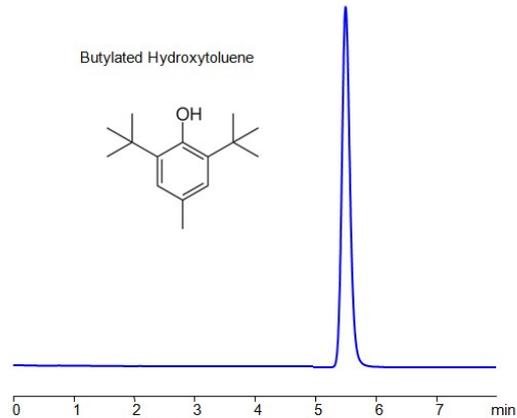


## HPLC Method for Analysis of Butylated Hydroxytoluene on Newcrom R1 Column



<b>Column:</b>	Newcrom R1
<b>Column size:</b>	3.2× 100 mm, 5 µm
<b>Column part number:</b>	NR1-3.2.100.0510
<b>Mobile phase:</b>	MeCN/H <sub>2</sub> O – 80/20%
<b>Buffer:</b>	H <sub>2</sub> SO <sub>4</sub> – 0.1%
<b>Flow rate:</b>	0.5 mL/min
<b>Detection:</b>	UV 280 nm
<b>Sample:</b>	1 mg/ml in MeCN/H <sub>2</sub> O – 80/20%
<b>Injection volume:</b>	2 µl
<b>LOD*:</b>	8 ppb

Separation type: Liquid Chromatography Reversed-phase

Butylated hydroxytoluene (BHT) is a synthetic antioxidant widely used in a variety of industries, particularly in food preservation, cosmetics, and industrial products.

Butylated hydroxytoluene is used primarily for preserving the freshness and quality of products by preventing oxidative degradation. While considered safe for use within regulatory limits, its potential health and environmental effects continue to be areas of study and discussion.

Butylated Hydroxytoluene can be retained, and analyzed on a mixed-mode 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/H <sub>2</sub> O – 80%,
<b>Buffer</b>	H <sub>2</sub> SO <sub>4</sub> – 0.1%
<b>Flow Rate</b>	0.5 mL/min
<b>Detection</b>	UV 280 nm
<b>Sample</b>	1 mg/ml in MeCN/H <sub>2</sub> O – 80/20%
<b>Injection Volume</b>	2 µl

Quelle: <https://sielc.com/hplc-determination-of-itraconazole>