Agilent

Trusted Answers

Discover the possibilities of intelligent mass spectrometry

7000E and 7010C Triple quadrupole GC/MS



For years leader in the field of GC and GC/MS

For over 50 years, Agilent has been a leader in the GC and GC/MS sectors. The history of Agilent's leadership in mass spectrometry begins with the founding of HP in 1938. And at every step of the way, your goals are also our goals: a better user experience, better laboratory operations and more business success.



1971

Tabletop 5930A MS

Introduction of HP's first GC/MS device with oscilloscope and recorder.



1982

5970 MS

This groundbreaking product from Agilent was the first of a large GC/MS product family. While the mass range was almost as good as in the early stand models, the sensitivity was comparable to earlier benchtop devices.



1994

GCD

Gas chromatography/mass spectrometry technology became so popular that we introduced an easy-to-use model, the GCD.



1996

5973 GC/MSD

The 5973 was characterized by an extended

Mass range and better sensitivity

Off. With the help of MSD ChemStation and

Local Control Panel could have two GC/MSD

Controlled from a PC.



2005

5975 GC/MSD

The 5975 GC/MSD extended the mass range to 1050 m/z, and the sensitivity reached an S/N ratio of 100:1 for 1 pg OFN.



1976

5992A Benchtop GC/MS

Until that time, all GC/MS systems were standing devices that were set up on the ground. The 5992 was the first benchtop device and a milestone in history.



1988

Unix and DOS ChemStation

Unix ChemStation was the successor to the Pascal Workstation. The Agilent DOS ChemStation ran on low-cost PCs: Modern operating systems made it possible to switch to less specialized computer platforms.



1996

Hyperbolic gold-coated quartz quadrupole

The hyperbolic gold-coated quartz quadrupoles improved sensitivity, performance, spectra and isotope ratios.



2007

MassHunter software

The MassHunter software enabled device setting up to data analysis and reporting and made GC/MS analysis a powerful routine application for everyone.



2009

7000A Triple quadrupole GC/MS

The first GC/MS system from Agilent that exploited the selectivity and associated higher sensitivity of true GC/MS/MS.



2012

7200 GC/Q-TOF

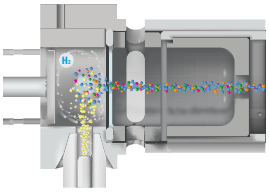
The 7200 GC/Q-TOF was the ideal tool for solving complex problems and complements Agilent's GC/MS portfolio with high-resolution battery masses.



2015

5977B GC/MSD and High Efficiency Source

Ensures unrivalled analytical sensitivity and maximum operational efficiency for ultratrack applications.



2017

Self-Cleaning Agilent JetClean Ion Source

The ion source no longer had to be cleaned often or not at all, which increases the productivity of single and triple quadrupol GC/MS systems.



2019

QuickProbe GC/MS

The Agilent QuickProbe GC/MS system is designed for forensic laboratories to enable direct analysis in real-time and without sample preparation.



2022

7000E and 7010C

Agilent 7000E and 7010C GC/TQ extend device intelligence and enable new data acquisition modes and self-recognizing device diagnostics. The 7000E is also compatible with the Agilent HydroInert source.



2012

Replaceable ion source

The interchangeable ion source (RIS) enabled the exchange of EI and CI source technologies in the Agilent 7200 GC/Q-TOF without ventilation.



2013

5977A GC/MSD

With the 5977A, the EI ion source with extractor was introduced, which ensures higher sensitivity and a better thermal profile. In addition, the 7890B GC system and the MSD were able to communicate directly with each other.



2016

7010B Triple quadrupole GC/MS

The Agilent 7010B represented the evolution of proven performance, combining reliable performance and compatibility with the High Efficiency Source and JetClean ion sources. In addition, dynamic MRM data acquisition was introduced.



2017

7250 GC/Q-TOF

The 7250 improved and extended the workflows for high-resolution accurate masses of the predecessor model 7200 GC/Q-TOF, while also offering high resolution and a large dynamic range.



2022

5977C

The 5977C delivers better analytical performance and technologies to maximize device uptime. The new HydroInert source ensures better performance with H2 as carrier gas.



Agilent 7000E and 7010C GC/TQ

Designed for your business goals

Processing times are crucial to the reputation of the laboratory. But every new day brings with it new productivity issues, including device downtime, repetition of samples, and review of data. Now get to know the Agilent 7000E and 7010C Triple Quadrupole GC/MS system. The 7000E GC/TQ ensures reliable performance day after day, while the 7010C GC/TQ is designed for analyses that require the lowest detection limits. Both use new technologies to maximize laboratory productivity so you can focus on advancing your lab.

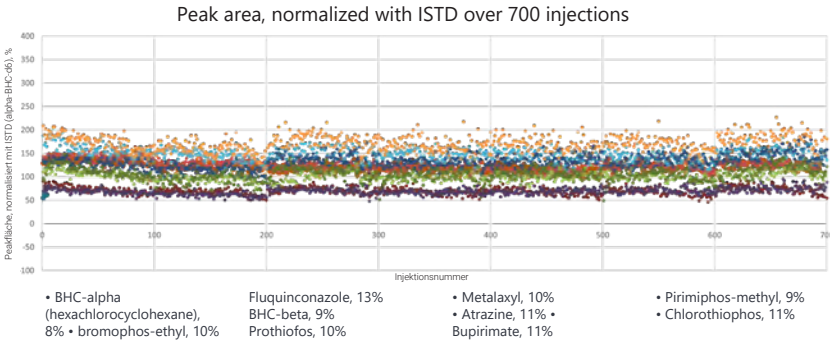


Mass spectrometric performance that keeps you competitive



7000E: Reliability and reproducibility

The Inert Plus extractor-EI ion source enables high analytical sensitivity of active substances that most likely interact with non-inert surfaces. Designed for routine laboratories with different applications in different industries for optimum operational efficiency.

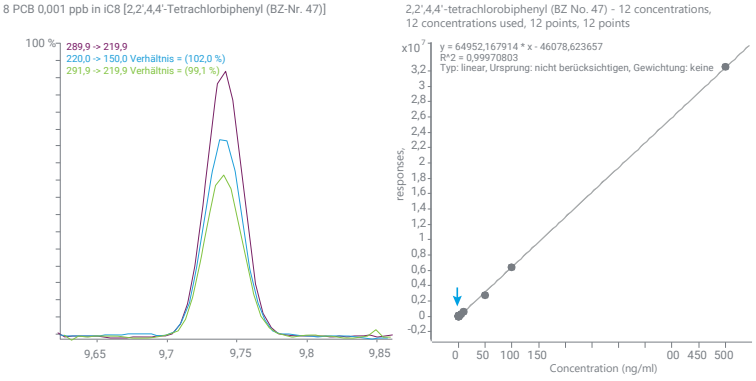


Spinach extract was prepared by QuEChERS extraction, purified with Captiva EMR-HCF and enriched with pesticides to a concentration of 20 ppb. The subsequently measured peak area signals were stable in the analysis with the 7000E GC/TQ over 700 injections. The analysis time was 10 minutes. After 100 injections each, the GC liner and the septum were replaced; no other maintenance activities were performed. The observed signal stability and reproducibility of the 7000E GC/TQ over time were outstanding.



