

OPTIMIZE YOUR ANALYSIS OF VOCs IN WATER

The Measure of Confidence



Agilent GC/MS VOC Application Kit

Health and safety concerns are driving global efforts to monitor water quality. Particularly, water contamination with volatile organic compounds (VOCs) of various origins is a high priority for regulatory agencies, since VOCs can cause both acute and chronic health problems.

For more than three decades, GC/MS with purge-and-trap (P&T) has been the preferred analytical technique for VOCs in water. However, analysts continue to be challenged by the large number of targets with differing chemical characteristics.

Perform highly sensitive chromatography that exceeds ICAL requirements for published methods

Agilent's GC/MS VOC Application Kit gives your team the tools to quickly analyze trace target compounds in complex matrices. Its analytical conditions and MS tune parameters provide a unique approach to EPA methods 524.2, 524.3 and 8260B – making it easier for you to:

- Implement P&T conditions for EPA methods 524.2, 524.3 and 8260B
- Establish GC/MS method parameters for VOC Analysis
- Reliably satisfy USEPA requirements with our new automated tuning approach

The Agilent GC/MS VOC Application Kit includes the following components – so you can spend *less time* on method development and *more time* on validation:

- Accessory Kit, which includes analytical column, inlet liner, methods, and other materials needed for optimal performance
- Field-tested P&T parameters
- Automated tuning routine for 4-bromofluorobenzene (BFB)
- Recommended procedures for standards preparation and initial calibration (ICAL)



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Increase the sensitivity, robustness, and stability of your GC/MS VOC analysis

Agilent's GC/MS VOC Application Kit lets you leverage your *new or existing* hardware to deploy methods developed by our chemists. Our innovative approach to standards preparation, P&T techniques, system tuning, and data reporting give you the advantages of:

- Increased tune stability for longer intervals between tuning
- MDL < 0.048 µg/L for most 524.2 compounds
- MDL < 0.060 µg/L for most 8260B compounds
- A calibration response factor with an average RSD of 8% for EPA 524.2 and 6.1% for EPA 8260B.

Ordering information.

To order G7022A Agilent GC/MS VOC Application Kit, consult with your Agilent Account Manager or visit www.agilent.com/chem

Additional technical information.

- Optimized Volatile Organic Compound Analysis Using Agilent VOC Application Solution (5991-0896EN)
- Volatile Organic Compound Analysis Using Purge and Trap (5991-0029EN)

Put your applications on the *fast track*

Contact your local Agilent Representative or Agilent Authorized Distributor at

www.agilent.com/chem/contactus

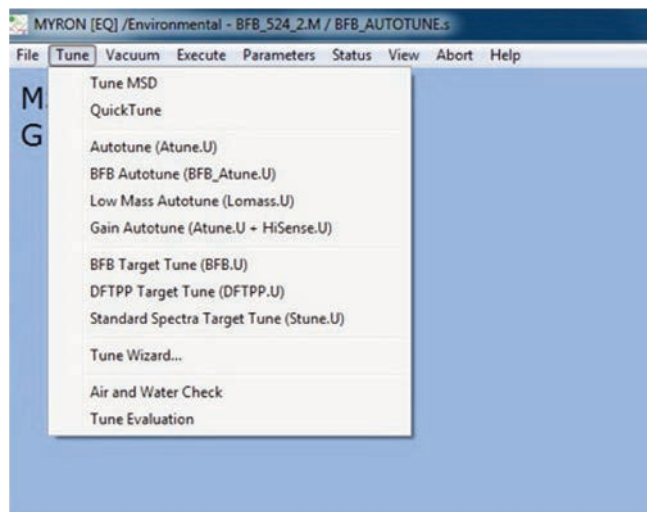
Or call **800-227-9770** (in the U.S. or Canada)

Visit www.agilent.com/chem/appkits for a description of available Analyzers and Application Kits

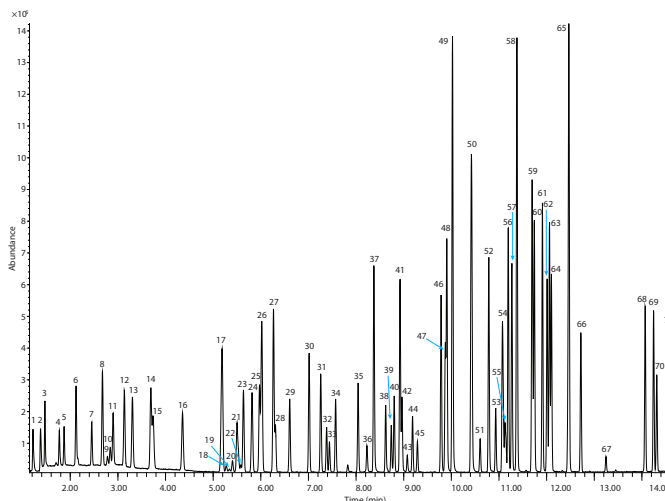
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Achieving the lowest possible detection limits: GC/MS analysis of VOCs using P&T



Tune and vacuum control view of the Agilent MSD Productivity ChemStation. BFB Autotuning provides long-term stability and improves sensitivity into the PPT range.



Total Ion Chromatogram of EPA Method 524.2 ICAL standard, acquired using the GC, MSD, and P&T parameters contained in Agilent's GC/MS VOC Application Kit. Excellent stability, robustness, and peak shape were achieved – and detection limits were lowered to PPB or PPT levels.



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