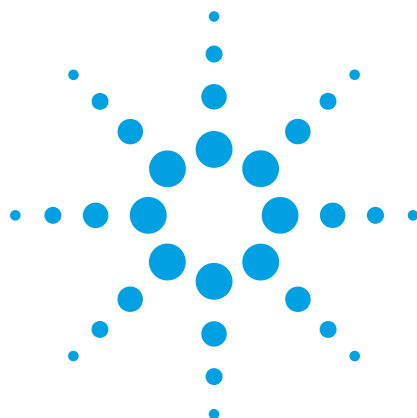




A New Horizon of Performance



Agilent G1888 Network Headspace Sampler

- Full system integration
- Extended sample capacity
- Built-in ease-of-use
- Uncompromised reliability



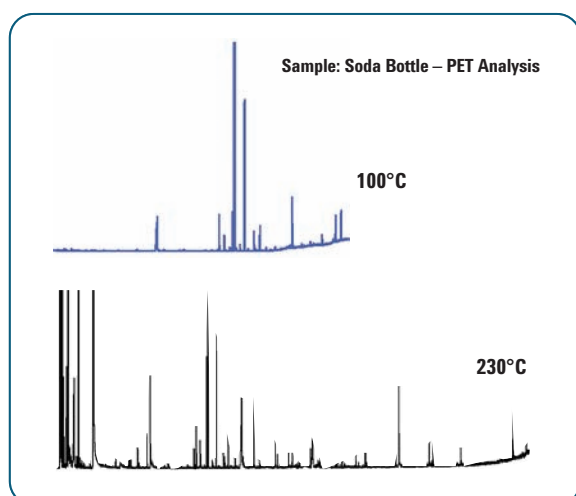
Agilent Technologies

The Steps To Confidence

From sample introduction...

A headspace sampler allows you to introduce volatile compounds automatically – from virtually any sample matrix – directly into a GC or GC/MS. Agilent, the leader in GC and GC/MS technology, was the first to offer a full-featured automated headspace system (HSS) using the proven technology of pressurized vials with fixed volume sample loop. And now with the new G1888, headspace analysis has achieved a new level of performance.

EXPANDED TEMPERATURE RANGE



HEADSPACE SAMPLER

- Deactivated sample path provides superior analysis of active compounds
- 70-sample tray capacity and 12 heating positions for maximum throughput
- Easy switch between built-in pneumatics and GC-EPC control, to fit your GC configuration
- Multi-headspace-extraction (MHE) provides maximum sensitivity
- Multi-line display and 19-key keypad allow for easy stand-alone operation and diagnostics
- Choice of screw cap and 10 mL or 20 mL crimp top vials to meet your sampling needs
- Up to 230° C equilibration temperature expands the traditional headspace application space



IMPROVED SAMPLE CAPACITY

...to data analysis

The G1888 is a fully integrated system from sampling to separation to detection to data analysis to reporting. Single-point ChemStation control of the HSS, GC, and detectors means increased automation built for 21 CFR Part 11 compliance. Secure LAN-based instrument communication ensures that you have easy access to your data. And with a familiar software interface and on-line help, learning the system is simple.

GAS CHROMATOGRAPH

- GC-EPC seamlessly integrates to control HSS vial pressure and flow
- Low-volume, highly inert, heated volatiles interface is optimized for HSS-GC analysis
- Cryo-PTV in conjunction with MHE concentration mode provides maximum sensitivity
- Superior flexibility results in best possible performance for any application

CONTROL/DATA SYSTEM

- ChemStation provides full access to all HSS method parameters
- ChemStation sequence table ensures that vial identification information is transferred to the final report
- ChemStation controls intelligent sample overlapping to optimize sample throughput
- Event log tracks method execution and provides vial-by-vial troubleshooting information
- Consistent traceability for compliance with 21 CFR Part 11
- All HSS method parameters stored as part of the GC method for full data integrity



From application...

