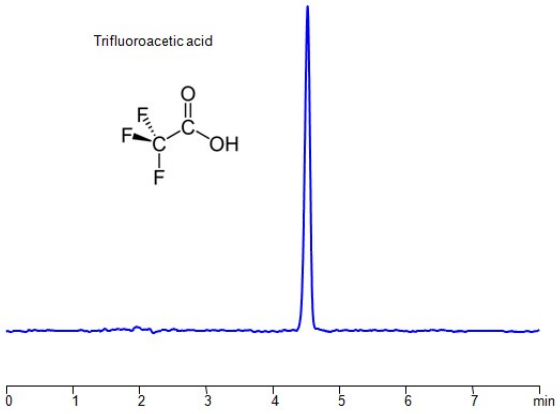
HPLC ELSD Method for Analysis Trifluoroacetic acid on Primesep B4 Column



Column:	Primesep B4
Column size:	4.6 × 150 mm, 5 µm
Column part number:	B4-46.150.0510
Mobile phase:	MeCN/H_2O – 70/30%
Buffer:	Ammonium acetate pH 5.0 – 60 mM
Flow rate:	1.0 mL/min
Sample:	1 mg/ml
Injection volume:	3 µl
LOD:	1 ppm
Detection:	ELSD, the nebulizer and evaporator temperatures 50°C, with a gas flow rate of 1.6 Standard Liters per Minute (SLM)

Trifluoroacetic acid (TFA) is a strong organic acid with the chemical formula CF3COOH.

Trifluoroacetic acid can be retained and analyzed using an Primesep B4 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase consisting of water, acetonitrile (MeCN), and ammonium formate as a buffer. Detection is achieved using ELSD

Method Parameters

Column	Primesep B4, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN/H2O – 70/30%
Buffer	Ammonium formate pH 3.0 – 60 mM
Flow Rate	1.0 mL/min
Detection	ELSD, the nebulizer and evaporator temperatures 50°C, with a gas flow rate of 1.6 Standard Liters per Minute (SLM)
Injection Volume	3 µl

Quelle: https://sielc.com/hplc-method-for-analysis-tfa