

Separation of Eight Cannabinoids

With the recent legalization of both medicinal and recreational marijuana in the United States, analysis of individual cannabinoids has captured the public's interest at a new level. As such, many new cannabis products are now available, i.e., edibles, vaporizers, and extracts to name a few. The increased marketability of the product has incited consumers to take a greater interest in the quality and craft ability of the products being sold. Through the quantification of individual cannabinoids, the consumer can make an informed decision about the possible effects they could expect from the products they purchase. Therefore, the need for accurate, robust, and affordable analysis tools are of the utmost importance.

With health, safety, and edibles dosing as the primary motivation, Hamilton Company developed an HPLC method that isolates eight major cannabinoids. The HxSil C18 (3 μ m) column provides an accurate, cost effective, and robust solution that can be used in any HPLC system.

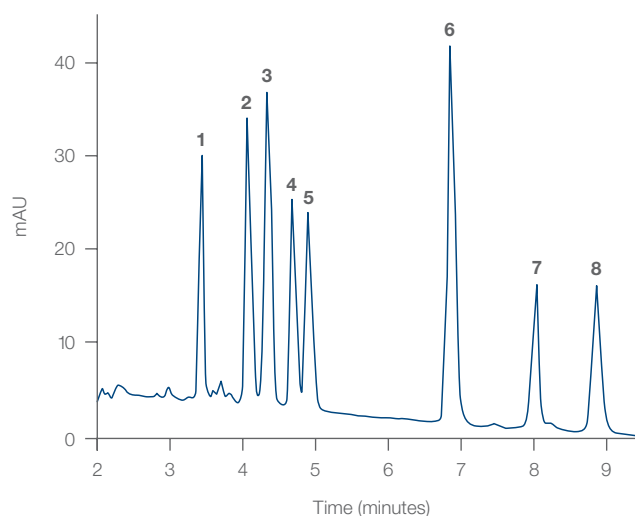
Column Information

Packing Material	HxSil, 3 μ m
Part Number	79641
Dimensions	150 x 4.6 mm

Chromatographic Conditions

Gradient	0–10 min, 78–92% B 10–15 min, 78% B
Temperature	Ambient
Injection Volume	5 μ L
Detection	UV at 230
Eluent A	20 mM NH_4COOH pH 3.5
Eluent B	Acetonitrile
Flow Rate	1.0 mL/min

Separation of Eight Cannabinoids



Compounds:

- | | |
|-------------------------------|--|
| 1: Cannabidiol (CBD) | 5: Cannabigerol (CBG) |
| 2: Cannabidiolol (CBDL) | 6: Cannabinol (CBN) |
| 3: Cannabidiolic Acid (CBDA) | 7: Δ -9-Tetrahydrocannabinol (Δ -9-THC) |
| 4: Cannabigerolic Acid (CBGA) | 8: Δ -9-Tetrahydrocannabinolic Acid (Δ -9-THCA) |

Author: Adam L. Moore, PhD, Hamilton Company

©2019 Hamilton Company. All rights reserved.
All other trademarks are owned and/or registered by Hamilton Company in the U.S. and/or other countries.
Lit. No. L80098 — 08/2019

Web: www.hamiltoncompany.com

USA: 800-648-5950

Europe: +40-356-635-055

To find a representative in your area, please visit hamiltoncompany.com/contacts.

Hamilton Americas & Pacific Rim

Hamilton Company Inc.
4970 Energy Way
Reno, Nevada 89502 USA
Tel: +1-775-858-3000
Fax: +1-775-856-7259
sales@hamiltoncompany.com

Hamilton Europe, Asia & Africa

Hamilton Central Europe S.R.L.
str. Hamilton no. 2-4
307210 Giarmata, Romania
Tel: +40-356-635-055
Fax: +40-356-635-060
contact.lab.ro@hamilton-ce.com