7010C: proven sensitivity

High Efficiency Source (HES) provides unrivalled analytical sensitivity for ultra-track applications. Ideal for laboratories with high sample throughput, which need to save time and money with the highest operational efficiency.



In the PCB analysis with the 7010C GC/TQ, an excellent linearity of the calibration was achieved. noted. As an example, a calibration with 2,2',4,4'-tetrachlorobiphenyl in the range 0.001 to 500 ppb. After injection of 1 fg into the 7010C GC/TQ, a high Sensitivity of analysis observed.



Intelligence for Ultimate Productivity

The new Agilent 7000E and 7010C Triple Quadrupole GC/MS devices feature smart technologies that reduce device downtime and analytics times, maximizing analytical laboratory productivity.

Intelligent device diagnostics from start to finish

Before each tuning, the GC/TQ performs a comprehensive system readiness check so that the device is ready when you are. In addition to detailed system screening and system assessment procedures, self-controlled GC functions provide practical tools for device diagnostics and maintenance. This includes self-controlled maintenance with step-by-step guidance for frequent tasks that can be viewed on mobile devices.

Maximize operating time, predictable downtimes

Unexpected device problems and associated downtime disrupt laboratory operations significantly, especially if the cause of the problem is unknown. The 7000E and 7010C GC/TQ systems monitor their own indicators, and the system for reporting preventive maintenance provides an overview of the general state of the device in real time.

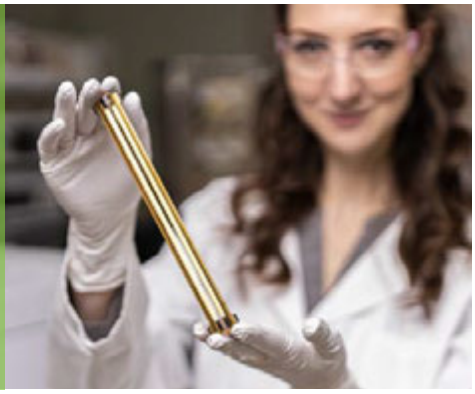
Optimal performance, no trying around

The fine tuning of GC/TQ systems for performance optimization is demanding and time-consuming. The innovative, fully automated, fast SWARM Autotune algorithms of the 7000E and the 7010C GC/TQ eliminate the need for any trial and error when achieving optimum device performance.

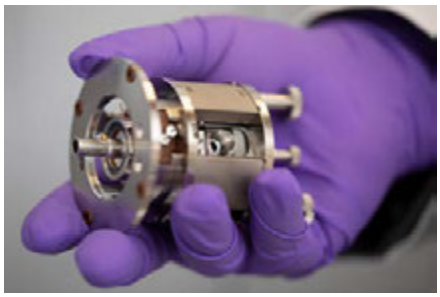


Innovation for more profitability

Flow rate. Operating time. Efficiency. Operating costs.



These fundamental factors have an impact on profitability – regardless of the business area in which you operate. They are constantly under pressure to analyze more and more samples, although resources are decreasing and analytical challenges are increasing. In your lab, any task can potentially increase or decrease profit. All devices must make their contribution. Each sample counts.



Self-Cleaning Agilent JetClean Ion Source

In routine analysis, matrix deposits are inevitable. So far, you had to regularly remove the ion source, clean the lens and then reinstall everything. Thanks to the self-cleaning Agilent JetClean ion source, the need for manual cleaning of the ion source is greatly reduced or completely eliminated. This means that you have one to two more days per month to carry out analyses. To maximize the operating time of the devices and the sample throughput. The JetClean ion source is available as an option for Agilent single-quadrupole and triple-quadrupole GC/MS systems.

Learn more about the self-cleaning JetClean ion source



Hyperbolic gold-coated quartz quadrupole

The quartz monolith guarantees optimal alignment of hyperbolic surfaces over the entire life cycle of the mass spectrometer. The gold-coated surfaces remain clean even at high temperatures (up to 200 °C) and are maintenance-free.



Capillary flow technology

Many GC and GC/MS analyses concern complex samples containing high-boiling compounds. After elution of all target peaks, the Agilent Capillary Flow Technology enables a backflush of the column, with which all remaining compounds are flushed out. Benefits include shorter cycle times, less column maintenance, better data and increased productivity.

Learn more about Agilent Capillary Flow Technology.



Oil-free Agilent IDP-10 scroll pump

The oil-free IDP-10 scroll pump from Agilent is an oil-free, compact, quiet and insulated vacuum pump with remote control of speed. The pump's inverter motor ensures uniform vacuum performance – at all frequencies and input voltages that are common worldwide. The IDP pumps use a one-sided spiral design that can be serviced in 15 minutes with simple tools. Compatible with 7000 and 7010 GC/TQ devices, devices using hydrogen as carrier gas, and JetClean.

Learn more about the oil-free IDP-10 scroll pump from Agilent.



Retention Time Locking (RTL)

Updating the expected retention times after routine chromatographic maintenance is often associated with a high expenditure of time and complexity. RTL is an uncomplicated and flexible tool with which this effort can be reduced. The tool allows different GC systems in one and the same laboratory or in a laboratory network to have the same retention times when carrying out the same GC method. This simplifies data comparison and quality controls.

HydroInert source: optimised performance with hydrogen carrier gas

Solve the problems with hydrogen as a carrier gas

Helium is a limited resource, and its production is inefficient and therefore expensive. Hydrogen is a low-cost, renewable gas and the best alternative to helium. The new HydroInert source minimises the sensitivity losses and spectral anomalies associated with the use of H2 gas. HydroInert has unique advantages, including:

– spectral fidelity compared to He as a carrier gas, even for compounds, which have a strong tendency towards hydrogenation.

– Superior peak form of high boilers, especially PAH.