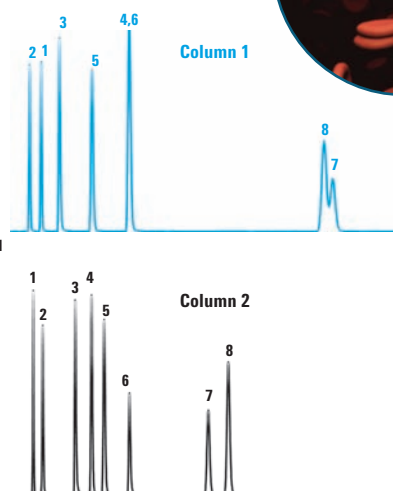
Headspace samplers save time and reduce the potential for errors that are common to other GC sample preparation techniques. The G1888 was designed for high sample capacity, sensitivity, and inertness, making it uniquely suited to meet the challenges of forensic, pharmaceutical, environmental, food safety and other analyses.

DUAL COLUMN BLOOD ALCOHOL ANALYSIS

GC Oven: 35°C isothermal
Inlet: Split/splitless at 150°C
 A two-hole ferrule (P/N 5062-3580) was used to connect both columns to the same inlet
Column I: DB-ALC1 (P/N 123-9134)
 30m x 0.32 mm x 1.8 µm
Column II: DB-ALC2 (P/N 123-9234)
 30m x 0.32 mm x 1.2 µm

Headspace oven: 60°C
Vial equilibration time: 15 min
Sample: 5 µl of 0.08 g/dL standard mix in 10 ml vial

1. Acetaldehyde
2. Methanol
3. Ethanol
4. Acetone
5. 2-Propanol
6. Acetonitrile
7. Ethyl Acetate
8. Methyl-Ethyl Ketone

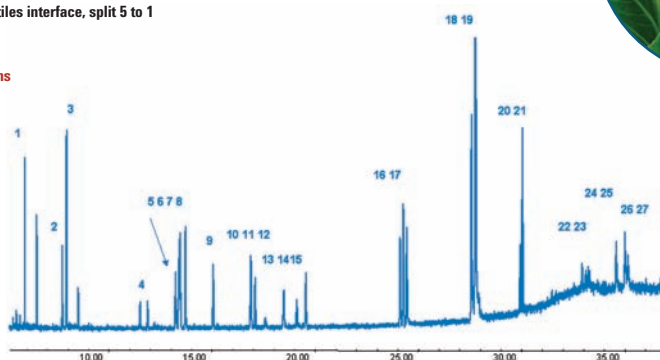


EVAPORATION HEADSPACE ANALYSIS OF PESTICIDES

Sample: 100 ng pesticide mix in acetone
Full evaporation method, ~1 ng on column injected
Column: 30m x 0.25 mm x 0.25 µm HP-5MS
GC: 6890N with volatiles interface, split 5 to 1
MSD: 5973 inert

HSS: G1888 conditions
 10 ml vial
 Temp: 225°C, 15 min

1. Dichlorvos
3. Vernolate
8. Lindane
15. Chlorpyrifos
17. P,p'-DDE
19. Propargite
21. Mirex
27. Fluvalinate



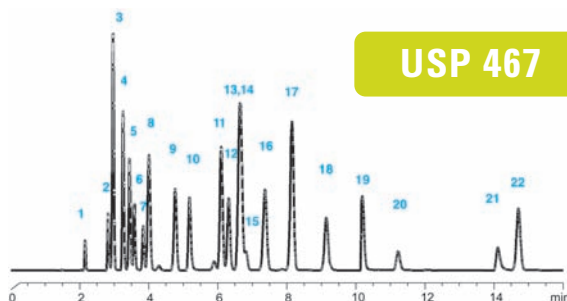
...to compliance

Fully integrated control and data analysis software tracks the sample vial from sampling to reporting. Using the ChemStation, HSS parameters are stored as part of the GC method, to ensure data integrity every time. As the worldwide leader in compliance, Agilent was the first to innovate with built-in compliance features for analytical instrumentation. Agilent offers compliance programs that enable lab managers to make one call for any or all of their needs.



