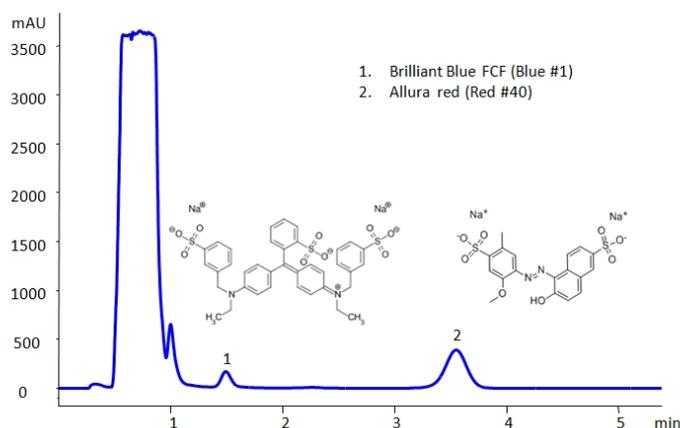


HPLC Method for Analysis of Brilliant Blue FCF and Allura Red in Monster Energy Ultra Violet, Sugar Free Energy Drink



Column:	Newcrom BH
Column size:	4.6 × 50 mm, 5 µm
Mobile phase:	MeOH/H ₂ O – 75/25%
Buffer:	H ₂ SO ₄ – 0.5%
Flow rate:	1 ml/min
Detection:	UV 210 nm
Sample:	Monster Energy Ultra Violet, Sugar Free Energy Drink
Injection Volume:	100 µl

High Performance Liquid Chromatography (HPLC) Method for Analysis of Brilliant Blue FCF (Blue 1) , Allura Red (Red #40) .

Brilliant Blue FCF (Blue 1) is a synthetic molecule used as a food coloring agent. Allura Red (Red 40) is another food colorant. Both are present in Monster Energy Ultra Violet sugar free drink. Both are disodium salts and can be separated in HPLC by our Newcrom BH mixed-mode column which utilizes both hydrophobic and ion-exchange properties. The mobile phase is methanol (MeOH) and water with sulfuric acid (H₂SO₄) buffer making the method MS-compatible. Can also be UV detected at 210 nm

You can find detailed UV spectra of Blue 1 and information about its various lambda maxima by visiting the following link.

You can find detailed UV spectra of Red 40 and information about its various lambda maxima by visiting the following link.

Method Parameters

Column	Newcrom BH, 4.6 x 50 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeOH/H ₂ O – 75/25%
Buffer	H ₂ SO ₄ – 0.5%%
Flow Rate	1.0 mL/min
Detection	UV 210 nm

Quelle: <https://sielc.com/hplc-method-for-analysis-of-brilliant-blue-fcf-and-allura-red-monster-energy-ultra-violet-sugar-free-energy-drink>