

Just the Right Features— at Just the Right Price

Agilent 7694E Headspace Sampler
Gas Chromatograph



Simplicity Makes the 7694E Headspace Sampler Affordable

Headspace sampling is ideal for most laboratories. This technique—sampling the gas above a sample held at a constant temperature in a sealed vial—works for virtually any type of matrix.

Sample preparation can be as simple as sealing the pre-measured sample in a vial. This saves considerable time and eliminates or reduces solvents.

And because gas sampling is cleaner than liquid sampling, the injection port requires less maintenance and columns last longer.

Until now, however, headspace samplers have been too feature rich for many laboratories.

Not any more.

Agilent Technologies' 7694E headspace sampler is an inexpensive, simple-to-use, and reliable headspace unit. With all the quality and reliability you expect from Agilent, the 7694E headspace sampler offers just the features you need—at a price to fit your budget.



Results are reliable and consistent.

Rework is minimized.

Laboratory productivity rises.

Designed for optimum value, this headspace sampler provides:

- Low capital and operating costs
- Constant heating time for assured repeatability
- An inert nickel sample path that protects against sample carryover, loss, or degradation
- Automation for processing up to 12 samples unattended.

Simplicity Makes It Reliable and Easy to Use

This standalone unit offers just enough features to meet most laboratory needs:

- **Rugged construction and simplicity of design for continuous operation in almost any environment.** Agilent instruments are tested under extreme conditions to ensure their reliability.
- **Easy-to-use controls for minimal operator training.** A simple, easy-to-use keypad lets you quickly set sampler parameters and store methods with the push of a button. You can also link up to four methods for expanded flexibility.

Interface to any gas chromatograph for maximum flexibility. You can use the sampler with any GC. Because all Agilent instruments are designed to work together seamlessly, you can enjoy optimum performance when it is coupled with any Agilent chromatograph. When you combine this sampler with the low-cost, Agilent 4890D GC, you gain a powerful yet affordable system that can analyze volatile compounds in virtually any matrix.

- **Constant heating time, one vial at a time, for assured repeatability.** Samples with the same parameters receive exactly the same treatment.
- **Automatic parameter increments for easy method development.** You can set either the oven temperature or vial equilibration time in increments to determine optimum sampling parameters.
- **Vial shaking for more representative sample results.** This feature can help homogenize samples or dissolve salts.

Headspace Sampling: Ideal for Most Samples

Headspace sampling is highly efficient in introducing volatile compounds from almost any matrix into a GC. This technique makes easy work of samples that have:

- A solid or extremely viscous matrix—preventing direct injection
- Liquids that require preparation before injection
- Vapor as the target of interest, such as for perfumes.

The procedure is simple. In many cases, all you have to do is place the pre-measured sample in a vial, seal the vial, and heat the sample. This is one of the fastest, cleanest, and easiest sampling techniques.

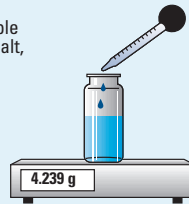


Without intervention, you can sequentially run up to twelve 10- or 20-mL sample vials—using any one of four methods that you store in the sampler. Methods may be linked for optimum throughput.

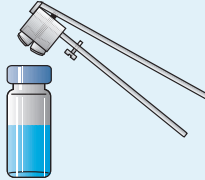
Automation Gives Fast, Consistent Results

For the Agilent 7694E headspace sampler, repeat up to 12 times.

- 1 Put a known amount of sample into a headspace vial (istd, salt, or pH-adjusting reagents, if required).

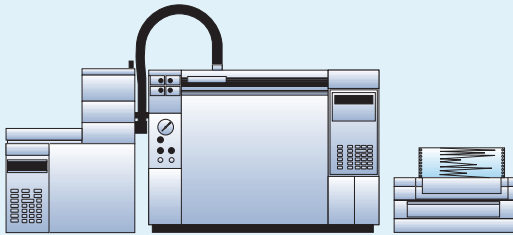


- 2 Crimp vial cap.



Automated Process Using the Agilent 7694E Headspace Sampler

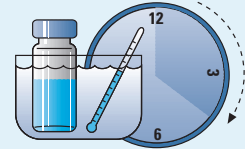
- 3 Place a vial in the Agilent 7694E headspace sampler and push the button marked "Start."



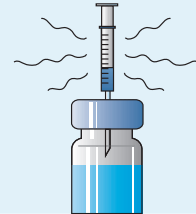
Manual sampling techniques are simple and inexpensive. They are also tedious and subject to human error. Automation, in contrast, ensures consistent and reliable results. It also frees laboratory personnel for more productive tasks.