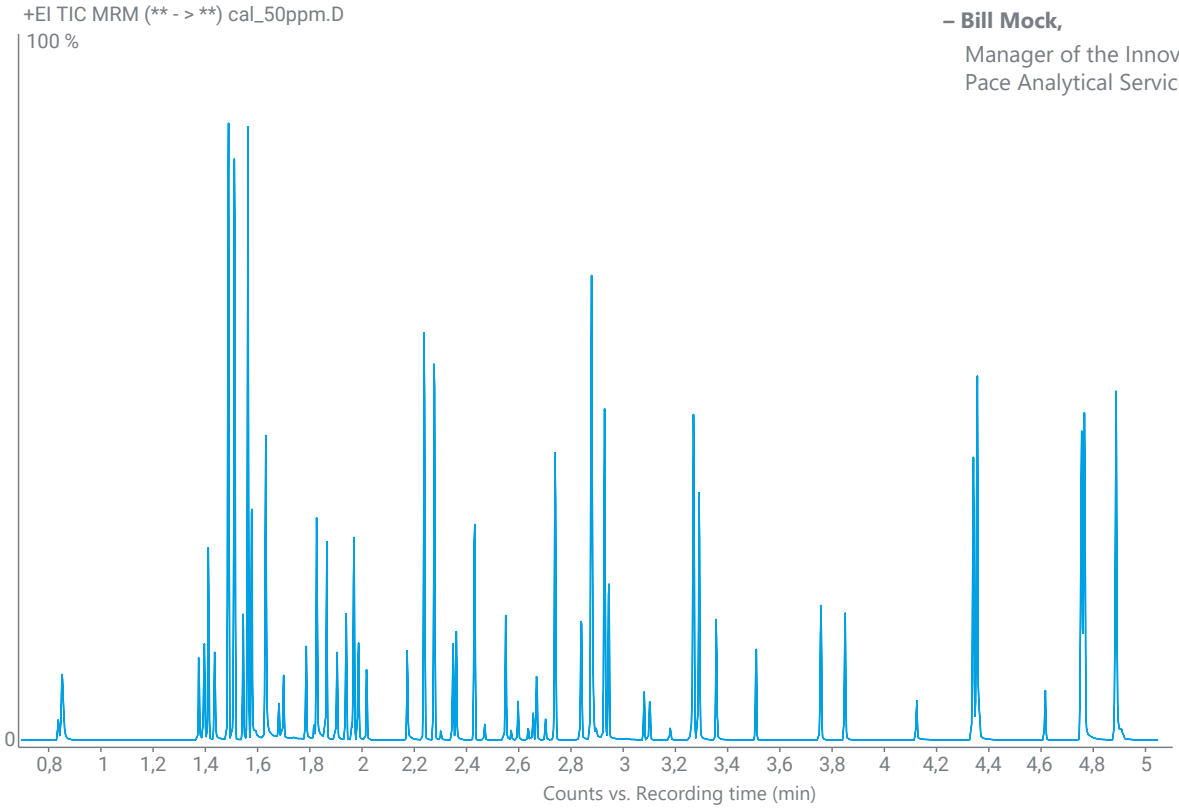
– Unchanged source components and familiar assembly.



"Supply shortages with helium are becoming more common, and this is an excellent alternative to He.

– Bill Mock,
Manager of the Innovation Laboratory
Pace Analytical Services

EPA Method 8270 SVOC Analysis: 50 ppm standard in MRM mode with H2 carrier gas



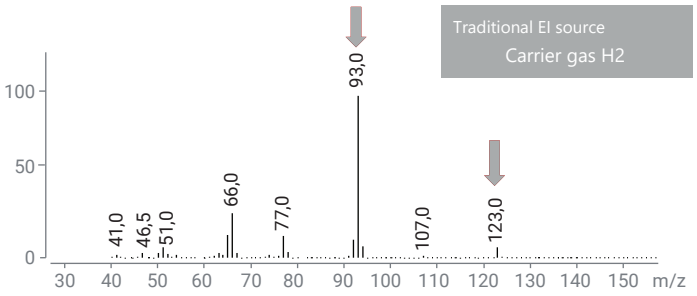
A comprehensive mix of U.S. EPA 8270 SVOCs were analyzed with the 7000E with HydroInert source and H2 as carrier gas. Compared to the carrier gas helium, the analysis yielded better peak shapes and a faster analysis time of 5.8 minutes.

Precautionary statements when switching to hydrogen as carrier gas

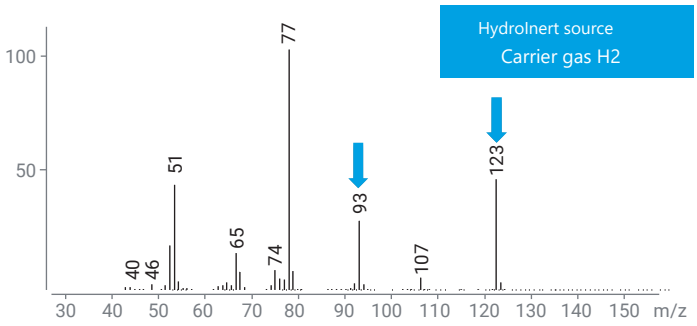
Since hydrogen is combustible, safety in the handling of this gas is paramount. Further safety instructions can be found in the safety manual for working with hydrogen in the context of GC/MS (Hydrogen Safety Manual for GC/MS) by Agilent (order number G7003-90053). Before connecting hydrogen and using hydrogen as a carrier gas, the entire safety manual must be read carefully.

Analysis of nitrobenzene as an example of a compound prone to reactions in the source and hydrogenation

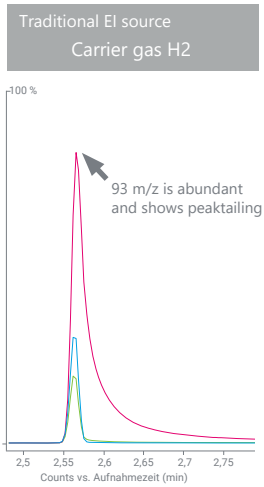
Spectral fidelity, resolution and peak form of HydroInert are significantly better when H2 is used as carrier gas



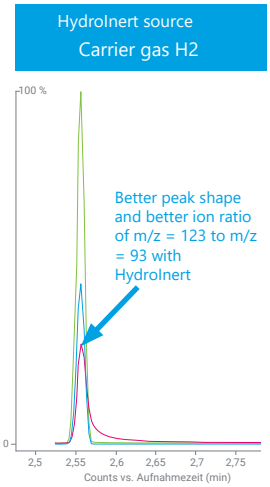
When using the extractor ion source (extraction lens, 3 mm), hydrogenation to aniline was observed, see abundance of the ion with m/z=93.



Better spectral fidelity with an excellent ratio of m/z=123 to m/z=93.



An ordinary measurement shows indications of a hydrogenation of nitrobenzene to aniline, see abundance of the ion with m/z=93.



When using the HydroInert source, the mass spectrum is more consistent with nitrobenzene.



The new HydroInert source from Agilent

Resources for saving or conversion of GC/MS carrier gas

These links provide support for the transition from GC/MS devices to hydrogen

Overcome the helium shortage

Explore how to avoid price fluctuations and possible supply shortages of helium as a carrier gas for GC analysis.

Savings calculator for saving helium

Find out how much you can save with Agilent Gas Saver (with and without nitrogen standby).

Helium savings module

Check the amounts of helium used and avoid interruptions.

User manual for switching Agilent EI GC/MS devices from helium to hydrogen as carrier gas

Detailed instructions for converting Agilent EI GC/MS systems from helium to hydrogen as carrier gas.



