

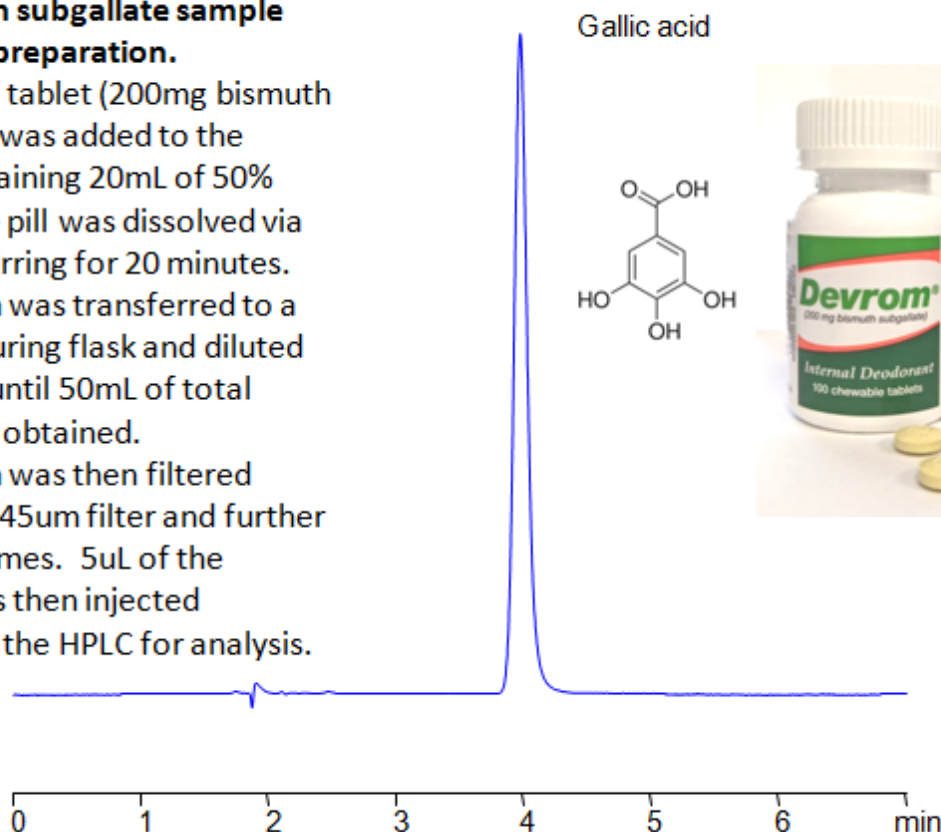
HPLC UV Method for Analysis of Gallic Acid in Bismuth Subgallate Tablets (Devrom) on Newcrom BH Column

<https://sielc.com/hplc-method-for-analysis-of-gallic-acid-in-bismuth-subgallate-tablets-devrom>

Chromatogram

Bismuth subgallate sample preparation.

The crushed tablet (200mg bismuth subgallate) was added to the beaker containing 20mL of 50% H₂SO₄. The pill was dissolved via magnetic stirring for 20 minutes. The solution was transferred to a 50mL measuring flask and diluted with water until 50mL of total volume was obtained. The solution was then filtered through a 0.45µm filter and further diluted 10 times. 5µL of the solution was then injected directly into the HPLC for analysis.



Column:	Newcrom BH
Column size:	4.6 × 150 mm, 5 µm
Column part number:	NBH-46.150.0510
Mobile phase:	MeCN/H ₂ O – 10/90%
Buffer:	H ₃ PO ₄ – 0.5 %
Flow rate:	1.0 mL/min
Detection:	UV 273 nm

Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Bismuth subgallate , Gallic acid .

Gallic acid is a naturally-occurring phenolic acid with the chemical formula C₇H₆O₅. It can be found in gallnuts, sumac, witch hazel, tea leaves, oak bark, and other plants. Historically, it was a key ingredient in European iron gall ink. The use of it spanned from its first discovery in the 12th century into the 19th century. In the modern times, it is used as an antioxidant and a preservative. You can find detailed UV spectra of Gallic acid and information about its various lambda maxima by visiting the following link.

Bismuth subgallate is a medication with the chemical formula $C_7H_5BiO_6$. It is primarily used to deodorize flatulence and stools. Additionally, it is used to treat the *Helicobacter pylori* infection.

Bismuth subgallate, Gallic acid can be retained and analyzed using the Newcrom BH stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a phosphoric acid buffer. Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN – 10%
Buffer	H ₃ PO ₄ – 0.5%
Flow Rate	1.0 ml/min
Detection	UV 273nm
Class of Compounds	Acid, Hydrophilic
Analyzing Compounds	Bismuth subgallate, Gallic acid

HPLC Column Used

Newcrom BH, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

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