

Pollutants in Cannabis

Sample preparation à la LCTech

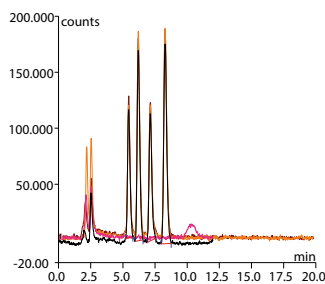
LCTech helps analytical laboratories expand their testing capabilities for cannabis and cannabis-containing products for **mycotoxins** and **pesticides** with exceptional clean-up columns that can be easily automated:

Mycotoxin - Analysis

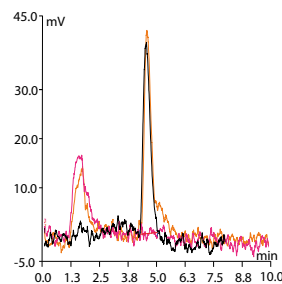
Immunoaffinity columns such as the Afla-OtaCLEAN columns for both regulated mycotoxins at once

- ✓ Afla-OtaCLEAN for simultaneous clean-up for aflatoxins B/G and ochratoxins
- ✓ Save time & money
- ✓ Best results in international round robin tests
- ✓ Miniaturized variant available
- ✓ Recovery rates show exceptional results for the toxins

Chromatogram aflatoxin B/G



Chromatogram ochratoxin A



■ Standard 4 ng / 2 mL represents 20 ppb
■ Hemp blind with Afla- OtaCLEAN
■ Hemp 20 ppb with Afla- OtaCLEAN
■ Hemp 20 ppb with AflaCLEAN Select



Afla- OtaCLEAN column

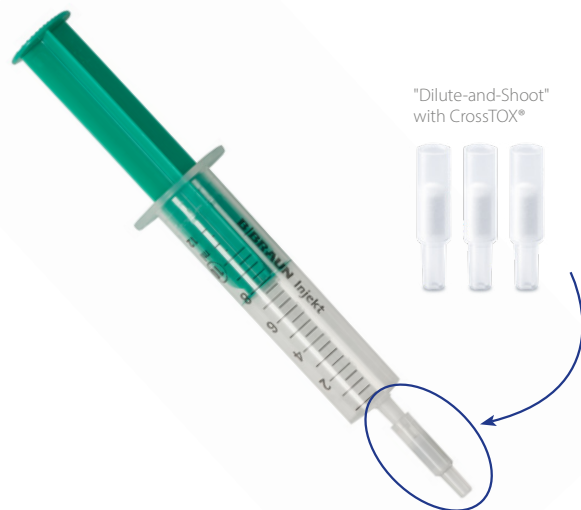
OtaCLEAN SMART column



AflaCLEAN SMART column

CrossTOX® columns - 17 mycotoxins in one go for LC-MS/MS-based analysis

- ✓ Reduced background noise during analysis
- ✓ Very good peak identification of Aflatoxins and others
- ✓ A higher sensitivity is achievable due to minimised matrix effects after concentration
- ✓ Significant reduction of LC-MS/MS down-times
- ✓ No internal standard necessary for the majority of toxins



"Dilute-and-Shoot" with CrossTOX®

PESTICIDE CLEAN-UP ON NEXT PAGE



CHROMATOGRAPHIC SPECIALTIES INC.

1-800-267-8103 • www.chromspec.com • tech@chromspec.com



Pesticide - Analysis



Non-dispersive QuEChERS application for pesticide analysis in cannabis

Extraction

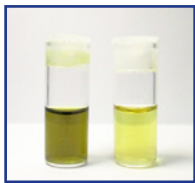
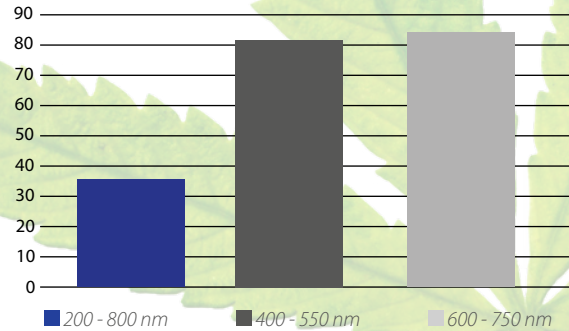
- No shaking
- No centrifugation
- Up to 5 min. faster than a dispersive clean-up
- Improved matrix retention
- Less matrix load into LC-MS/MS with more injections between clean-up cycle



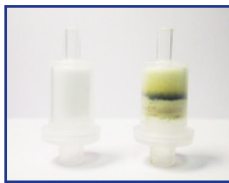
LC-MS/MS



Matrix Retention (Cannabis) in %



sample before and after clean-up



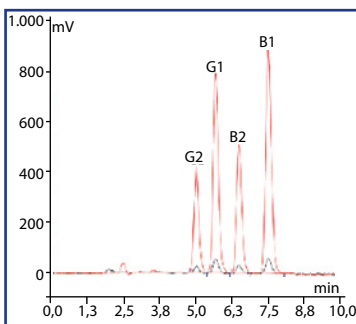
column before and after clean-up

Automate your cannabis clean-up with the **FREESTYLE** robotic system

Highest Sensitivity Through Automation

Full automation using the SMART columns in the FREESTYLE ThermELUTE™ enables not only a higher sample throughput but also the highest analytical sensitivity, since the eluate is quantitatively transferred into the HPLC system.

- Increase your sample throughput
- Achieve reliable, reproducible results
- Increase your analytical sensitivity by a factor of 14



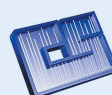
Chromatogram: Sensitivity gain by a factor of 14 on a 3 mL column
■ Manual Clean-up ■ Automated with FREESTYLE ThermELUTE™



FREESTYLE robotic system



www.LCTech.de



**CHROMATOGRAPHIC
SPECIALTIES INC.**

1-800-267-8103 • www.chromspec.com • tech@chromspec.com

