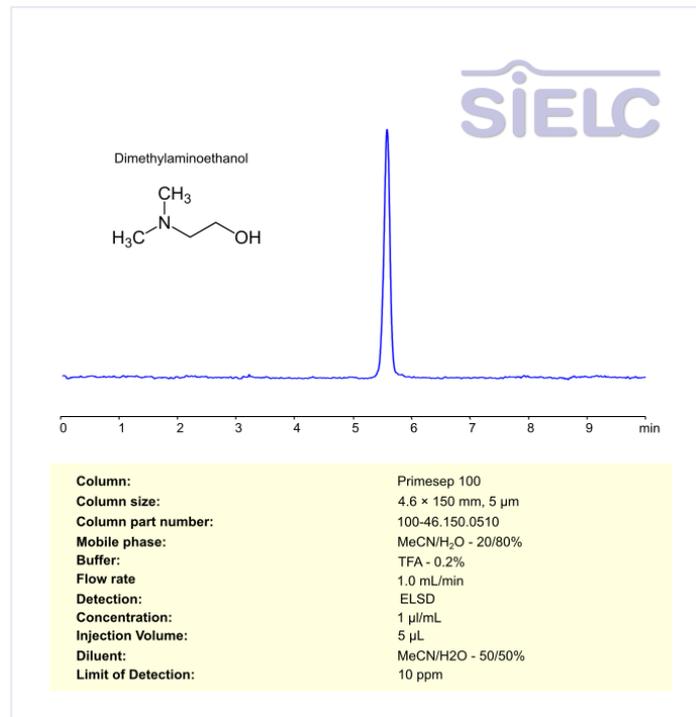


## ELSD HPLC Method for Analysis of Dimethylethanolamine (DMAE or DMEA) on Primesep 100 Column



Dimethylethanolamine (DMAE or DMEA) is a chemical compound often associated with nootropics, skincare, and industrial applications.

**Nootropic Effects:** DMAE is marketed in dietary supplements for its potential to enhance cognitive function, memory, and mood. It is thought to work by increasing acetylcholine synthesis, a neurotransmitter important for brain activity. **Skin Care:** DMAE is included in some anti-aging creams and cosmetics, where it is claimed to improve skin firmness and reduce fine lines. **Industrial Applications:**

**Intermediate in Synthesis:** Used as a precursor in the production of resins, coatings, and polymers.

**Corrosion Inhibitor:** Used in water treatment and other industrial processes. **Research and Laboratory Use:**

Common in chemical research as a reagent or intermediate.

Dimethylethanolamine (DMAE or DMEA) can be retained, and analyzed using a Primesep 100 mixed-mode stationary phase column. The analysis utilizes a gradient method with a simple mobile phase consisting of water, acetonitrile (MeCN), and TFA as a buffer. Detection is carried out using ELSD

\*LOD was determined for this combination of instrument, method, and analyte, and it can vary from one laboratory to another even when the same general type of analysis is being performed.

## Method Parameters

<b>Column</b>	Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
<b>Mobile Phase</b>	MeCN – 20%
<b>Buffer</b>	TFA – 0.2%
<b>Flow Rate</b>	1 mL/min
<b>Detection</b>	ELSD, the nebulizer and evaporator temperatures 50°C, with a gas flow rate of 1.6 Standard Liters per Minute (SLM)

Quelle: <https://sielc.com/hplc-method-for-analysis-dmea>