MassHunter Software: Faster to Findings

Solve daily problems and make GC/TQ analytics faster, easier and more routine with Agilent MassHunter software. With MassHunter software, which is compatible with all quantitative mass spectrometers from Agilent, you retain control when collecting data. The customizable functions support a wide variety of applications. With MassHunter software, users of any level of knowledge can also achieve reliable results. It supports numerous applications with easy-to-use method templates and offers an extensive spectral library with data on retention time and/or retention index.



New air and water leak testing in MassHunter Acquisition

– A simple and flexible visualization tool
to identify and correct leaks in your GC/TQ system.

During the leak test, up to
10 ions are added which are displayed as extracted ions. This can be done by monitoring the signals of a leak test gas (e.g. B. Compressed gas spray.



MassHunter Optimizer for GC/TQ

This fully automated tool saves time in the development of MRM data acquisition methods by reducing the time required for manual verification. Important advantages include:

– Saving time in the development of an optimized MRM method.

– A smooth transfer of GC/MSD methods GC/TQ.

– Integrated test functions.



MassHunter Acquisition

Two new data acquisition modes: tMRM and dMRM/scan.

Intelligent SWARM-Autotune on GC/TQ
Now it's twice as fast.

Integrated technical and procedural control elements
Ensure data security, regulate access and simplify compliance with FDA (USA) 21 CFR Part 11, Annex 11 to the EU Good Manufacturing Practice Guide and similar electronic records regulations.



MassHunter Quantitative Analysis

– Quant-My-Way offers a user-configurable Surface for quantification that is specific to the target workflow.

Includes integrator with peak validation for minimal manual reintegration with verification based on outliers (review-by-exception).

– Report creation by simple click of the mouse
Basis of integrated reporting templates.

Learn more about the possible use of Agilent MassHunter software in your laboratory.

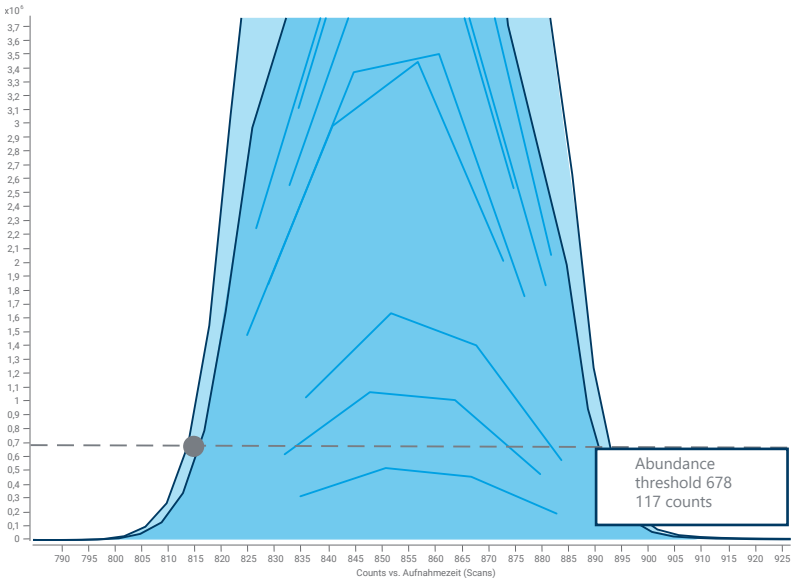
New data acquisition modes of 7000E and 7010C

Triggered MRM (tMRM)

tMRM is a data-dependent scan function that increases throughput, collects quantitative and qualitative data, and minimizes the cost of analysis.

Target analysis

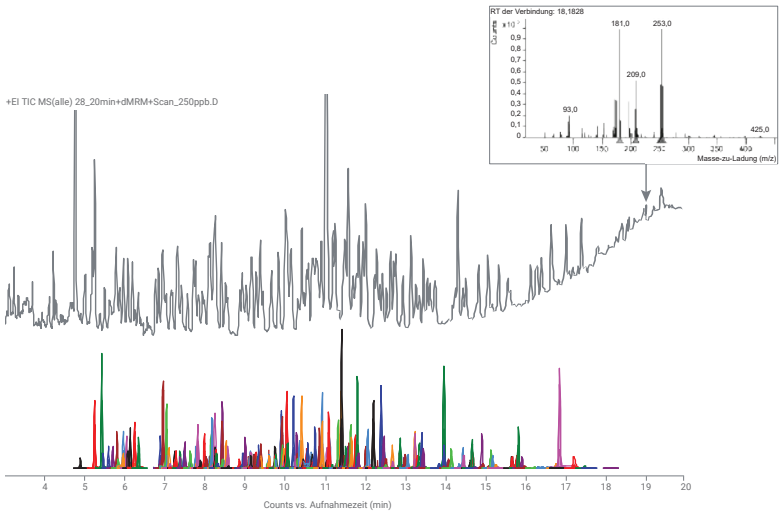
Precursor	product	CE	primary trigger	threshold		
287,9	272,7	15				
287.9 92.9 20 X						
285,9	270,9	15				
285.9 93 25 X X 678 117						
285,9	63	45				
196,9	168,9	15				
125	79	5				
124,9	47	15				
108,9	78,9	5				
8.9	47	10				



A tMRM experiment with two primary transitions for each analyte. When the primary MRM signals reach a custom threshold, secondary MRM transitions are triggered.

Dynamic MRM and scanning at the same time (dMRM/scan)

The MassHunter Acquisition software allows you to perform a dynamic MRM while scanning simultaneously. In addition to the shorter dMRM residence times, the simultaneous scans allow for subsequent analysis without re-injection. Further information on the dynamic MRM data acquisition mode can be found in the technical overview "New Dynamic MRM Mode Improves Data Quality and Triple Quad Quantification in Complex Analyses" (5990-3595EN).



dMRM/scan acquisition data of a QuEChERS extract of spinach demonstrate comparable sensitivity and superior linearity. In addition, the collected data of the complete scan enables reliable subsequent analyses even in complex matrices.

