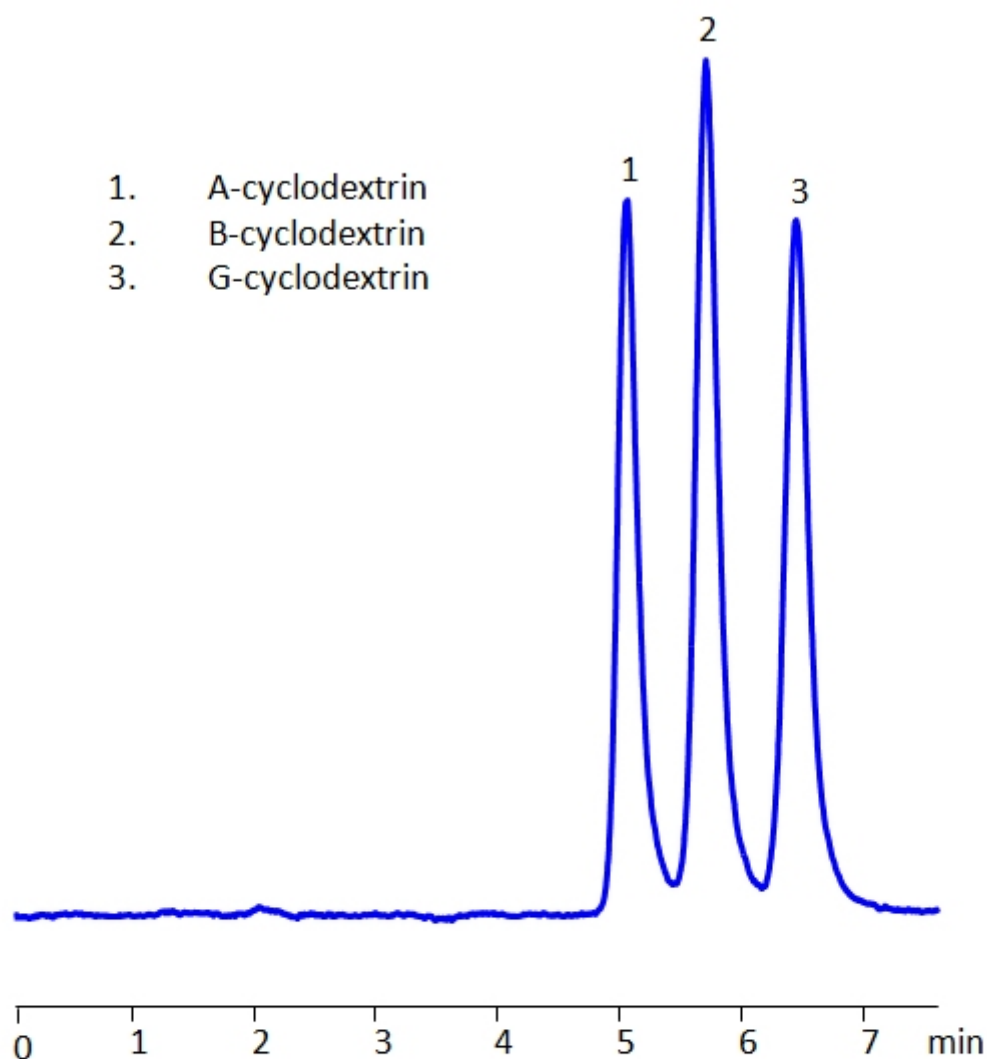


HPLC Method For Analysis of Cyclodextrins on Primesep S2

<https://sielc.com/hplc-method-for-analysis-of-cyclodextrins-on-primesep-s2>

Chromatogram



Column:	Primesep S2
Column part number:	S2-46.150.0510
Column size:	4.6 × 150 mm, 5 µm
Mobile phase:	MeCN/H ₂ O – 70/30%
Buffer:	AmFm pH 3.0 - 20mM
Flow rate:	1.0 mL/min
Detection:	ELSD, 40C

Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of B-Cyclodextrin, G-Cyclodextrin and A-Cyclodextrin

Cyclodextrins are hexasaccharides that are natural starch-conversion products. Industrially, they are manufactured by enzymatic degradation of vegetable raw materials.

Alpha-cyclodextrin has the chemical formula $C_{36}H_{60}O_{30}$. It is said to lower blood pressure, cholesterol, and glucose levels. It is primarily used as a dietary supplement for fiber.

Beta-cyclodextrin has the chemical formula $C_{42}H_{70}O_{35}$. It is used in a large variety of industries primarily as a complexing agent. Its most notable uses are in medicine as sustained release drugs carrier and to improve stability in drugs.

Gamma-cyclodextrin has the chemical formula $C_{48}H_{80}O_{40}$. It is used as a complexing agent due to having the largest cavity size between the natural cyclodextrin. It has use across a variety of industries from food, to medicine, to textiles, and cosmetics.

Method Parameters

Mobile Phase	MeCN- 70%
Buffer	AmFm pH 3.0- 20 mM
Flow Rate	1.0 ml/min
Detection	ELSD
Class of Compounds	Sugar
Analyzing Compounds	beta-CYCLODEXTRIN,alpha-CYCLODEXTRIN,gamma-Cyclodextrin

HPLC Column Used

Primesep S2, 4.6 x 150 mm, 5 μ m, 100 Å, dual ended

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