

aokin rapid analysis system

Rapid Automated Trace Analysis At the Point-of-Entry Testing

The **aokin** rapid analysis system is a compact and versatile analytical instrument for rapid, sensitive, and quantitative determination of small molecules in complex food or biological samples.

Designed for rapid point-of-entry testing in environments ranging from incoming goods control to routine laboratory analysis.

- Quick and quantitative
- Assay time is 3 minutes
- Simplified sample preparation techniques combined with fully automated analysis
- HPLC quality at a fraction of the cost and time
- Ideal for industrial use at the point-of-entry testing

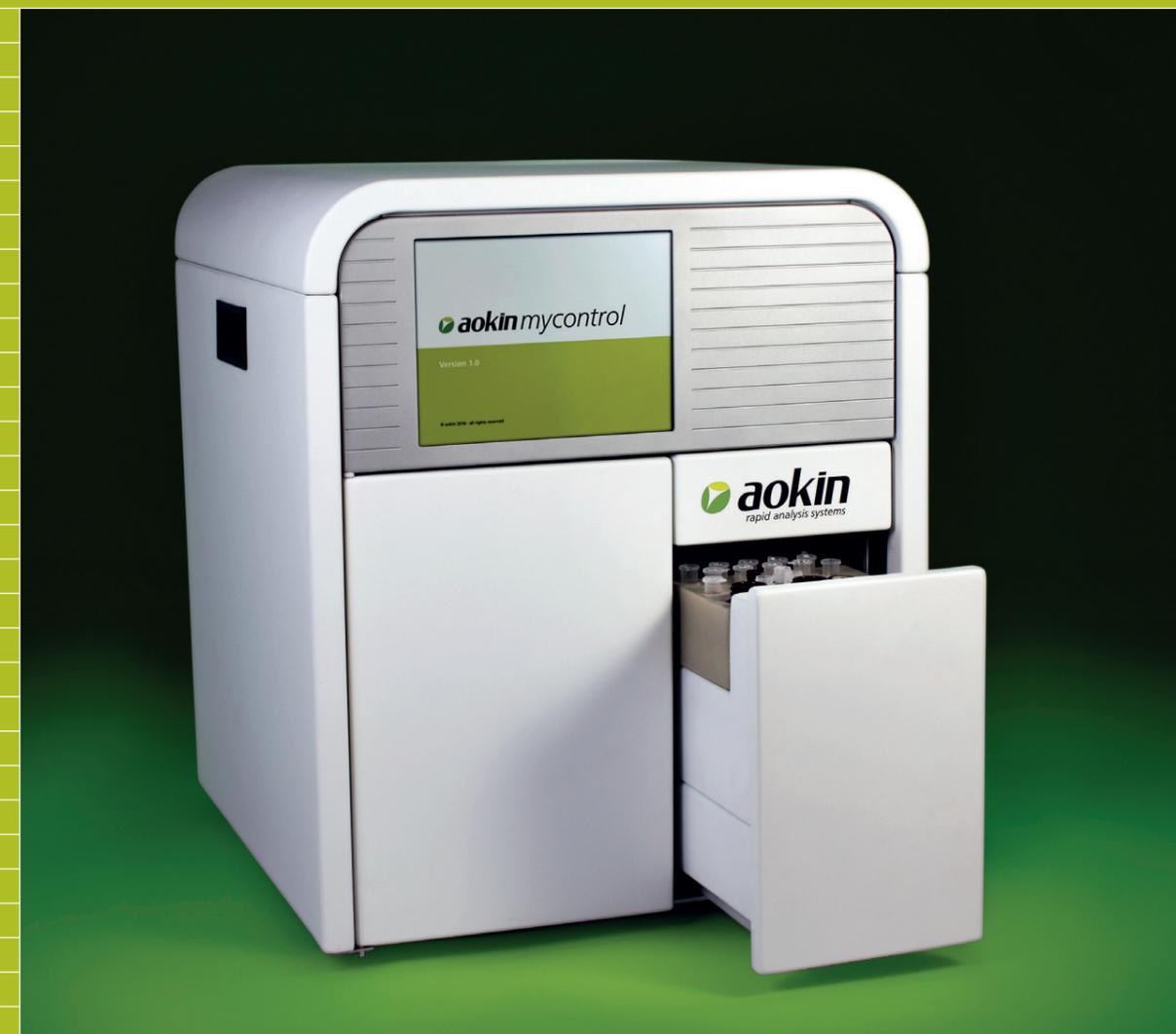


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Unique Technology

rapid kinetic assay for mycotoxins was pioneered and developed by **aokin**. The innovative trace analysis is based on the determination of reaction kinetics of the binding of an analyte with a highly specific antibody. A liquid phase assay, it measures the change (kinetics) of polarized fluorescence over a few seconds, thus allowing for unprecedented precision and speed.

Modern excitation light sources, switchable polarizers, robust detectors with lock-in amplification, excellent and user friendly software interface all combine to provide excellent sensitivity and ease of use. A modern and robust system proven to be working in a laboratory and as a mobile system.



Unique Applications

aokin rapid analysis can be used to quantitatively evaluate any specific binding between smaller and larger molecules. This includes but is not limited to mycotoxins, pesticides, fungicides, insecticides, antibiotics, hormones, vitamins, alkaloids, biogenic amines, drugs of abuse, cyanotoxins, oligomers, or any other small molecules of interest.

What's more, **aokin rapid analysis** is largely independent of complex or complicated fluids. It can be performed directly with urine, serum, food extracts, waste water, and even whole blood.