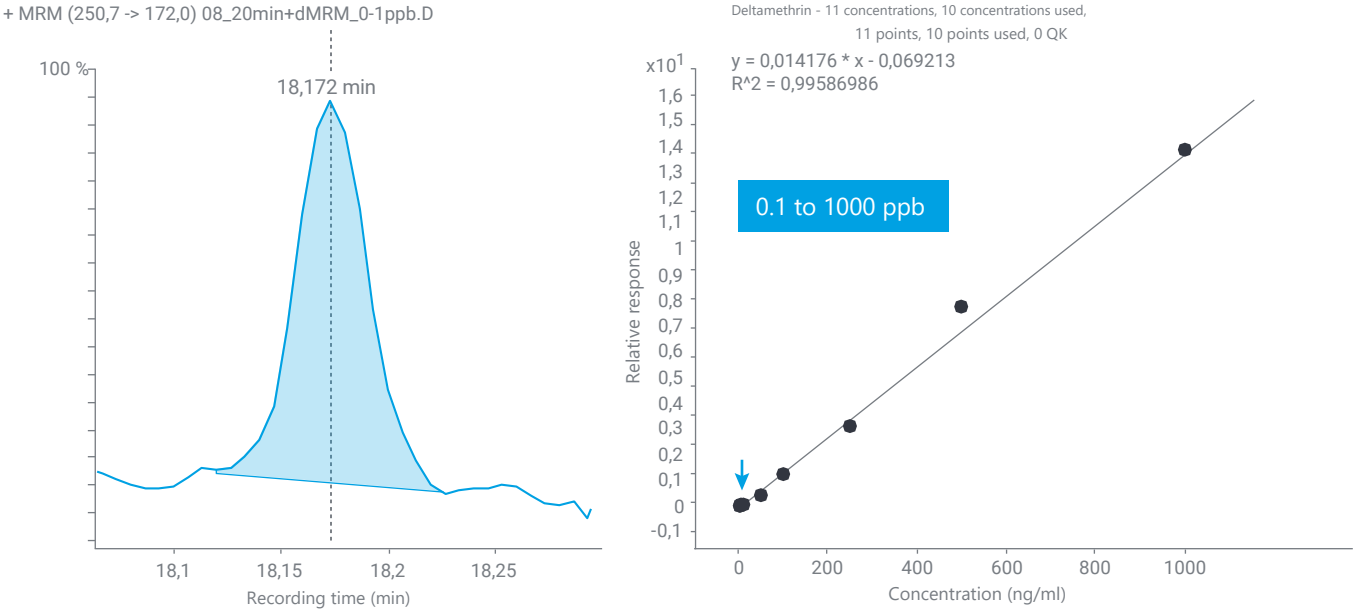


Solutions for better productivity

Agilent's database of pesticides and environmental pollutants includes over 1,100 compounds with multiple transitions per compound and over 7,500 matrix-optimized MRM transitions. This information facilitates the development of data acquisition methods with fewer matrix interferences and supports the optimisation of triple quadrupol GC/MS applications.

Accelerate work start-ups in your laboratory – with ready-to-analyze e-methods.

Agilent e-methods speed up your preparation work by allowing you to download large amounts of technical information and optimized analytical methods into an analytical, digital information package.



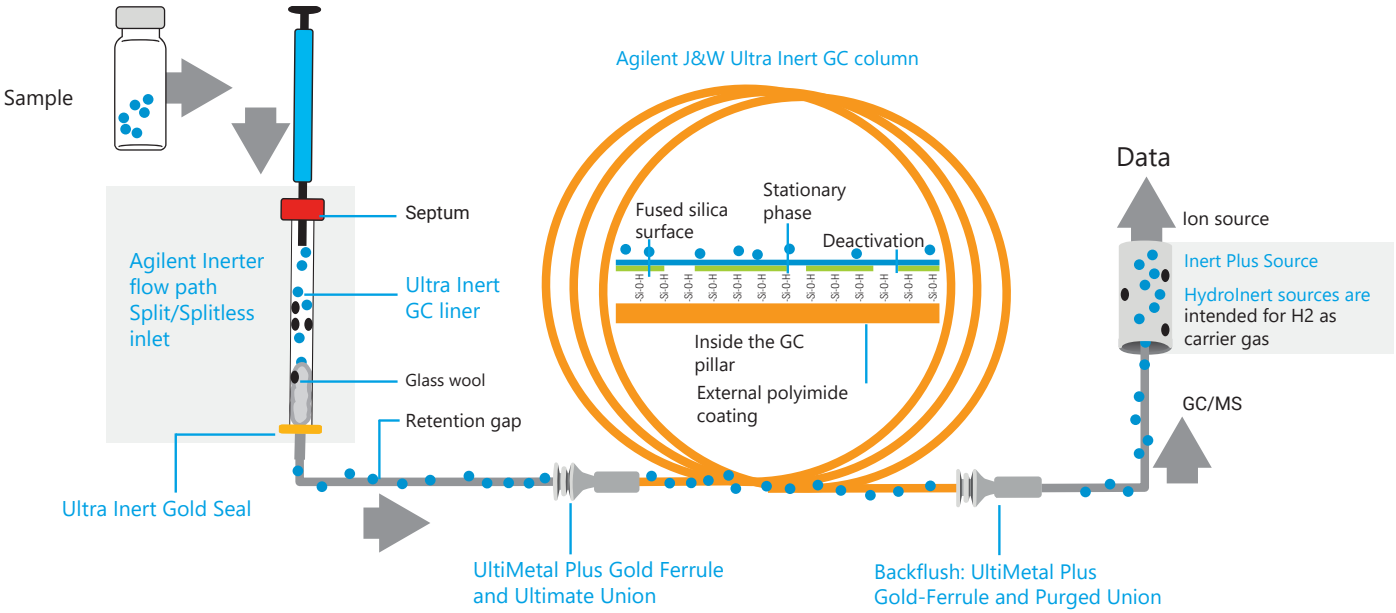
Deltamethrin, as a pesticide, places particularly high demands on GC/MS analysis because its sensitivity in the chromatographic space is low. is. With the 7010C, a high sensitivity can be achieved: chromatogram of deltamethrin at the limit of quantification (LOQ) at 0.1 ppb in QuEChERS extracts of spinach. In this difficult analyte, the 7010C achieved a very good linearity (R2 >0.995) of 0.1 ppb to 1000 ppb.

Learn more about the possible use of Agilent MassHunter software in your laboratory.

Completely inert flow path: as important as never before

Available samples are getting smaller, increasingly active and more complex. Losses due to activity in the flow path can therefore not be afforded. Repeating or reviewing dubious analytical results also contributes to the waste of valuable resources, reduces productivity and negatively affects your operating result. In addition, with active analytes in the trace region, you do not always have a second chance, since there is no sample left for further analyses.







Do not miss anything in your GC/MS analysis

Agilent's solutions for an inert flow path provide greater analytical sensitivity, accuracy, linearity and reproducibility from the analysis of active environmental samples to drug screening. More info



Reliable and unrivalled GC separation

The development of a gas chromatography system with the greatest confidence in the world is a continuous process. With each step, we increase speed, improve functionality and create new analytical opportunities without losing sight of the essentials: business outcomes.



Meet the current and future requirements for your analytics

The Agilent 8890 GC system provides excellent flexibility. The 8890 is the next advanced development of the proven Agilent GC systems, which increases productivity, delivers high-quality data and offers unrivalled reliability to all users.

– Can be configured with any GC/MS system and with a wide
A range of GC detector options can be combined.

The helium savings module offers cost-saving carrier gas options.

Analyzers have pre-configured and tested systems
for a wide range of specific applications.



Take advantage of the full profitability potential of your laboratory

The Agilent Intuvo 9000 GC is in a class of its own. The innovative compact design offers fast direct heating, ferrule-free fittings, GuardChip technology and clip-free columns for faster sample analysis and fewer and faster column changes. Intuvo continues Agilent's existing experience in reliability and gold standard performance in a compact, high-performance complete solution.

