

Application Report 270

Analysis of Benzoic Acid Derivatives Using Ascentis™ C18

The suitability of the Ascentis C18 for the efficient separation of organic acids, benzoic acid, 4-hydroxybenzoic acid, acetylsalicylic acid (aspirin), 2-hydroxybenzoic acid (salicylic acid) and ethyl paraben by HPLC-UV. Structures and a representative chromatogram are presented.

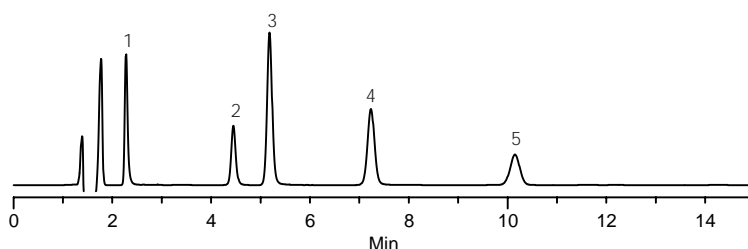
Key Words

Ascentis C18, 581324-U, organic acids, benzoic acid, 47849, 65-85-0, 4-hydroxybenzoic acid, 240141, 99-96-7, acetylsalicylic acid (aspirin), A3160, 50-78-2, 2-hydroxybenzoic acid, 69-72-7, ethyl paraben, R472370

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Acquisition System: Hitachi LC

Notebook Reference: 1550



G003014

Conditions

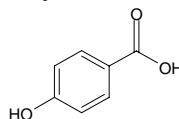
column: Ascentis C18, 15 cm x 4.6 mm I.D., 5 µm particles (581324-U)
mobile phase: 70:30, 0.1% TFA in water: 0.1% TFA in acetonitrile
flow rate: 1.0 mL/min.
temp: 30 °C
det: UV at 220 nm
injection: 10 µL
sample: as indicated in 0.1% TFA in water

Peak IDs

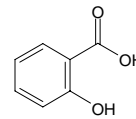
1. 4-hydroxybenzoic acid (50 µg/mL)
2. Acetylsalicylic acid (50 µg/mL)
3. Benzoic acid (50 µg/mL)
4. 2-hydroxybenzoic acid (50 µg/mL)
5. Ethyl paraben (50 µg/mL)

Structures

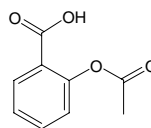
4-hydroxybenzoic acid - G002623



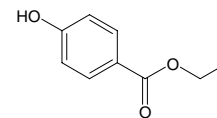
2-hydroxybenzoic acid - G002624



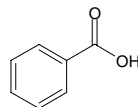
Acetylsalicylic acid - G002625



Ethyl paraben - G002626



Benzoic acid - G002622



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