ORGANIC VOLATILE IMPURITIES IN PHARMACEUTICAL PRODUCT

USP 467



GC Conditions:

Column: DB-624, 30m x 0.53 mm x 3.0 μ m
Carrier: Helium, 35 cm/sec, constant flow
Oven: 40°C (5 min) to 90°C at 2° C/min
90°C to 250°C at 30°C/min
Injection: Headspace, 180°C, split 7 to 1
Detector: FID, 260°C

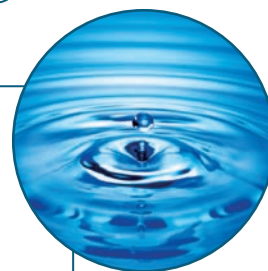
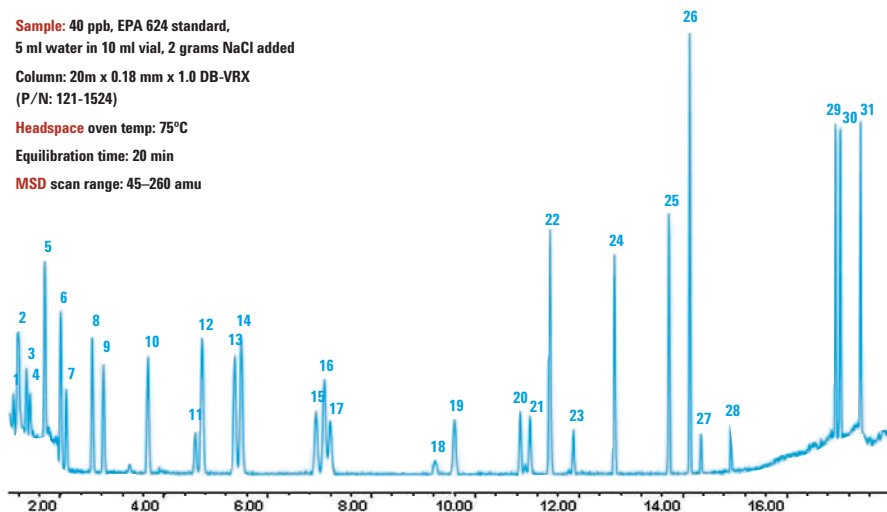
Headspace conditions:

Oven temp: 85°C
Loop temp: 95°C
Transfer line temp: 110°C
Vial equilibration time: 10 min

- | | |
|-------------------------|-----------------------|
| 1. Methanol | 14. s - Butanol |
| 2. Ethanol | 15. Chloroform |
| 3. Ether | 16. Cyclohexane |
| 4. Acetone | 17. Benzene |
| 5. i - Propanol | 18. Heptane |
| 6. Acetonitrile | 19. Trichloroethylene |
| 7. Methylene Chloride | 20. 1,4 - Dioxane |
| 8. t - Butanol | 21. Pyridine |
| 9. Hexane | 22. Toluene |
| 10. Propanol | |
| 11. Methyl ethyl ketone | |
| 12. Ethyl acetate | |
| 13. Tetrahydrofuran | |

VOLATILE ORGANIC COMPOUNDS IN WATER

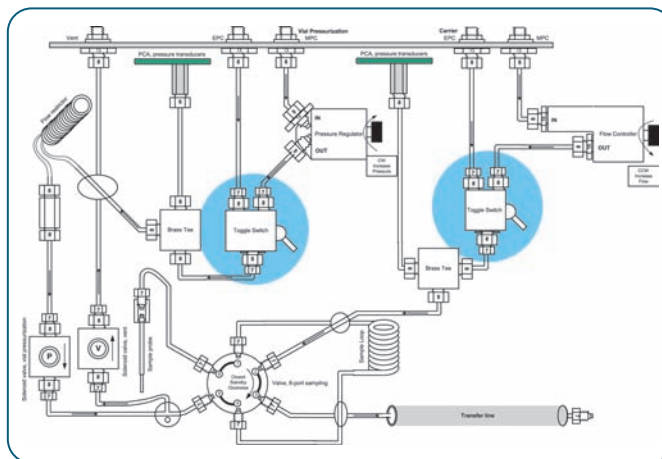
Sample: 40 ppb, EPA 624 standard,
5 ml water in 10 ml vial, 2 grams NaCl added
Column: 20m x 0.18 mm x 1.0 DB-VRX
(P/N: 121-1524)
Headspace oven temp: 75°C
Equilibration time: 20 min
MSD scan range: 45-260 amu



From installation...