See your applications in a new light

Detection of potentially hazardous pesticides in the trace area



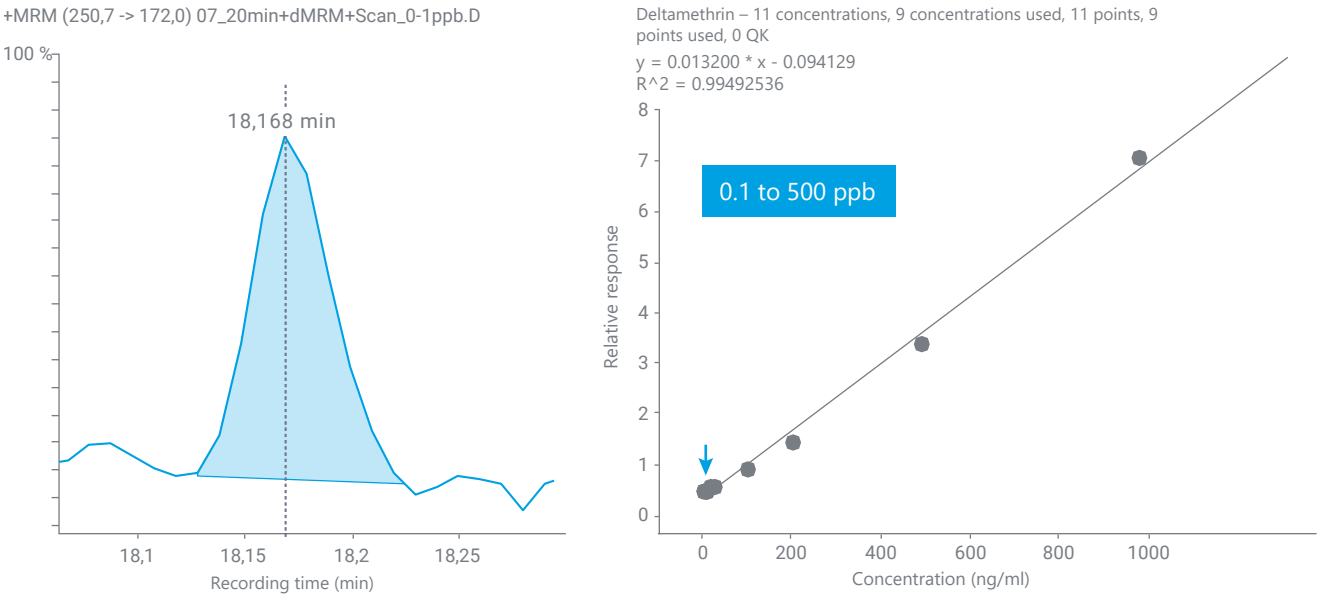
Trace pollutants in food and the environment are a cause for concern, increasing the demand for faster and more reliable methods of identifying and quantifying pesticides and pesticide residues. Currently developed techniques include:

– Backflush in the middle of the column arrangement – reversal of the carrier gas flow after the last analyte has escaped from the column in order to avoid spill-overs.

Pulsed splitless injection – maximizes the transfer of analytes the inlet to the GC column and minimizes the dwell time and degradation in the inlet.

– Retention Time Locking – makes it possible for new pillars or Devices which: have exactly the same retention times as in the MRM database, which greatly simplifies method maintenance.

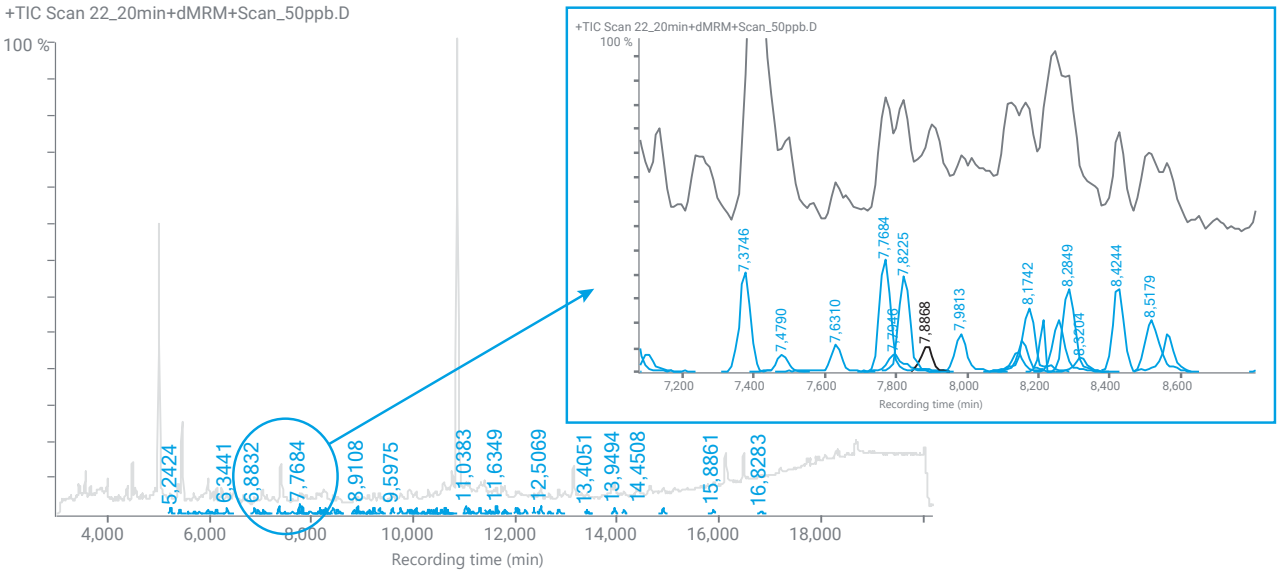
– The Agilent MassHunter MRM database for pesticides and Environmental pollutants (P&EP 4) – provides data of up to eight MRM transitions per analyte. In this way, data acquisition methods can be assembled without having to develop MRM. The database contains retention times for 20- and 40-minute GC stove programs with constant flow.



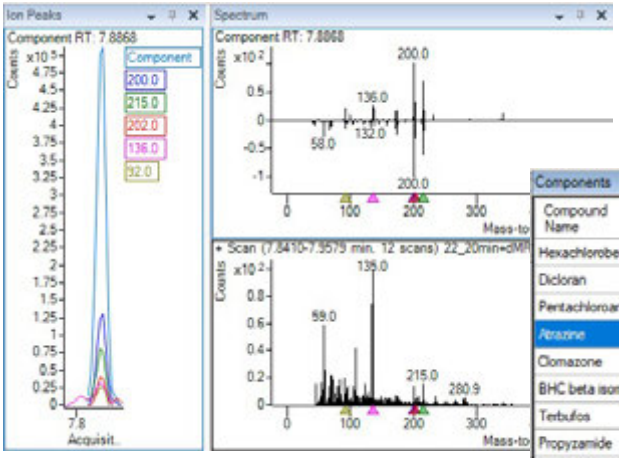
In the simultaneous dMRM/scan mode on the 7010C, a high sensitivity was maintained (see chromatogram for deltamethrin at LOQ concentration of 0.1 ppb in a QuEChERS extract of spinach). In this dMRM/scan capture mode, the 7010C delivered excellent linearity over 0.1 to 500 ppb.

