

**A SMART way of mycotoxin
elution –ready to inject!**

- **Faster**
- **Greener**
- **More sensitive**



**With the miniaturized SMART
immunoaffinity columns.**

ThermELUTE Light



SMART Sample Preparation

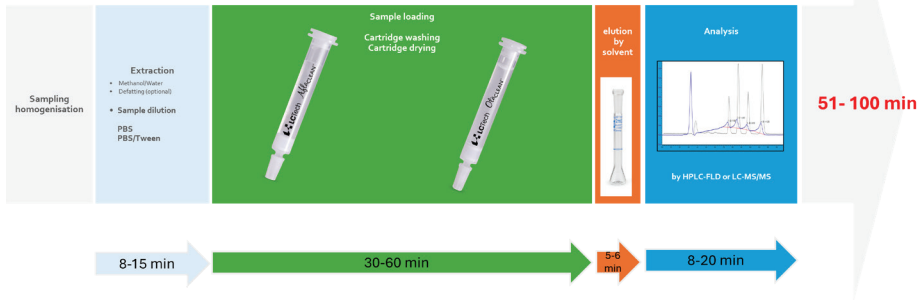
MYCOTOXIN ELUTION BY HEAT

A “Ready-To-Inject”- Sample In Less Than 20 Minutes !

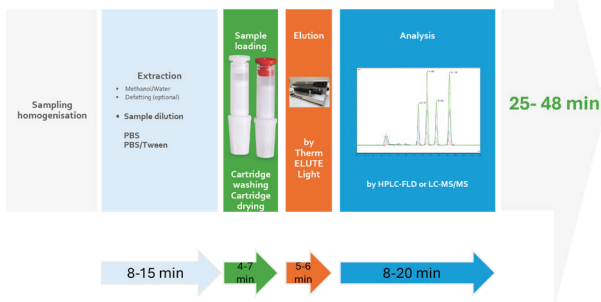
Smarter with Unique Thermal Denaturation

Ready in < 20 minutes -The SMART workflow powered by ThermELUTE Light cuts prep time from over 50 minutes to under 20 minutes. Ideal for high-throughput mycotoxin testing.

“Old school” Sample Workflow Mycotoxin Analysis (Aflatoxins/Ochratoxin A)



SMART Sample Workflow Mycotoxin Analysis (Aflatoxins/Ochratoxin A)



Faster

Save 50% of time/sample – Double throughput !

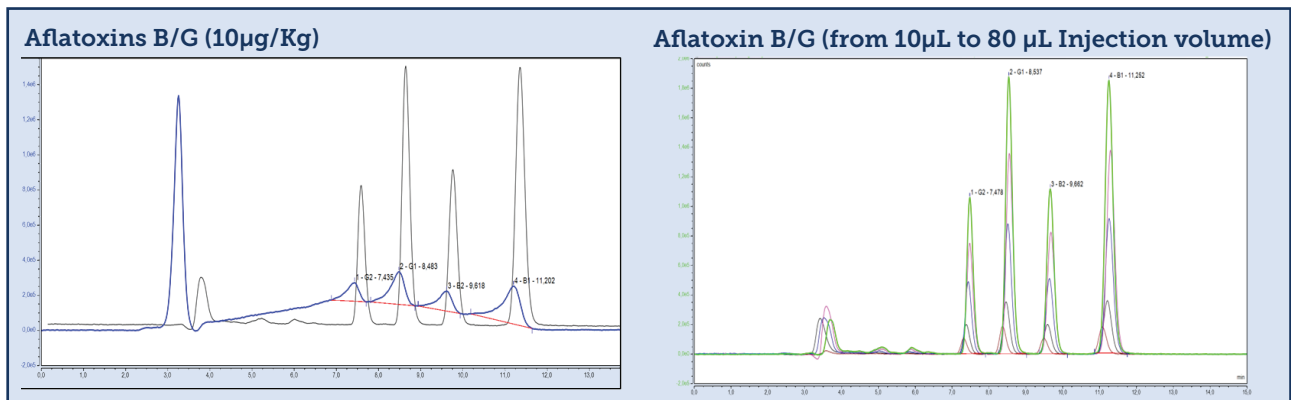
Greener

Up to 80 % solvent savings and less waste

More Sensitive

Gain of sensitivity by adjusting injection volume without chromatographical drawback

