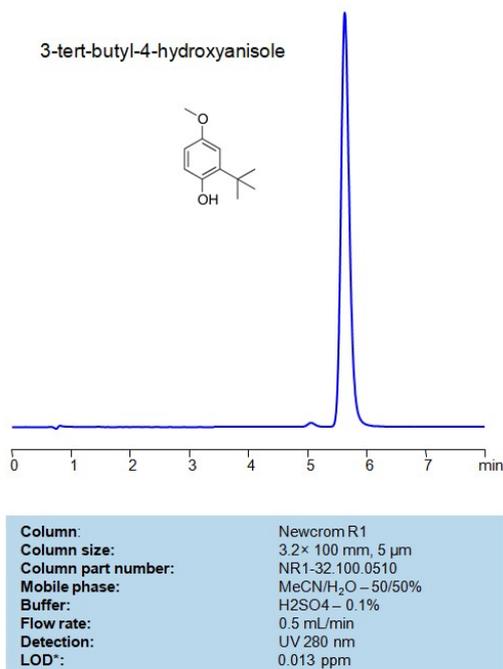


## HPLC Method for Analysis of 3-tert-butyl-4-hydroxyanisole (BHA) on Newcrom R1 Column



Separation type: Liquid Chromatography Reversed-phase

3-tert-butyl-4-hydroxyanisole (BHA) is a synthetic antioxidant commonly used as a food preservative. It is an aromatic compound with the chemical formula C<sub>11</sub>H<sub>16</sub>O<sub>2</sub>. BHA belongs to a class of compounds known as butylated hydroxyanisoles.

Function: BHA is used as an antioxidant to prevent the spoilage of fats and oils in various food products. It helps protect these substances from oxidative degradation, extending the shelf life of processed foods.

Chemical Structure: The compound has a molecular structure with a tert-butyl group (tert-butyl radical) attached to the oxygen atom of a hydroxyanisole group. The IUPAC name for BHA is 2-tert-butyl-4-methoxyphenol.

Usage: BHA is commonly used in a variety of food products, including snack foods, baked goods, cereals, and fats and oils. It is also used in certain cosmetic and pharmaceutical products.

3-tert-butyl-4-hydroxyanisole (BHA) be retained and analyzed on a reversed-phase Newcrom R1 column with a mobile phase consisting of water, Acetonitrile (MeCN), and sulfuric acid. This analytical method can be detected with high resolution and peak symmetry at a wavelength of 280 nm using UV detection

## Method Parameters

<b>Column</b>	Newcrom R1, 3.2 x 100 mm, 5 µm, 100 Å, dual ended
<b>Mobile Phase</b>	MeCN – 50%
<b>Buffer</b>	H2SO4 – 0.1%
<b>Flow Rate</b>	0.5 mL/min
<b>Detection</b>	UV 280 nm
<b>Sample</b>	1 mg/ml
<b>Injection Volume</b>	1 µL

Quelle: <https://sielc.com/hplc-determination-of-3-tert-butyl-4-hydroxyanisole>