Agilent provides a complete, reliable, rugged headspace system. As a single-vendor solution, all system components work together by design, avoiding compatibility problems or installation delays. Site preparation and installation services guarantee that your system is installed and functioning properly. Familiarization services ensure that users are quickly running samples.

Switch easily between built-in pneumatics control and GC EPC control, for flexibility to interface with any GC in your lab.



Choose control by either Agilent's widely used ChemStation or built-in, easy-to-use multi-line display keypad.



Use either 10 mL or 20 mL crimp top headspace vials without changing hardware. Or use screw cap vials, which are ideal for field sampling.



...to services

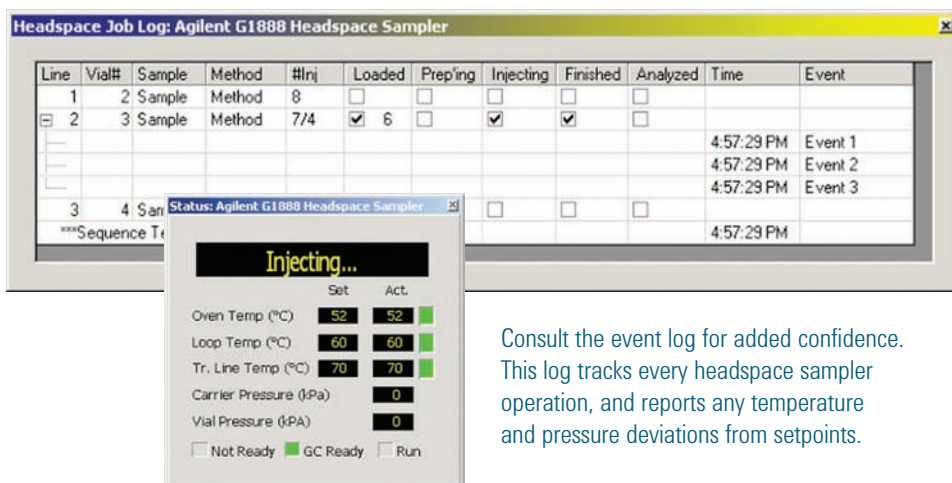
Agilent offers a wide range support services, from application support to hardware preventive maintenance. A full complement of operational qualification and performance verification (OQ/PV) services allows your company to verify and formally document the performance of your analytical instruments at any point during the instrument lifetime. All services are performed by trained and certified Agilent representatives.



Take immediate advantage of new features by updating the main microprocessor firmware over the Internet



Get started right away by accessing pre-stored common chemical test methods from the keypad. Use detailed power-on self-tests and the semi-automatic leak test to ensure that your system is always working properly.



Consult the event log for added confidence. This log tracks every headspace sampler operation, and reports any temperature and pressure deviations from setpoints.

Agilent: Solutions Time After Time

The G1888 Network Headspace Sampler, integrated with the industry-standard Agilent 6890N GC and 5975B Series MSD, gives you uncompromised performance and reliability. For the confidence of consistent results every time, choose Agilent, the world's largest supplier of gas chromatographs and related products.

The Agilent Value Promise – 10 years of guaranteed value

The G1888 Network Headspace Sampler is backed by the Agilent Value Promise. This promise guarantees you at least ten years use of your HSS from the date of purchase, or Agilent will credit you with the residual value of the system when you upgrade to an Agilent replacement system.

Information at your fingertips

Stay up-to-date on the G1888 and other Agilent products.

- Tailored email notifications that reflect your specialized interests
- Access to how-to videos, chromatogram libraries, application notes and more
- Free firmware and software updates
- Faster registration for free e-Seminars and other training

Register online at

www.agilent.com/chem

or call **800 227 9770** (in the US and Canada)

In other countries, please contact your local Agilent Representative or Agilent Authorized Distributor.

Microsoft® is a U.S. registered trademark of Microsoft Corporation. Windows 2000 and Windows XP are U.S. registered trademarks of Microsoft Corporation.

Information, descriptions, and specifications in this publication are subject to change without notice.

© Agilent Technologies, Inc. 2006
Printed in the U.S.A. July 15, 2006
5989-5364EN



Agilent Technologies