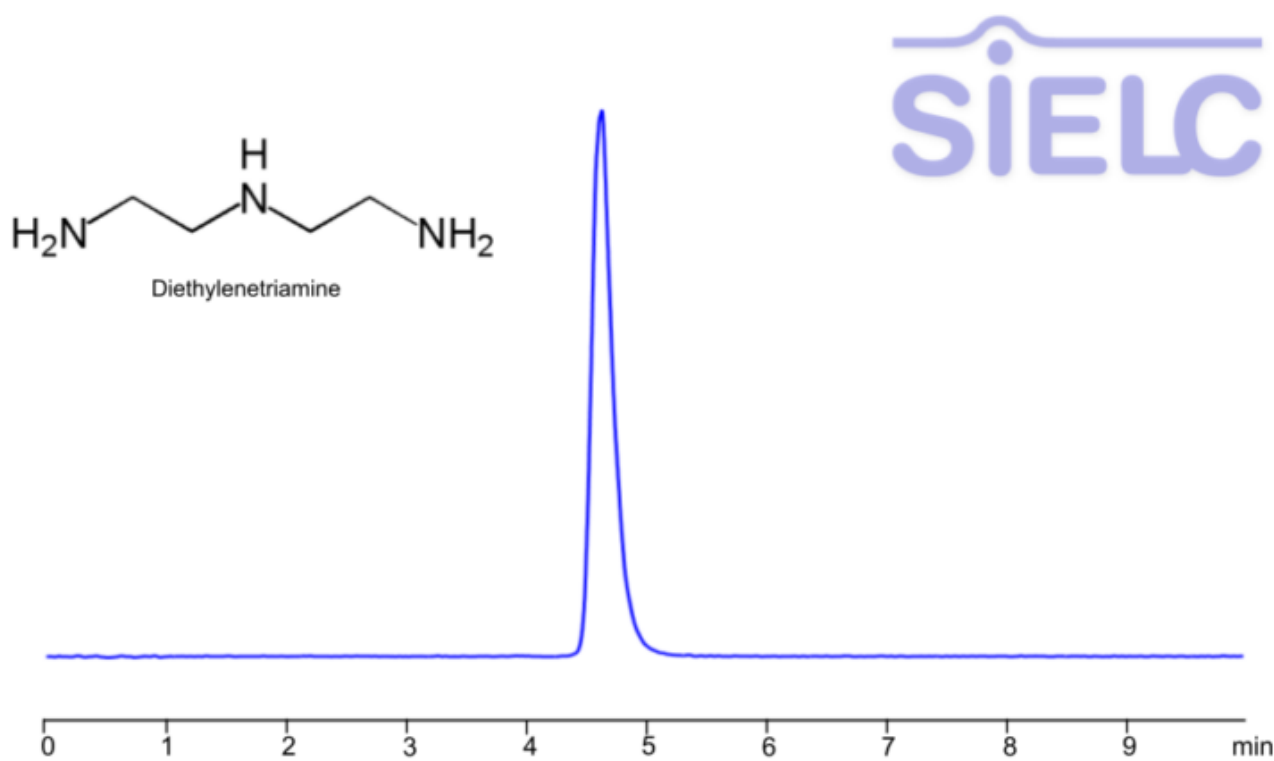


HPLC ELSD Method for Analysis of Diethylenetriamine on Primesep 500 Column

<https://sielc.com/hplc-separation-of-diethylenetriamine>

Chromatogram



Column	Primesep 500
Column Size	2.1 × 150 mm, 5 µm
Part Number	500-21.150.0510
Mobile Phase	Ammonium acetate pH 3.0 20 mM in MeCN/H ₂ O - 10/90%
Injection volume:	1 µL
Flow Rate	0.2 mL/min
Detection	ELSD, the nebulizer and evaporator temperatures 50°C, with a gas flow rate of 1.6 Standard Liters per Minute (SLM)
Limit of Detection*	1 ppm
Sample	1.3 mg/ml in MeCN/H ₂ O - 10/90%

Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Diethylenetriamine

Diethylenetriamine, also denoted as dien or DETA, is an organic compound with the chemical formula $\text{HN}(\text{CH}_2\text{CH}_2\text{NH}_2)_2$. It is primarily used as a curing agent for epoxy resins.

Diethylenetriamine can be retained and analyzed using the Primesep 500 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid as a buffer. Detection is performed using ELSD.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 10/90 %
Buffer	Ammonium Acetate pH 3.0 – 20 mM
Flow Rate	0.2 ml/min
Detection	ELSD
Limit of Detection*	1 ppm
Class of Compounds	Organic Compound
Analyzing Compounds	Diethylentriamine

HPLC Column Used

Primesep 500, 2.1 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](#)