



For multi-mycotoxin analysis

18 mycotoxins at one go!

The CrossTOX® columns by LCTech allow a high efficient sample clean-up of regulated and expected mycotoxins in many matrices. At the same time, the columns improve the conventional dilute-and-shoot process via an QuEChERS based procedure:


- **High purity** of extracts due to special sorbents for high matrix binding; no separate syringe filtration
- Significantly **less 13C Internal standard** required due to special affinity mechanism of the columns
- **Extension of cleaning and maintenance intervals** of your LC-MS/MS system due to the high purity of the extracts
- Only **one column for a wide range** of applications

Catch them all

- Aflatoxine B1, B2, G1, G2
- Ochratoxin A
- Zearalenon
- Deoxynivalenol
- Fumonisine B1, B2
- T-2
- HT-2
- Nivalenol
- 3-Acetyl-DON
- 15-Acetyl-DON
- DON-3Glc
- Sterigmatocystin
- Citrinin
- Diacetoxyscirpenol



The CrossTOX® columns are suitable for both manual and automated processing. Please find in the following **your advantages compared to the conventional Dilute-and-Shoot** procedure:

	 Dilute-and-Shoot	CrossTOX® Manual processing	CrossTOX® Automated processing with FREESTYLE
Extraction	● 30 – 90 minutes	● 5-10 minutes	● 5-10 minutes
13C Internal Standard	● For all Toxins needed	● For less toxins needed	● For less toxins needed
Dilution of Extract	● Necessary	● Not necessary	● Not necessary
Way of Filtration	● Syringe filtration	● Column filtration	● Not necessary
Dispensing	● In vial	● In vial	● Direct Injection to LC-MS/MS
Cleanliness of Extract	● Not clean enough	● Very clean	● Very clean
LC-MS/MS Maintenance	● Permanent maintenance	● Less maintenance	● Less maintenance
Process time / Man power	● Heavy workload	● Heavy workload	● Less workload

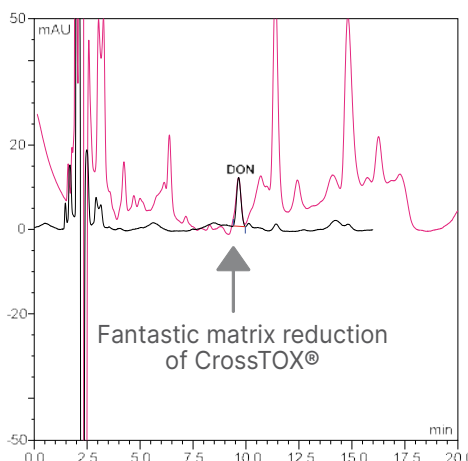


Range of Applications

The range of applications for CrossTOX® is remarkably wide. With only one extraction protocol the columns can be used for all matrices commonly in this analysis, e.g. cereals, nuts or dried fruits. The UV-chromatogram shows the very high clean-up efficiency of CrossTOX®. The pink line represents a wheat sample cleaned via the conventional dilute-and-shoot procedure (syringe filtration). The black line represents clean-up via CrossTOX®. This shows the substantial improvement using the CrossTOX® Column clean-up compared to the dilute-and-shoot approach.

*A constantly growing list of all matrices tested so far can be found at www.LCTech.de. We would also be happy to receive your feedback.

Recovery rates compliant to EN 401/2006

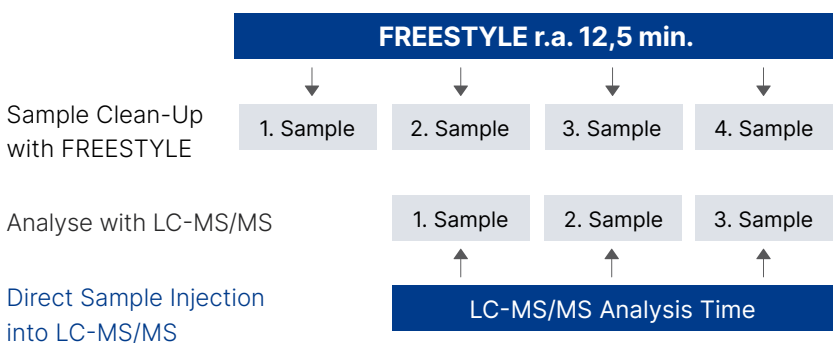


Processing via FREESTYLE

For automated processing of the CrossTOX® columns the FREESTYLE system offers the options:

- from raw extract to cleaned sample or
- from raw extract to chromatogramm (full automation)

In order to realize the highest possible degree of automation, the FREESTYLE SPE robotic system is upgraded with an HPLC Direct-Injection module for direct injection into your LC-MS/MS system. This enables the parallelization of clean-up and analysis for up to 120 samples/day and thus to an optimum utilization of your LC-MS/MS system.



Ordering Information

P/N	Description	Pc. / Pck.
17900	CrossTOX® Clean-up Columns Manual processing	100 Pc. / Pck.
17901	CrossTOX® Clean-up Columns Automated processing	100 Pc. / Pck.

FREESTYLE™ Robotic System FREESTYLE SPE + HPLC Direct-Injection-Module. We are happy to send you a suitable configuration on request.