Dioxins S$^3$
Smart Solution Systems
Full solution for Dioxins and PCBs analysis from A to Z

For the first time, BUCHI, MIURA and Shimadzu combine their strengths to offer a full solution for Dioxins and PCBs analysis, from samples extraction to results even with fatty samples.

**Combined power:** BUCHI SpeedExtractor E-916 + MIURA GO-xHT + Shimadzu GCMS-TQ Series

Benefit from a comprehensive solution combining analysis speed, overall sample cost and throughput – for a better Return on Investment (ROI).

**Pressurized Solvent Extraction**

**BUCHI SpeedExtractor E-914/E-916**

- **Wide range of applications**
  - The flexible sample volume and the selection of various process parameters make it possible to use the SpeedExtractor in a very wide range of applications: from trace analysis to quality control, from 1 mL to 120 mL sample size, with a simple or very complex matrix.

- **Fast and fail-safe**
  - Shortened time to analysis is guaranteed as a benefit of simultaneous extraction and evaporation – processing up to six samples in parallel with solvent extraction within 30 minutes.

- **Thanks to compatible glassware direct evaporation without manual transfer of the extracts is performed using the Multi-vapor™ F-12/F-6, the Syncore® Analyst R-12/R-6 or BUCHI’s Rotavapor®. The automated extraction cell sealing mechanism ensures increased process safety.**

- **Low running costs**
  - Sustainable cost savings for solvents of up to 70 % are achieved compared to extractions using classical glassware. Operator costs are low as laborious transfer of extracts from extraction to concentration is obsolete.

**Powerful Clean-Up**

**MIURA GO-2HT/4HT/6HT**

- **No cross contamination**
  - With a valveless system, there are no solenoid valves on the Dioxins and PCBs flow lines – the system will not bring any cross contamination into your analysis. All columns and tubings are disposable with easy connections.

- **Fully automated fractionation**
  - It offers efficient concentration and fractionation using special surface-treated adsorbent in the concentration columns. Thanks to heated columns, it gives excellent clean-up.

- **Less solvent consumption**
  - Much faster delivery of 1 mL extracts with a consumption of less than 100 mL of solvent per sample. It uses only 85 mL of hexane as well as 2 mL of toluene and no dichloromethane. This is both user and eco-friendly.

**Smart GC-MS/MS Analysis**

**Shimadzu GCMS-TQ Series**

- **Smart Productivity**
  - Simultaneous multi-component analysis is now optimized for hundreds of target compounds, dramatically improving productivity. UFMS (Ultra Fast Mass Spectrometry) can acquire up to 32,000 transitions in a single analysis.

- **Smart Operation**
  - With "Smart MRM", GCMSolution sets the analytical conditions automatically, making method development painless, fast and easy. In combination with the new Smart Environment Database (registered with 527 components), users can automatically create multicomponent batch analysis methods to reduce complicated analysis preparations prior to creation of calibration curves.

- **Smart Performance**
  - The exceptionally efficient ion source and the collision cell provide low detection limits. High speed scanning control ASSP™ (Advanced Scanning Speed Protocol) and simultaneous Scan/MRM analysis mode provide high quality library searchable fragmentation spectra and accurate low-level quantitative data in a single analysis.
The shown system combination is only available in Europe.

Post-sales service and support are vital and long-term considerations when investing in capital instrumentation for a laboratory. Shimadzu and BUCHI offer complete peace of mind for all aspects of instrument care and delivery of consumables.

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