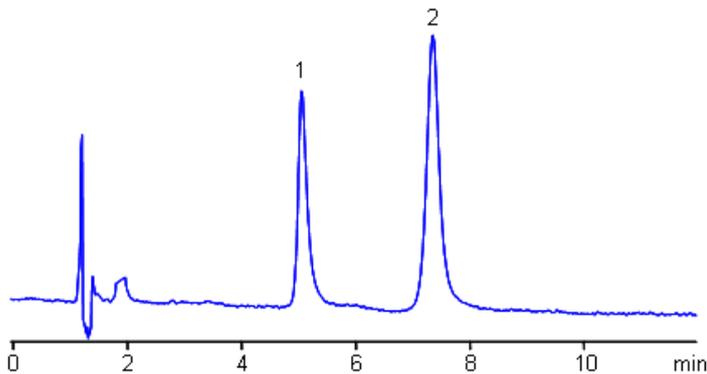# Separation of Benzoic and Acetylbenzoic acid in Hydrogen-Bonding Mode

Column: SHARC 1
Size: 3.2 x 100 mm
Mobile phase: MeCN /MeOH 95/5 with 10 mM
              Ammonia
Flow: 0.5 mL/min
Detection: UV 250 nm

1.   Benzoic acid
2.   4-Acetylbenzoic acid

A general approach for analysis of various organic acids with MS detection in negative mode was developed using hydrogen-bonding stationary phase – SHARC1. A highly sensitive method allows to analyze traces of organic acids in various matrices using ACN/MeOH/ammonia mobile phase. In hydrogen-bonding chromatography acetonitrile is a weaker solvent and alcohol is a stronger solvent. Various gradient and isocratic conditions can be used

The SHARC™ family of innovative columns represents the first commercially available columns primarily utilizing separation based on hydrogen bonding. SHARC stands for Specific Hydrogen-bond Adsorption Resolution Column . Hydrogen bonding involves an interaction or attraction between a bound hydrogen atom and molecules containing electronegative atoms, such as oxygen, nitrogen, and fluorine.

Method Parameters

Column	Sharc 1, 3.2×100 mm, 5 µm, 100 Å
Mobile Phase	MeCN/MeOH – 95/5%
Buffer	Ammonia 10mM
Flow Rate	005 mL/min
Detection	UV, 250 nm

Quelle: https://sielc.com/Separation%20of%20Benzoic%20and%20Acetylbenzoic%20acid%20in%20Application-Hydrogen-Bonding-Mode