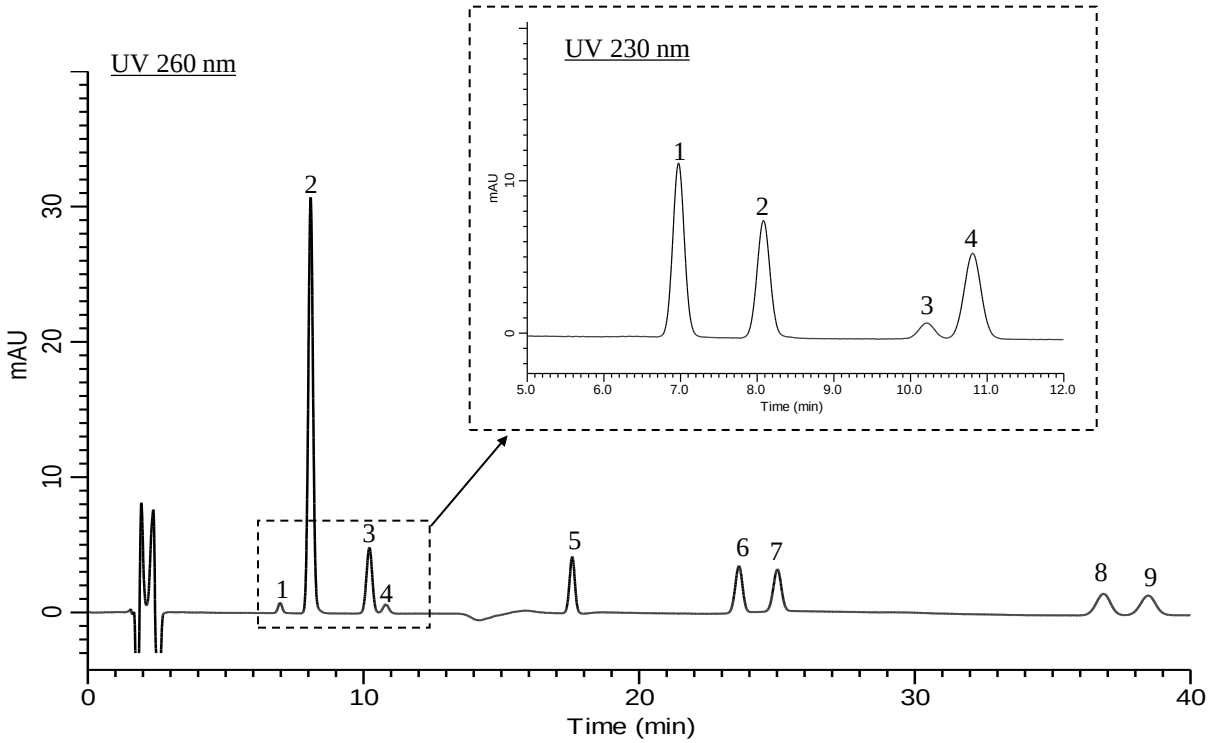
Analysis of Preservatives (Inertsil ODS-4)



Conditions

System : GL-7400 HPLC system
Guard Column : Cartridge Guard Column E
Inertsil ODS-4 (5 µm, 10 x 4.0 mm I.D.)
Column Cat. No. : 5020-08520
Column : Inertsil ODS-4 (5 µm, 250 x 4.6 mm I.D.)
Column Cat. No. : 5020-03946
Eluent : A) CH_3OH/CH_3CN/5 mM Citric acid buffer* = 5/4/11, v/v/v
B) CH_3OH/CH_3CN/5 mM Citric acid buffer* = 1/2/7, v/v/v
A/B = 0/100 -10 min- 0/100 -5 min- 100/0 -22 min- 100/0, v/v
Flow rate : 1.0 mL/min
Col. Temp. : 40 °C
Detection : UV 230, 260 nm (GL-7452A PDA detector)
Injection Vol. : 20 µL
Sample : Standards

* 5 mM Citric acid buffer : Dissolve 7.0 g of citric acid monohydrate and 6.0 g of Tri-sodium Citrate Dihydrate in 1 L of water, and dilute ten-fold by water.

Analyte:

1. Benzoic acid (1 mg/L)
2. Sorbic acid (1 mg/L)
3. Dehydroacetic Acid (1 mg/L)
4. *p*-Hydroxy benzoic acid methyl ester (1 mg/L)
5. *p*-Hydroxy benzoic acid ethyl ester (1 mg/L)
6. *p*-Hydroxy benzoic acid *iso*-propyl ester (1 mg/L)
7. *p*-Hydroxy benzoic acid *n*-propyl ester (1 mg/L)
8. *p*-Hydroxy benzoic acid *iso*-butyl ester (1 mg/L)
9. *p*-Hydroxy benzoic acid *n*-butyl ester (1 mg/L)