

Reduce the strain on your resources when implementing new technologies for analyzing difficult matrices

Based on Agilent's 5977A Series GC/MSD and 7890B GC System, our user-friendly GC/MSD Semi-Volatiles Analyzer quickly screens and quantitates large numbers of target compounds in complex matrices – all within a single analysis. Its built-in features include Deconvolution Reporting Software (DRS), plus a semi-volatiles library with 338 single-component analytes from EPA methods 525, 625 and 8270. Together, these tools help you quickly and accurately analyze target compounds in dirty matrices. Additionally, the Analyzer is pre-tested for semi-volatiles analysis – with inlet, column, capillary flow technology, and software tools factory installed and configured – allowing your team to focus on method validation instead of method development.

Screen more target compounds... in less time

Agilent's GC/MSD Semi-Volatiles Analyzer makes use of productivity-boosting GC/MS technologies that allow you to:

- · Increase the number of targets screened
- · Differentiate target compounds from matrix interference
- · Reduce the analysis time required per sample
- Perform a complete data evaluation with screening and quantitation in 2-3 minutes post run
- Produce consistent, high-quality results immediately after installation

The following components are included – saving you time and money:

- · Semi-Volatiles checkout samples
- Retention Time Locked application-specific column, ensuring reliable database matching
- Video training tutorials for easy learning of more advanced Analyzer features
- Quick-start guide and Application Note that show you how to run the screening method provided with the Analyzer
- · CD-ROM with analysis methods, data files, and reports





Agilent Technologies

These built-in features make it *faster* and *easier* to screen large numbers of target compounds in complex matrices



Multimode Inlet (MMI) with

large-volume injection enhances trace-level detection and adds flexibility by including standard split/splitless capabilities.



Retention Time Locking (RTL) for consistent retention times after column maintenance and easy matching with the 338-compound semi-volatiles library.



Deconvolution Reporting Software (DRS) works with a semi-volatiles library that

works with a semi-volatiles library that includes 338 single-component analytes from EPA methods 525 and 8270. This powerful combination lets you achieve fast, highconfidence screening of target compounds... particularly those in dirty matrices.



Capillary Flow Technology (CFT) and backflush promote shorter run times, low chemical background, longer column life, and less frequent source cleaning to improve uptime.

See how our GC/MSD Semi-Volatiles Analyzer will get your lab on the *fast track* to better broad-range screening



This graph proves that backflushing can reduce run time by 50%. The blank area after backflush indicates that the inlet and column are clean.

| Sample I Data File Date/Tir Adjacent | : C:\msdche ne: 4:27:55 P : Peak Subtra | oas Checkout m\1\DATA\Semivoas_Relock\Se M Monday, August 24, 2009 | - | - | Shap | | ements = M | |
|---|---|--|-----------------|-------|-------|-------------------|------------------|-------------|
| | | | Amount (ng) | | AMDIS | | NIST | |
| R.T. | Cas # | Compound Name | Chem station | AMDIS | Match | R.T. Diff sec. | Reverse Match | Hit Num. |
| 3.8773 | 62759 | N-Nitrosodimethylamine | 7.33 | 7 | 95 | 0.6 | 92 | 1 |
| 6.2524 | 62533 | Aniline | 10.21 | 8.4 | 99 | 0.3 | 96 | 1 |
| 6.569 | 3855821 | 1,4-Dichlorobenzene-d4 | 10 | 10 | 98 | 0.4 | 93 | 1 |
| 7.3429 | 78591 | Isophorone | 10.19 | 10.36 | 97 | 0.7 | 96 | 1 |
| 7.7494 | 81209 | 1,3-dimethyl-2-nitrobenzene (ss) | 10.64 | 11.4 | 97 | 0.3 | 97 | 1 |
| 7.8060 | 1146652 | Naphthalene-d8 | 10 | 10 | 100 | 0.4 | 90 | 1 |
| 8.6450 | 77474 | Hexachlorocyclopentadiene | 12.88 | 12.8 | 96 | -1.0 | 85 | 1 |
| 9.0438 | 7786347 | Mevinphos | 11.96 | 11.36 | 96 | -1.0 | 91 | 2 |
| 9.5301 | 15067262 | Acenaphthene-d10 | 10 | 10 | 99 | 0.4 | 85 | 1 |
| 9.5652 | 51285 | 2,4-Dinitrophenol | 18.86 | 17.57 | 91 | -1.1 | 92 | 1 |
| 9.6000 | 100027 | 4-Nitrophenol | 12.32 | 13.17 | 95 | -0.8 | 91 | 1 |
| 9.6937 | 121142 | 2,4-dinitrotoluene | 11.6 | 11.18 | 97 | -0.9 | 92 | 1 |
| 10.0725 | 86737 | Fluorene | 10.33 | 9.22 | 98 | -0.6 | 94 | 1 |
| 10.0944 | 534521 | 4,6-Dinitro-2-methylphenol | 15.32 | 15.32 | 95 | -0.6 | 93 | 1 |
| 10.2014 | 1582098 | Trifluralin | 11.65 | 11.93 | 97 | -0.6 | 93 | 1 |
| 10.6528 | 122349 | Simazine | 12.47 | 10.77 | 93 | -0.7 | 85 | 2 |
| 10.6773 | 1912249 | Atrazine | 11.21 | 11.11 | 96 | -0.7 | 93 | 1 |

A DRS report (with locked retention times) of the semi-volatiles checkout sample. Together with Agilent's semi-volatiles library, DRS quickly and accurately identifies target compounds in high-matrix samples.

Ordering information:

Order an Agilent **5977A Series GC/MSD** along with an Agilent **7890B GC system** using the following Part Number:

 G3445B#461: Semi-Volatiles DRS Screening GC/MSD Analyzer

Put your lab on the productivity fast track.

Contact your local Agilent Representative or Agilent Authorized Distributor

Call **800-227-9770** (in the U.S. or Canada) or visit **www.agilent.com/chem/appkits**

This information is subject to change without notice. (© Agilent Technologies, Inc. 2013 Printed in U.S.A., April 5, 2013 5990-6232EN



Agilent Technologies