Sensitive analysis of known and unknown structures

In the simultaneous dMRM/scan data acquisition mode, comparable sensitivity and linearity are achieved. This mode also allows the identification of connections that the dMRM and MassHunter Unknowns Analysis software are not targeting. In addition, the mode helps not to overload the source and enables subsequent analysis.



The identification of atrazine at a concentration of 50 ppb in a QuEChERS extract of spinach in simultaneous dMRM/scan mode with MassHunter Unknowns Analysis is based on interference correction.



The deconvolated spectrum of the compound at RT of fludioxonil will be compared with the reverse reference spectrum of the library. The deconvolution process has removed interference and ensures high-quality compliance with library spectra.

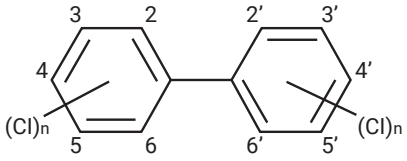
Components

Compound Name	Compone RT	Library RT	Delta RT	Match Factor	Best Hit	Formula	CAS#	Component Area
Hexachlorobenzene	7.7684	7.7840	0.0156	84.7	☑	C6Cl6	118-74-1	5177510.3
Dicloran	7.7946	7.8010	0.0064	56.8	☑	C6H4Cl2N2O2	99-30-9	1328222.9
Pentachloroanisole	7.8225	7.8410	0.0185	63.2	☑	C7H3Cl5O	1825-21-4	4416232.7
Atrazine	7.8868	7.8870	0.0002	56.3	☑	C8H14ClN5	1912-24-9	1189030.6
Clomazone	7.9813	7.9850	0.0037	87.2	☑	C12H14ClNO2	81777-89-1	1891239.2
BHC beta isomer	8.1412	8.0300	-0.1112	64.7	☑	C6H6Cl6	319-85-7	1016865.3
Terbufos	8.1558	8.1640	0.0082	56.4	☑	C9H21O2PS3	13071-79-9	1545178.9
Propyzamide	8.1742	8.1730	-0.0012	62.1	☑	C12H11Cl2NO	23950-58-5	3581712.3
Pentachloronitroben...	8.2134	8.2260	0.0126	62.7	☑	C6Cl5NO2	82-68-8	1100843.6
Pentachlorobenzonit...	8.2564	8.2620	0.0056	72.3	☑	C7Cl5N	20925-85-3	2699208.9

Perform complex PCB analyses in a high dynamic range

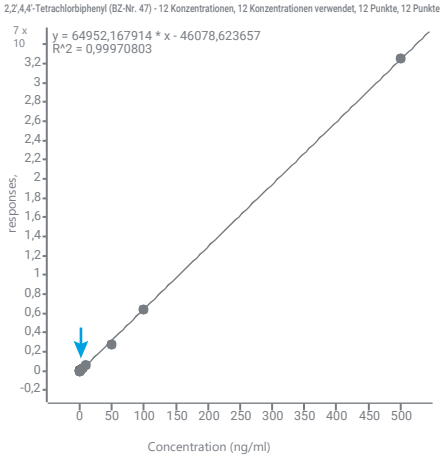
For years, PCBs were often used as dielectrics and coolant for electrical appliances. They were then identified as an environmental toxin and classified as a persistent organic pollutant. However, due to widespread use and environmental persistence, PCBs are still present in the environment, especially in water sources and soils. GC/TQ analyses are suitable for quantifying PCB compounds, especially in complex matrices.



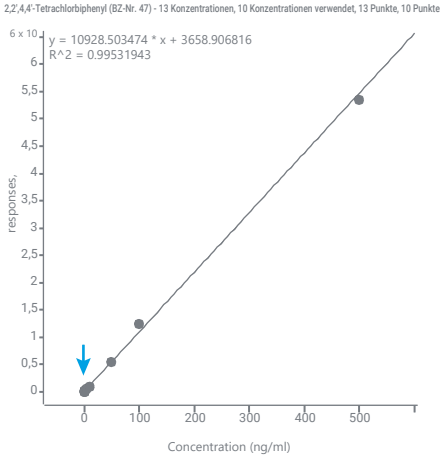


The general chemical structure of polychlorinated biphenyls (PCBs).

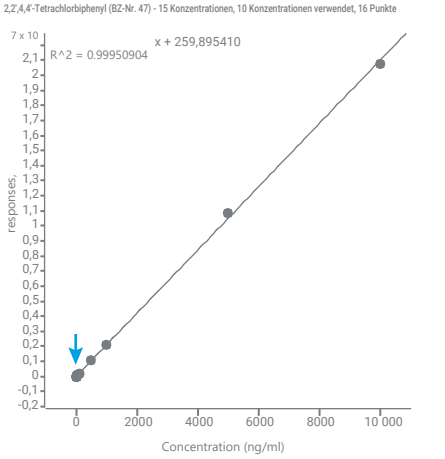
7010C: 0.001 to 500 ppb



7000E (3 mm extraction lens) : 0.01 to 500 ppb



7000E (9 mm extraction lens) : 0.5 to 10,000 ppb



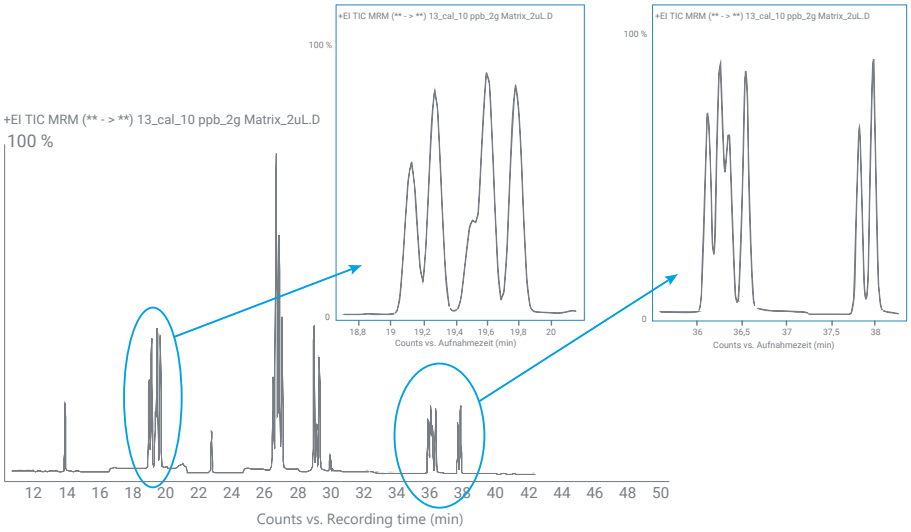
Calibration curves for 2,2',4,4'-tetrachlorobiphenyl with the D7010C and 7000E (3-mm and 9-mm extraction lenses, respectively) show excellent Linearity (R2 > 0.995) over a large dynamic range. This gives you the flexibility to meet the requirements of PCB analysis based on of the target concentrations.