Manual Process

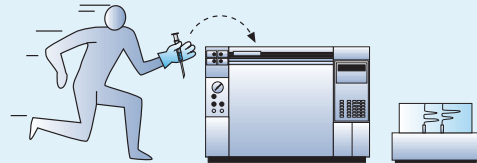
- 3 Heat the sample and wait for equilibration.



- 4 Sample using a gas-tight syringe (preferably heated at or above the temperature of the sample for greater precision).



- 5 Transport the syringe to the GC and manually inject the sample.



- 6 Repeat for the next sample.

The Agilent 7694E headspace sampler is the sampler to buy for low cost and high value.

Count on the Reliability of Agilent Instruments

To ensure that our products meet expectations, provide maximum uptime in your laboratory, and offer precise, accurate results, we give rigorous attention to detail in every step of the manufacturing and testing process.

We design, build, and test our instruments to comply with industry standards for safety and electromagnetic capability. Such standards include those of the Canadian Standards Association (CSA), the International Electro-technical Commission (IEC), the European Community (CE), and the International Special Committee on Radio Interference (CISPR).

We also perform many additional tests to ensure proper operation under power fluctuations and extremes of temperature, humidity, and vibration.

One Place for Service and Support

Agilent or an Agilent distributor—anywhere in the world—can offer you the benefits of skilled installation, reliable maintenance, and hardware support. Agilent service centers worldwide provide expert technical assistance, trained service people, and replacement parts.

For More Information

For more information about the Agilent 7694E headspace sampler, call your local Agilent analytical sales office or Agilent distributor today.

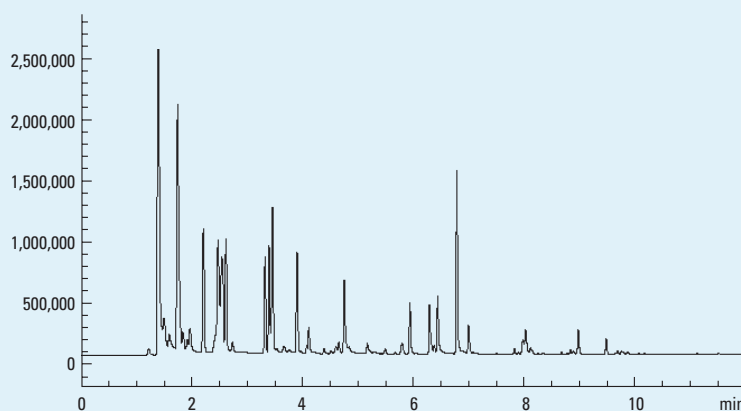
You can also log on to the Internet at: <http://www.agilent.com>

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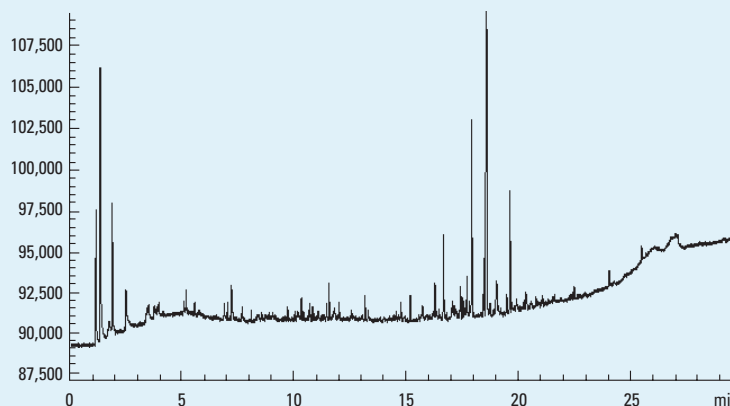
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Coffee



Agilent 7694E Headspace Sampler Conditions	Agilent GC Conditions
Oven: 80 °C	Oven: 40 °C (1 min) - 280 °C (5 min) at 10 °C/min
Sample Loop: 130 °C	Inlet: Split/splitless (20:1 split ratio) at 250 °C
Transfer Line: 150 °C	Detector: FID at 250 °C
Vial Equilibration Time: 30 min	Carrier Gas: Helium at 2.0 mL/min
	Column: 30 m x 0.32 mm x 1.0 µm HP-5 Trace Analysis

Powdered Polyethylene



Agilent 7694E Headspace Sampler Conditions	Agilent GC Conditions
Oven: 120 °C	Oven: 40 °C (1 min) - 280 °C (5 min) at 10 °C/min
Sample Loop: 130 °C	Inlet: Split/splitless (20:1 split ratio) at 250 °C
Transfer Line: 150 °C	Detector: FID at 250 °C
Vial Equilibration Time: 30 min	Carrier Gas: Helium at 2.0 mL/min
	Column: 30 m x 0.32 mm x 1.0 µm HP-5 Trace Analysis



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