



Restek LC Solutions

Cannabis & Hemp

Applications and examples for possible separations for the analysis of Cannabis, Hemp, and Cannabis Products

- [FFSS2073](#) Growing Analytical Solutions for **Hemp and Cannabis Analysis** - Brochure with applications around the analysis of hemp and cannabis (products): Cannabinoids Potency, Terpenes Profiling, Residual Solvents, Pesticides Residue, Mycotoxins (GC, LC, standards, sample preparation)
- [LC_FF0625](#) The Resolution of **9-THC, 8-THC**, hydroxy- and carboxy- metabolites on Raptor FluoroPhenyl (LC-MS/MS) - showing resolution of Delta 8- and Delta 9-THC, -OH and -COOH metabolites included
- [LC_FF0612](#) UHPLC **Potency for 18 Cannabinoids Including Delta-10-THC Epimers and Exo-THC** (Raptor ARC-18 1.8 µm, LC-UV)
- [LC_GN0669](#) Solvent Savings Analysis of **21 Cannabinoids** on Raptor ARC-18 2.7 µm by **LC-UV** - simple isocratic UV method - baseline separation - only 3 mL of acetonitrile per analysis
- [LC_FF0583](#) Analysis of **21 Cannabinoids** on Raptor ARC-18 2.7 µm by **LC-MS** - isocratic method - lower limits of detection than LC-UV - separation of isobars - more cannabinoids can be added as discovered
- [LC_GN0579](#) **16 Cannabinoids** on Raptor ARC-18 **1.8µm** by **LC-UV** - simple isocratic UHPLC-UV method - 4 min runtime
- [LC_FF0590](#) **16 Cannabinoids** on Raptor ARC-18 (150 x 3 mm, **2.7 µm, LC-UV**) - simple isocratic UHPLC-UV method - 6 min runtime
- [FFAR3688](#) **How Extra-Column Volume Affects Cannabinoids Analysis and LC Column Choice** - Technical article that explains what extra-column volume is, how it affects chromatography, with special attention when a new method is used on a column smaller as usually used. Choose the best column and conditions for your analytical system!
- [LC_GN0589](#) **Cannabis Concentrate Sample** on Raptor ARC-18 **2.7µm** by HPLC-UV - with sample preparation recommendations
- [LC_GN0592](#) **Cannabis Concentrate Sample** on Raptor ARC-18 **1.8µm** by UHPLC-UV - with sample preparation recommendations
- [LC_GN0593](#) **Cannabis Chocolate Sample** on Raptor ARC-18 1.8µm by UHPLC-UV - with sample preparation recommendations
- [LC_GN0591](#) **Cannabis Hard Candy Sample** on Raptor ARC-18 1.8µm by UHPLC-UV - with sample preparation recommendations
- [LC_GN0588](#) **Cannabis Flower Sample** on Raptor ARC-18 **2.7µm** by HPLC-UV - with sample preparation recommendations
- [LC_GN0590](#) **Cannabis Flower Sample** on Raptor ARC-18 **1.8µm** by UHPLC-UV - with sample preparation recommendations
- [LC_GN0581](#) **Potency Analysis** of a Commercially Available **CBD Product** on Raptor ARC-18 2.7µm by LC-UV
- [LC_GN0682](#) California Cannabis **Pesticides and Mycotoxins in Dried Hemp** on Raptor ARC-18 (LC-MS/MS) - Quantification of low ng/g concentrations
- [LC_GN0675](#) California Cannabis **Pesticides and Mycotoxins in Chocolate** on Raptor ARC-18 (LC-MS/MS)
- [FFSS2946](#) High-Throughput Analysis of **Mycotoxins in Cannabis CBD Oil** Pairs Simplified Cleanup with LC-MS/MS Sensitivity (Raptor Biphenyl) - fast, 3-min total cycle time - with excellent compound resolution provided by the Raptor Biphenyl column - matrix interferences removed in one simple step by Resprep SPE - excellent sensitivity down to 2 ng/g in matrix on legacy instrumentation
- [FFAN3149](#) Analysis of **Pesticides and Mycotoxins in Cannabis Brownies** (Raptor ARC-18 2.7 µm, LC-MS/MS and LC-UV, Rxi-5ms for GC-MS/MS) - development of a test method for the analysis of pesticides and mycotoxins in cannabis brownies using the California list - brownies used as a model matrix due to their popularity among cannabis edibles users, and also because they contain high levels of potential interferences (carbohydrates and fats) - so the final method is suited for similar matrices (e.g., cookies or other baked goods) and shows excellent results in terms of linearity, accuracy, precision, and limits of quantitation (LOQs)
- [FFAN3481](#) Analysis of **Pesticides, Mycotoxins, and Cannabinoids in Cannabis Gummies** (Raptor ARC-18 2.7 µm, LC-MS/MS and LC-UV, Rxi-5ms for GC-MS/MS) - easy and effective workflow - using a single extraction procedure - California list of compounds - satisfactory results in terms of LOQ, linearity, accuracy, and precision were obtained for all the target contaminants
- [LC_FF0587](#) **Flavonoids in CBG Hemp Flower** on Raptor Biphenyl by LC-MS/MS
- [LC_FF0588](#) **Flavonoids in CBD Hemp Flower** on Raptor Biphenyl by LC-MS/MS

To learn more about these solutions, simply click the linked reference number above.

If you have the printed version and wish to receive the digital copy with links, or are interested in discussing any of the applications mentioned, please contact us at LC-EMEA@restek.com. We are always here to help with all other enquiries, assistance, or to discuss our try-before-you-buy evaluation column policy.

RESTEK

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Speed Up and Simplify LC Method Development with Restek's Pro EZLC Online Tools

NEW: LC Chromatogram Modeler

- Cut method development time and cost dramatically with highly accurate simulated separations.
- Explore different LC columns and conditions virtually so lab instruments stay online running samples.
- Refine methods in real time to instantly optimize performance for critical separations.

YOU NEED: To perform LC method development from scratch, including the column and conditions.

YOU HAVE: An analyte list (and you may have a column in mind, too).

YOU GET: Customized, interactive model chromatograms that provide a specific phase, column dimension, and conditions. You can change columns, modify LC method conditions, zoom in, and view chemical structures.

Compound library already includes:

- 291 Drugs of Abuse (including 71 isobars)
- 16 Nitrosamines (including 3 isobars)

Coming soon:

- Cannabinoids
- PFAS

Get started on
ez.restek.com



Questions?

Interested in evaluating a column
for your method? We are here to help!
LC-EMEA@restek.com

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Questions? Contact us or your local Restek representative (www.restek.com/contact-us).

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