aokin's rapid and quantitative analysis with controlled non specific binding, slow reaction kinetics and unwanted inhibitory effects is based on **aokin's** unique and patented technologies, covered by US patents 7993855, 81224359 and 8173379.

Mycotoxins can be harmful if they enter into the food chain. Regular control of mycotoxin levels is therefore regulated by law to ensure consistent, high quality, grain products.

Infestation with fungi can vary widely. Deoxynivalenol (DON) and Zearalenone (ZON) are both commonly found in flour. The contamination is caused by fungal infestation of the wheat ear.

Other mycotoxins which can be present in foodstuffs include Aflatoxin in nuts and cocoa, Ochratoxin in durum, wine and coffee, Fumonisin in corn, and T2/ HT2 in oats.

aokin offers a complete sample preparation and testing system for rapid, precise food and grain analysis.



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aokin Fluorescence Polarometer

Fluorescence Polarometer with monochromatic excitation and detection, thermostated cuvette and magnetic stirrer, suitable for use with various fluorescent tracers.

Autosampler for automatic handling of calibrations or 10 samples at a time.

Excitation at 450 ± 2 nm, detection at > 500 nm (factory setting for fluorescein label)

Technical data:

Teflon tubing, stainless steel tip micro-pump with optimal accuracy
Volume precision of 2 % at 20 μ l
Voltage: 100-240 V,

Dimensions:

Width 400 mm x Height 480 mm x Depth 414 mm

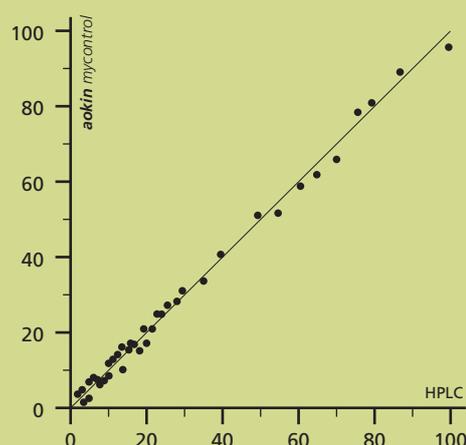


Validation with HPLC:

Characteristics of **aokin mycontrol**

Variance: 4-8 %

Correlation coefficient: (r) 0,990 - 0,996



Zearalenone concentration in wheat (in ppb) – comparison of the **aokin** method and HPLC

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aokin is ISO 9001 certified, ISO 17025 accredited, and works according to GLP.
aokin AG FB-M1601R1