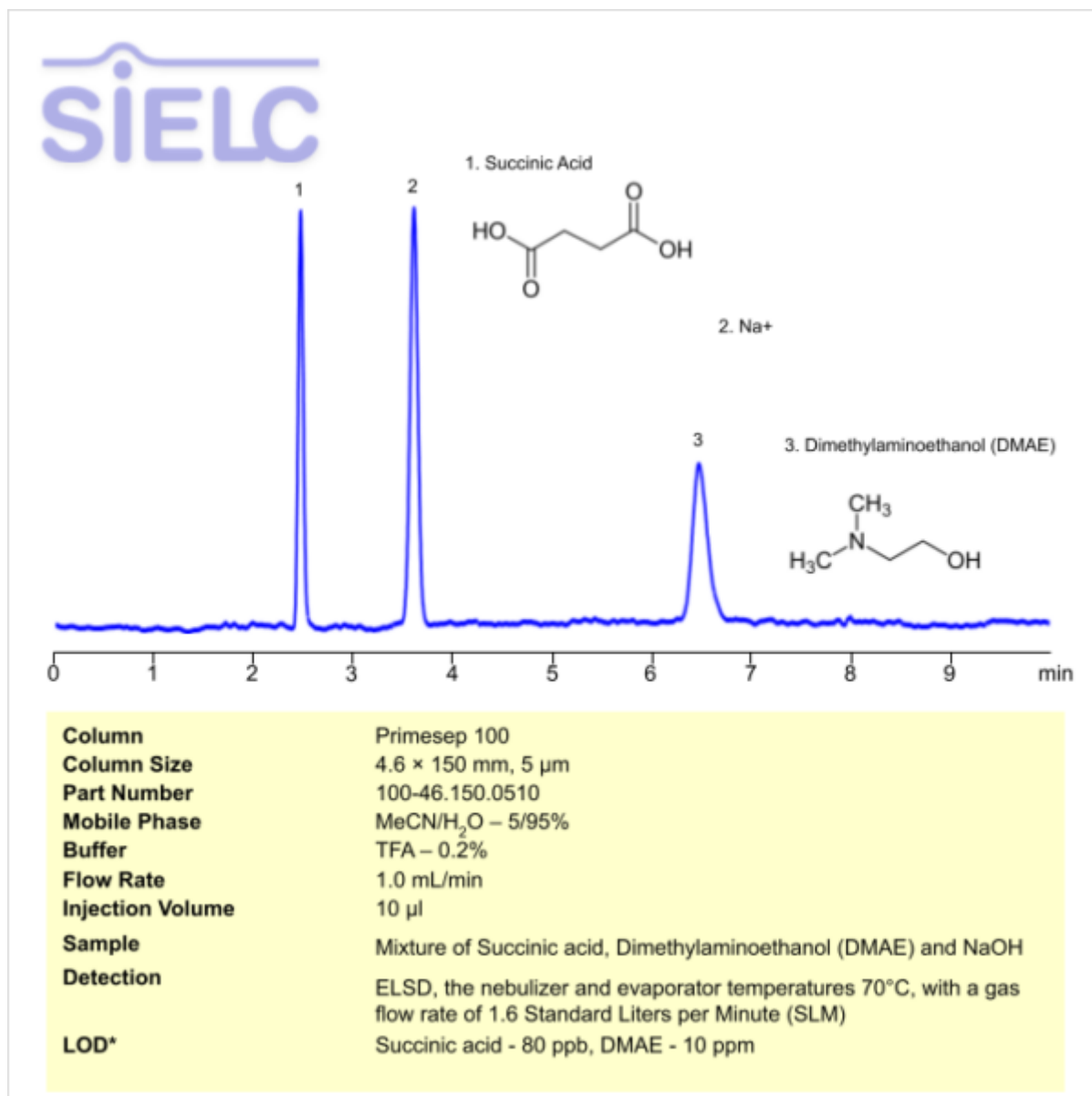


ELSD HPLC Method for Separation of Succinic acid and Dimethylaminoethanol (DMAE) on Primesep 100 Column

<https://sielc.com/hplc-method-for-analysis-succinic-dmae>

Chromatogram



Description

HPLC Method for Analysis of Dimethylethanolamine (DMAE or DMEA) , Succinic Acid on Primesep 100 Column by SIELC Technologies

Dimethylethanolamine , often written as DMAE or DMEA , is a chemical compound with the formula C₄H₁₁NO . It is often associated with nootropics, skincare, and industrial applications. 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. DMAE is included in some anti-aging creams and cosmetics, where it is claimed to improve skin firmness and reduce fine lines.

Succinic Acid is a dicarboxylic acid with the chemical formula C₄H₆O₄ . It is a precursor of some polyesters as well as a component of some alkyd resins. In food, it is typically used as an acidity regulator and flavoring agent. Sulfonic acids like 1-Pentanesulfonic acid, 1-Heptanesulfonic acid, 1-Decanesulfonic acid, and 1-Dodecanesulfonic acid are typically used in ion

chromatography and for organic syntheses. You can find detailed UV spectra of Succinic Acid and information about its various lambda maxima by visiting the following link.

Dimethylethanolamine (DMAE or DMEA) , Succinic Acid 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

Method Parameters

Mobile Phase	MeCN – 5%
Buffer	TFA – 0.2%
Flow Rate	1 ml/min
Detection	ELSD, the nebulizer and evaporator temperatures 70°C, with a gas flow rate of 1.6 Standard Liters per Minute (SLM)
LOD*	Succinic acid – 80 ppb, DMAE – 10 ppm
Class of Compounds	Amino alcohol, acid
Analyzing Compounds	Dimethylethanolamine (DMAE or DMEA), Succinic Acid

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)