Expand your use of hydrogen in the analysis of trace pollutants



Because of their ubiquity, PAHs are monitored in many foods – from seafood to cooking oils to smoked meat – as trace pollutants. The air, water and soil are also monitored for PAHs.

In GC/TQ analyses, helium is usually used as a carrier gas. In this application, however, hydrogen can replace helium. In this way, users benefit from shorter analysis times and better resolution. The Agilent 7000E GC/TQ together with the Agilent HydroInert source provide excellent sensitivity and resolution as well as high throughput compared to helium. In addition, significantly fewer interactions occur in the ion source without the use of helium, which is becoming increasingly expensive.



The 7000E with a new HydroInert source enables the use of hydrogen as a carrier gas for this PAH analysis. In this EU-PAH analysis, 10 ppb of EU-PAH target analyses were added to a matrix extract of infant formula and injected into a 7000E with HydroInert. All the target isomers were dissolved by chromatography and had an excellent peak form.

Name	Transition	RT	CF Limit Low	CF Limit High	CF R2
7H-Benzo[c]fluorene	216.0 -> 215.0	14.089	0.01	100	0.9990
Benz[a]anthracene	228.0 -> 228.0	19.333	0.01	100	0.9991
Cyclopenta[cd]pyrene	226.0 -> 224.0	19.520	0.1	100	0.9990
Chrysene	228.0 -> 226.0	19.812	0.01	100	0.9974
5-Methylchrysene	242.0 -> 239.0	22.909	0.05	100	0.9974
Benzo[b]fluoranthene	252.0 -> 252.0	26.834	0.01	100	0.9987
Benzo[k]fluoranthene	252.0 -> 252.0	27.016	0.01	100	0.9985
Benzo[j]fluoranthene	252.0 -> 252.0	27.199	0.01	100	0.9984
Benzo[e]pyrene	252.0 -> 252.0	29.140	0.01	100	0.9984
Benzo[a]pyrene	252.0 -> 252.0	29.464	0.01	100	0.9989
Indeno[1,2,3-cd]pyrene	276.0 -> 274.0	36.222	0.05	100	0.9987
Dibenz[a,h]anthracene	278.0 -> 275.7	36.524	0.01	100	0.9977
Benzo[ghi]perylene	276.0 -> 276.0	38.023	0.01	100	0.9988
1,2,9,10-Dibenzopyrene	302.0 -> 299.9	44.387	0.01	100	0.9992
1,2:4,5-Dibenzopyrene	302.0 -> 302.0	45.970	0.05	100	0.9988
Dibenzo[a,i]pyrene	302.0 -> 302.0	46.854	0.05	100	0.9994
3,4:8,9-Dibenzopyrene	302.0 -> 299.9	47.367	0.05	100	0.9992

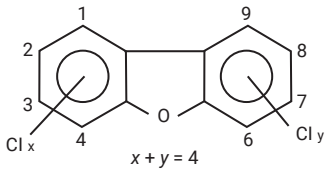
For all EU PAH analysts, the 7000E with HydroInert had excellent linearity over a wide dynamic range.

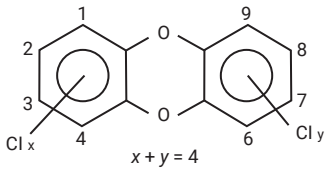
Conformity with strict global regulations

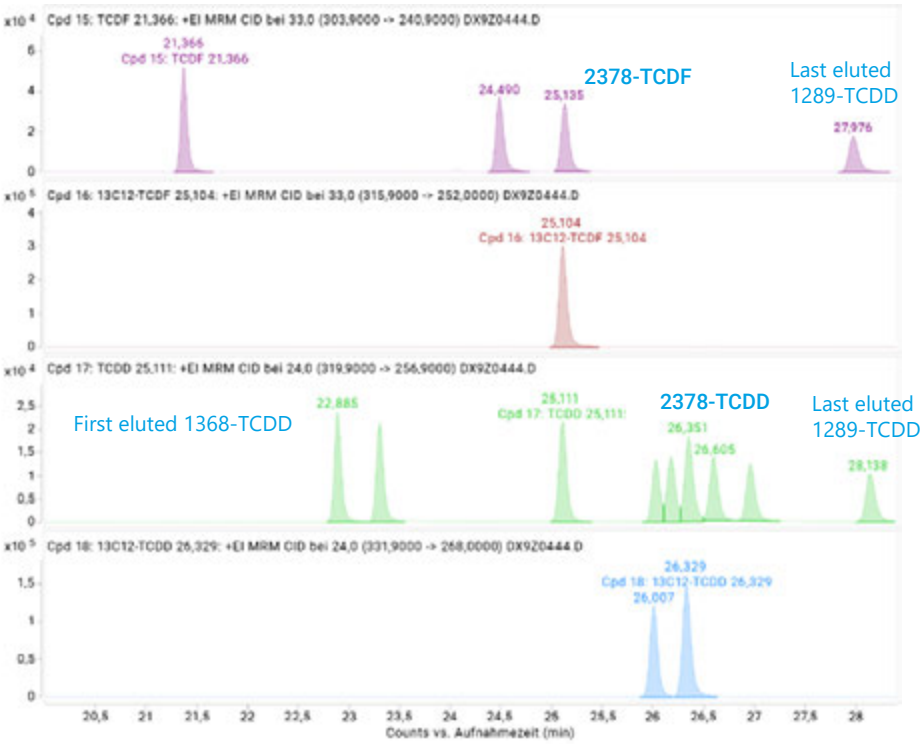
Whether EPA, EU, UK or other legal requirements are relevant to you, the Agilent 7010C GC/TQ is ideal for testing for persistent organic pollutants. This versatile and robust device ensures the specificity and sensitivity of high-resolution sector field system GC/MS devices at low cost and low complexity.



Agilent 7010 GC/TQ provides excellent sensitivity and an excellent S/N ratio for polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF). And thanks to the convincing reproducibility in the lower concentration range, the quantification of low concentrations also succeeds reliably. This is important as the authorities' Lowest Concentration Minimum Reporting Level (LCMRL) takes into account both sensitivity and reproducibility worldwide.







The chromatograms for tetrachlorinated dibenzofurans (TCDF) and tetrachlorinated dibenzodioxins (TCDD) show that the SGS AXYS 16130 method allows the use of the 7010 GC/TQ without changing the elution order in the mixture defining the window.



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The perspective of sustainability transforms the way researchers, scientists and manufacturers view products, processes and supply chains. However, it can be challenging to reduce a laboratory's environmental impact while optimising workflows and costs.

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my green lab.

Collaboration with My Green Lab

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initiative, SBTi. Read the press releases and learn more.

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From Insight to Outcome

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Published in the USA, 25. May 2022
5994-4921DEE

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