

Comprehensive Pesticide Surveillance Using a Single System

MassHunter Pesticides and Environmental Pollutants PCDL and Workflow for GC/Q-TOF



Monitoring pesticide and environmental pollutant residues is crucial to ensuring a safe food supply. There are currently over 1000 registered pesticides; the latest Agilent GC/TQ and LC/TQ instruments can each now deliver analysis of hundreds of these compounds per run. However, comprehensive calibration of hundreds of pesticides and environmental pollutants can be time consuming and cost prohibitive, especially considering it is often necessary to create different calibrations for different matrices or sample preparation procedures.

As a result, there is a strong need to screen a broad array of compounds and, when present, perform quantitative assessment to establish compliance with regulated maximum residue limits (MRLs).

Confidently use accurate mass to perform target and suspect screening

The Agilent MassHunter Pesticides & Environmental Pollutants (P&EP) Personal Compound Database and Library (PCDL) and Workflow for GC/Q-TOF provides a comprehensive pesticide surveillance solution for both targeted and suspect screening. This solution combines a comprehensive PCDL and detailed qualitative and quantitative screening workflows for use with the Agilent 7250 Series High Resolution Accurate Mass GC/Q-TOF to ensure laboratories meet expanding demand and productivity goals.

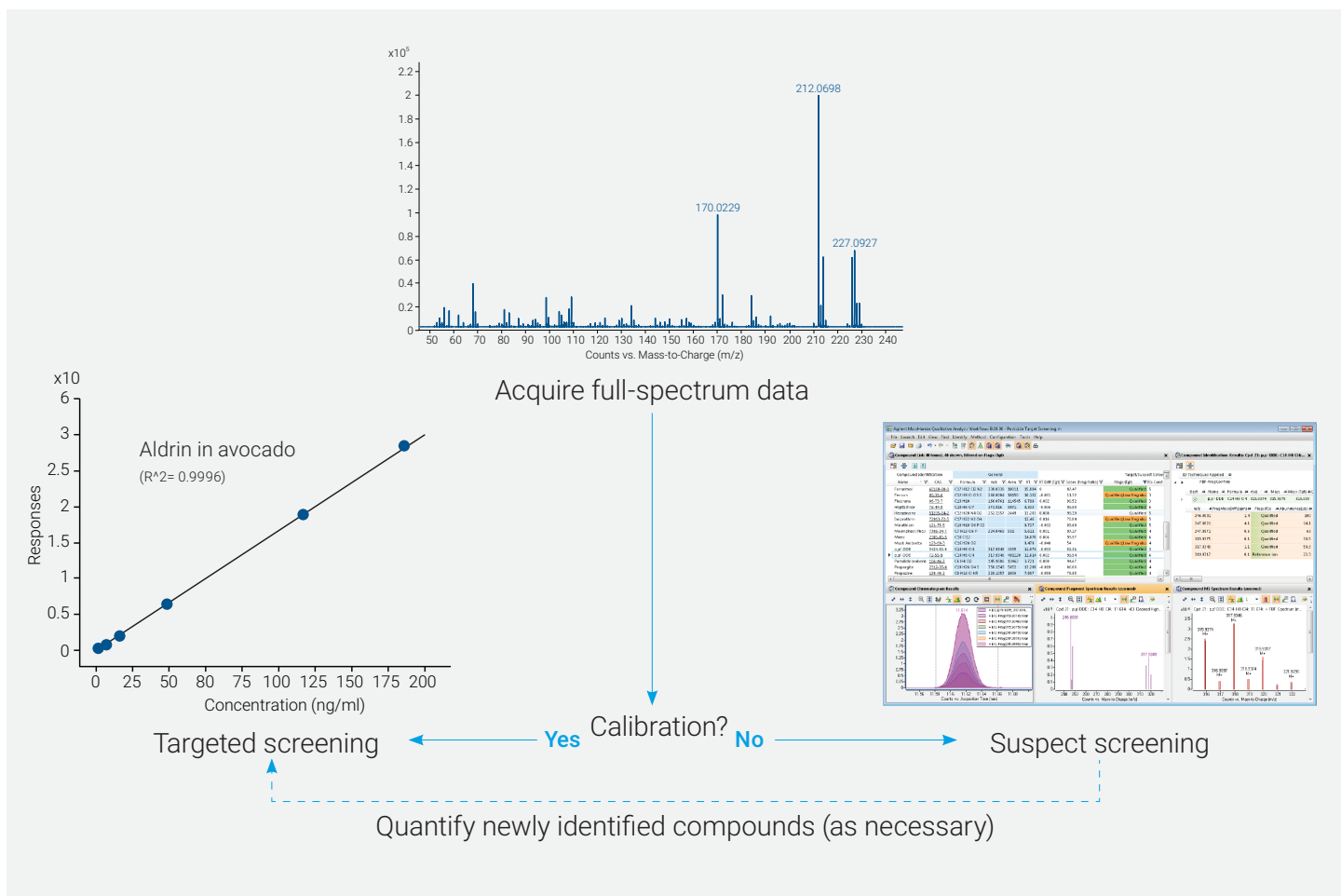
With the Agilent MassHunter Pesticides & Environmental Pollutants PCDL and Workflow for GC/Q-TOF you can:

- Easily adopt a combined targeted and suspect screening analysis with the comprehensive Workflow Guide, provided PCDL and GC/MS acquisition methods
- Always generate reliable results by using an expertly curated accurate-mass PCDL with more than 1000 pesticides and environmental contaminants
- Customize the PCDL exactly for your analysis—easily add or update compounds, spectra, and retention times (RTs) through the latest PCDL Manager Software
- Confidently identify compounds using Retention Time Locking, included in the PCDL, regardless of column age, maintenance, or replacement
- Future-proof your experiments with 3-years of free PCDL upgrades

Learn more at:

www.agilent.com/chem/food-ms-solutions

Workflow for comprehensive screening



Flexibility to review both suspects and quantitative targets from the same analysis

Agilent MassHunter Pesticides PCDL and Workflow for GC/Q-TOF enables both:

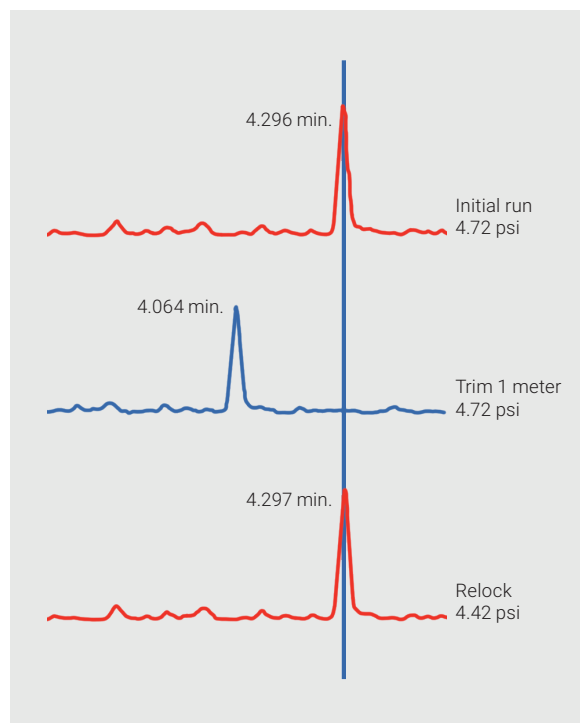
- Suspect screening of compounds against the PCDL
- Targeted screening for common pesticides using real time multi-level quantitation for the suspects

For the quantitative targets when target compounds are available, a comprehensive multiple-level calibration curve can be generated with increased linear range, thanks to the SureMass feature in MassHunter Quantitative Analysis software.

Developed in collaboration with leading pesticide laboratories

Transform your results from acceptable to exceptional using expert-developed acquisition methods and the MassHunter P&EP PCDL and Workflow for GC/Q-TOF:

- Identify compounds through accurate mass, retention time, isotope pattern, and fragment confirmation.
- Rest assured that the method always delivers the same retention time—regardless of column age, maintenance, or replacement—thanks to retention time locking.
- 20-minute acquisition method when higher throughput is required.
- 40-minute acquisition method when enhanced chromatographic separation is required.
- Take advantage of unique capillary flow technology, which enables backflushing to extend column life and reduce run times by removing late-eluting matrix components.
- Add your own compounds and library spectra using the MassHunter Qualitative Data Acquisition auto-curate workflow to create PCDLs specific to your analyses.
- Perform retrospective data analysis using newly added PCDL compounds—without the need to rerun samples.



Auto RTL tuning following inlet or column maintenance enables your laboratory to start analyzing samples faster.



MassHunter Quantitative Analysis result and data review

Ordering information

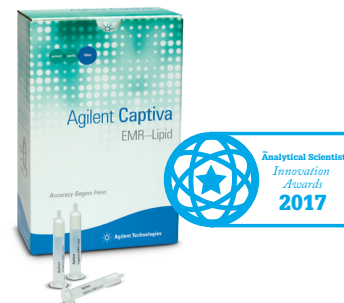
The MassHunter Pesticides and Environmental Pollutants PCDL and Workflow for GC/Q-TOF can be purchased with a new instrument order or as an add-on to an existing 7250 Series GC/Q-TOF.

Description	Part Number
MassHunter Pesticides and Environmental Pollutants PCDL and Workflow for GC/Q-TOF	G3892AA

A full portfolio of customized products, services, and support

Sample preparation for the most challenging food matrices

Matrix effects are of increasing concern, especially given the number of pesticides being monitored and their low detection limits. Agilent Captiva EMR—Lipid delivers the most complete matrix removal, including phospholipids, without adding extra time to your workflow.



Agilent CrossLab Services:

Maximize uptime with end-to-end support

You can trust Agilent CrossLab service experts to deliver valuable insights and keep your instruments running at top performance. Our industry-leading services—tailored to meet your needs—include application consulting, repairs, preventive maintenance, compliance verification, and education. Ask us how we can support your laboratory today.

Agilent
CrossLab

From Insight to Outcome

Put your laboratory on the productivity fast track. Contact your local Agilent representative or Agilent authorized distributor at

www.agilent.com/chem/contactus

Or call 800-227-9770 (in the U.S. or Canada)

For a description of available LC/MS databases and libraries, and GC/MS analyzers, visit

www.agilent.com/chem/food-ms-solutions

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Trusted Answers