

### 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 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.

Data File Date/Tin Adjacent The NIS	: C:\msdche ne: 4:27:55 P : Peak Subtra T library wa	m\1\DATA\Semivoas_Relock\S M Monday, August 24, 2009 ction = 2 s searched for the components	emivoas_R s that wer	elock_2.D e found in	Shap the Al	e Require	ements = M get librar	Vlediuı y.
			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**