Solvent free elution benefits on a glance



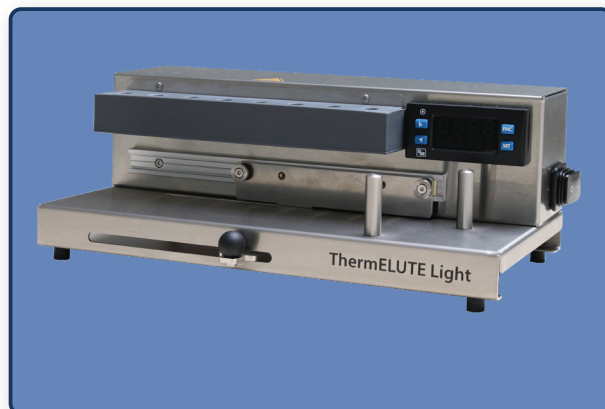
- Baseline separated aflatoxin B/G (10 µg/mL) peaks even at high injection volumes (grey: 80 µL water-based eluant; blue: 80 µL methanol)
- Better peak shape

- Low peak width
- No peak broadening or fronting
- Positive impact on LOD & LOQ
- Benefit: Increase of injection volume allows gain of sensitivity



ThermELUTE Light

Heating tool for the thermal elution of immunoaffinity columns (IAC)
in the field of mycotoxin analysis



Small, agile, efficient – but only as small as a rabbit – ThermELUTE light

The technical FEATURES:

Small footprint 30 x 17 x 11.5 cm ; 2.4 kg
plug&play installation display, heating device ,
elution rack

The individual STEPS:

1. Miniaturization of standard immunoaffinity columns (1 mL or 3 mL) to LCTech SMART columns
2. External manual processing of SMART columns with syringe (loading, washing, drying)
3. Transfer of SMART columns to ThermELUTE Light:
 - Soaking columns with aqueous solution - **heat up to 98°C for 5 minutes**
 - Eluate is transferred to elution vial by pushing air through

The DIFFERENCES:

- Miniaturized IAC format (SMART)
- Elution with **HEAT** and **aqueous eluate** instead of organic solvent

The RESULT:

Eluate **ready for injection** because of water based elution

- No dilution or evaporation necessary
- Increased injection volume possible
- Gain of sensitivity

HIGHLIGHTS:

- For Aflatoxins and Ochratoxin A
- More sensitive (far below baby food safety regulation without changes in analytical device)
- Faster - "Ready-To-Inject" in less than 20 minutes
- Saving time and money
- 8 samples in parallel
- No solvent exchange - no dilution necessary
- Reduced matrix interferences by specific antibody clean-up
- Applicable for all commodities

Clean-up Procedure with ThermELUTE Light

Prepare the System

- Turn on **ThermELUTE Light** and set to **98°C**.
- Place an **HPLC vial** in the elution rack.

Scan to watch step-by-step!



SMART Cartridges

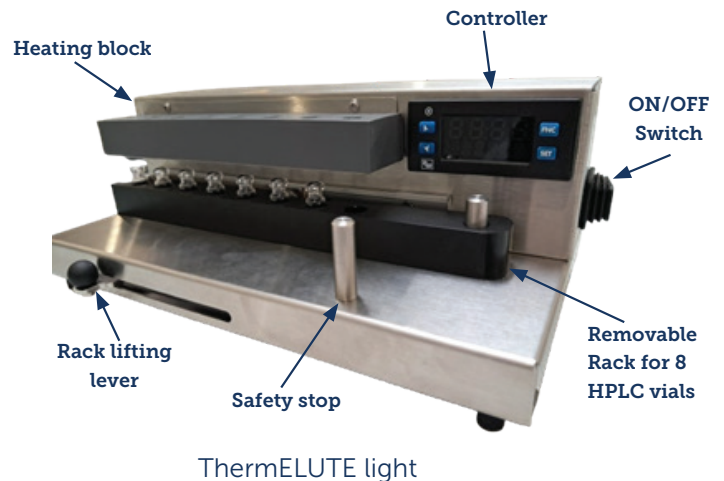
- Process the **SMART cartridge** as per the manual until the elution step.
- Charge cartridge with elution solvent.

Elution Process

- Perform **thermal elution 5 min at 98°C**.
- Transfer the eluate into the **HPLC vial**.

Transfer & Finalize

- Remove the **HPLC vial** for **HPLC analysis**.



P / N	ITEMS
21396	ThermELUTE Light
21372	Additional elution rack for ThermELUTE Light
19717	Power cable for USA & Canada
21792	AflaELUATOR B1, B2, G1, G2, glass bottle 200 mL
21793	AflaELUATOR M1, glass bottle 200 mL
21794	AflaELUATOR B1, B2, G1, G2, glass bottle 200 mL (US version)
13893	AflaELUATOR B1, B2, G1, G2, glass bottle 1000 mL (EU version)
12862/12863	AflaCLEAN SMART (100 pcs/pck or 1000 pcs/pck)
14246	AflaCLEAN M1 SMART (100 pcs/pck)
13346/13351	OtaCLEAN SMART (100 pcs/pck or 1000 pcs/pck)



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Scan me!



Velaris reserves the right to change the specifications and the appearance of the equipment without further notification.

Version 1.0