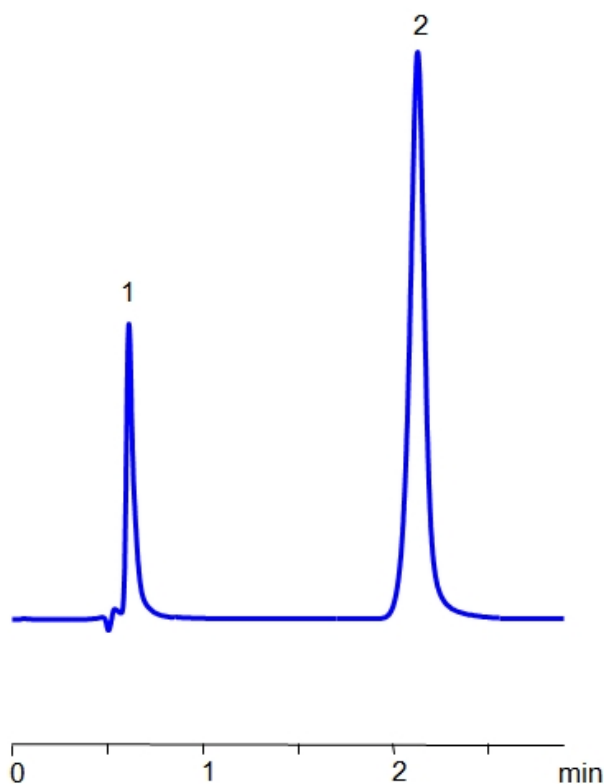


# HPLC Separation of Benzoic and 2-naphthalenesulfonic Acids

<https://sielc.com/hplc-separation-of-benzoic-and-2-naphthalenesulfonic-acids>

## Chromatogram



1. Benzoic Acid
2. 2-Naphthalenesulfonic Acid

**Column:** Newcrom BH  
**Column size:** 3.2 × 50 mm, 3 μm  
**Mobile phase:** MeCN/H<sub>2</sub>O - 80/20%  
**Buffer:** H<sub>2</sub>SO<sub>4</sub> – 0.2%  
**Flow rate:** 0.5 ml/min  
**UV detection:** 275 nm

## Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Benzoic Acid , 2-Naphthalenesulfonic Acid .

Benzoic Acid is an organic acid with antimicrobial properties. It is typically used in cosmetics, food, and pharmaceuticals as a preservative against yeast and mold. As treatment, it is also used as a topical medicine of fungal skin infections. It can be naturally found in many berries and vegetable resins. With it's chemical formula being C<sub>7</sub> H<sub>6</sub> O<sub>2</sub> , it is considered the simplest aromatic carboxylic acid. You can find detailed UV spectra of Benzoic Acid and information about its various lambda maxima by visiting the following link.

2-Naphthalenesulfonic Acid is an organic compound with the formula C<sub>10</sub> H<sub>7</sub> SO<sub>3</sub> H . It is used primarily in the production of dyes, but has also historically been industrially used for a it's various chemical reactions.

Newcrom BH column is used for HPLC separation of weak and strong organic acids using a mixed-mode method. Benzoic and naphthalenesulfonic acids are retained based on polar interaction mode and anion-exchange mode. The isocratic separation is achieved very quickly on a short 3.2 x 50 mm column in under 3 minutes. The mobile phase is acetonitrile (ACN) and water with sulfuric acid buffer. UV detection at 275nm.

## Method Parameters

<b>Mobile Phase</b>	MeCN/H <sub>2</sub> O – 80/20%
<b>Buffer</b>	H <sub>2</sub> SO <sub>4</sub> – 0.2%

<b>Flow Rate</b>	0.5 ml/min
<b>Detection</b>	UV 275nm
<b>Class of Compounds</b>	Acid
<b>Analyzing Compounds</b>	Benzoic Acid,2-Naphthalenesulfonic Acid

#### HPLC Column Used

**Newcrom BH, 3.2 x 50 mm, 3 µm, 100 A, dual ended**

[Order this column at hplc-shop.de](http://hplc-shop.de) →