

HPLC Separation of cis- and trans – 1,4 cyclohexanedicarboxylic Acid on Newcrom BH Column

1. cis-1,4-Cyclohexanedicarboxylic Acid
2. trans-1,4-Cyclohexanedicarboxylic Acid



Column:	Newcrom BH
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN/H ₂ O – 10/90%
Buffer:	H ₂ SO ₄ – 0.1%
Flow rate:	1 ml/min
UV detection:	200 nm
LOD:	10 ppm, based on the analysis of the sample 0.1 mg/ml injection volume 10 µl

High Performance Liquid Chromatography (HPLC) Method for Analysis of 1,4-Cyclohexanedicarboxylic acid .

1,4-Cyclohexanedicarboxylic acid is a pair of organic compounds with the chemical formula C₈H₁₂O₄ . It is typically used as a building block for polyesters and polyamides. Due to it improving hardness, flexibility, and impact strength of the previously mentioned compounds, it is used in automotive and construction industries. You can find detailed UV spectra of 1,4-Cyclohexanedicarboxylic acid and information about its various lambda maxima by visiting the following link.

1,4-Cyclohexanedicarboxylic 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 [buffer] buffer. Detection is performed using UV.

Method Parameters

Column	Newcrom BH, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H ₂ O – 10/90%
Buffer	H ₂ SO ₄ – 0.1%
Flow Rate	1.0 mL/min
Detection	UV 200 nm

Quelle: <https://sielc.com/hplc-separation-of-cis-and-trans-14-cyclohexanedicarboxylic-acid>