PROTECT
YOUR GC SYSTEM FROM PLOT COLUMN PARTICLE SHEDDING

The Measure of Confidence

Agilent J&W PLOT PT GC columns

Reduce maintenance cost for routine PLOT column analysis and extend capabilities with capillary flow technology and GC/MS

Particle shedding of the stationary phase can make it challenging to use porous layer open tubular (PLOT) columns. When particles dislodge from the column and flow downstream, the results can be flow restriction or plugging of the GC flow path, damage to column switching valves, and detector contamination. Particles entering the detector can cause signal spikes which can interfere with the software's ability to identify and quantitate compounds. The use of Agilent Capillary Flow Technology (CFT) and GC/MS analysis using PLOT columns has been limited due to these issues.

Some labs resort to inconvenient workarounds, such as installing a particle trap – via pressfit or other union and associated fittings – which can clog, or using in-line frits on the column at the valve or detector, which require periodic maintenance. Now, however, Agilent has developed a column technology with a built-in solution to the PLOT column particle shedding problem.

The ONLY columns with integrated particle trapping technology on *both ends* – enabling worry-free operation

Our integrated particle trapping technology – *an Agilent exclusive* – takes the worry out of performing GC or GC/MS analysis with PLOT columns for more confident day-to-day operation and identification of unknowns.

Benefits include:

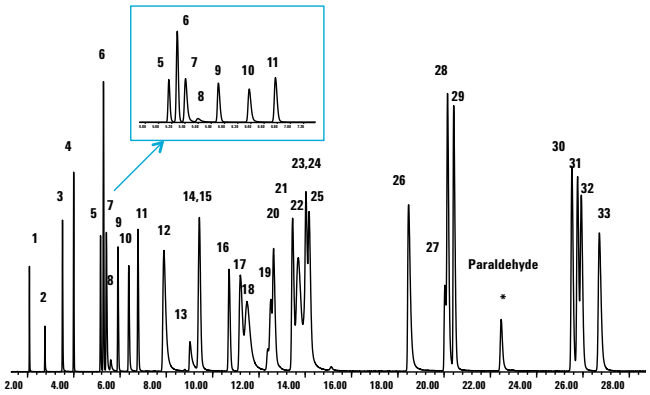
- **Enhanced analytical capability in the lab** using PLOT analyses with MS detection and CFT devices.
- **No more hassles with unions or downstream filters:** Our integrated particle trapping technology is incorporated *into the column* as one continuous length of fused silica tubing.
- **Higher throughput:** Reproducible flow restriction and increased stability reduce the need for method/system adjustments, and promote a steadier analytical output.
- **Lower operating costs and less downtime** associated with replacing filters and column switching valves.
- **Easy upgrade:** No changes in selectivity means minimal method adjustments and method revalidation.

*The integrated particle trapping technology on **both ends** of Agilent J&W PLOT PT GC columns reduces downtime, while allowing you to use a GC/MS for detailed, qualitative and quantitative analysis. **No other PLOT column offers this level of worry-free operation of your GC or GC/MS system.***

Agilent Technologies

Now you can *confidently* use PLOT columns for GC/MS applications

Agilent J&W PLOT PT GC columns are the *only* PLOT columns stabilized with integrated particle trapping technology *on both ends* to virtually eliminate particle shedding. They are ideal for analyzing light gases, solvents, and other volatile organic compounds in hydrocarbon processing, environmental (air), forensic, and food applications. And they are brought to you by Agilent – the world's GC leader.



Integrated PLOT column particle trapping technology enables worry-free operation with mass selective detection.

1. Methanol
2. Acetaldehyde
3. Ethanol
4. Acetonitrile
5. Acetone
6. Methylene chloride
7. Isopropyl alcohol
8. 2-Propanamine
9. Ethyl formate
10. 1-Propanol
11. Ethyl ether
12. 2-Methyl-2-propanol
13. 1,2-Ethanediol
14. Trichloromethane
15. 2-Butanone
16. Ethyl acetate
17. 2-Methyl-1-propanol
18. MTBE
19. 2-Chloro-butane
20. 1-Butanol
21. Benzene
22. 1,1,1-Trichloroethane
23. Carbon tetrachloride
24. 1-Chlorobutane
25. Hexane
26. 3-Methyl-1-butanol
27. DMSO
28. Toluene
29. Heptane
30. Ethylbenzene
31. 1,3-Dimethylbenzene
32. p-Xylene
33. o-Xylene

Column: **PoraBond Q PT** 25 m × 0.25 mm
Part No. CP7348PT
Carrier : Helium, constant flow mode, 40 cm/s @ 90 °C
Inlet: 200 °C, split ratio 120:1
OVEN: 90 °C, 10 °C/min to 140 °C for 6 min, 5 °C/min to 200 °C for 10 min
MSD: 280 °C transfer line, full scan at m/z 30-350

Ordering information

Agilent J&W PLOT PT columns are now available for porous polymer, alumina oxide, and MolSieve PLOT. If the column configuration you need is not mentioned here, it is also possible to order a custom column configuration in the Agilent J&W GC Custom Column Shop.

Part Number	Description	Dimensions*	Part Number	Description	Dimensions*
CP7348PT	PoraBOND Q PT	25 m x 0.25 mm x 3 µm	CP7518PT	CP-Al2O3/KCl PT	50 m x 0.53 mm x 10 µm
CP7351PT	PoraBOND Q PT	25 m x 0.32 mm x 5 µm	19091P-K15PT	HP-PLOT Al2O3 KCl PT	50 m x 0.32 mm x 8 µm
CP7352PT	PoraBOND Q PT	50 m x 0.32 mm x 5 µm	19095P-K23PT	HP-PLOT Al2O3 KCl PT	30 m x 0.53 mm x 15 µm
CP7353PT	PoraBOND Q PT	10 m x 0.53 mm x 10 µm	19095P-K25PT	HP-PLOT Al2O3 KCl PT	50 m x 0.53 mm x 15 µm
CP7354PT	PoraBOND Q PT	25 m x 0.53 mm x 10 µm	115-3352PT	GS-Alumina/KCl PT	50 m x 0.53 mm
CP7550PT	PoraPLOT Q PT	10 m x 0.32 mm x 10 µm	CP7565PT	CP-Al2O3/Na2SO4 PT	50 m x 0.32 mm x 5 µm
CP7551PT	PoraPLOT Q PT	25 m x 0.32 mm x 10 µm	CP7568PT	CP-Al2O3/Na2SO4 PT	50 m x 0.53 mm x 10 µm
CP7554PT	PoraPLOT Q PT	25 m x 0.53 mm x 20 µm	19091P-S12PT	HP-PLOT Al2O3 S PT	25 m x 0.32 mm x 8 µm
CP7557PT	PoraPLOT Q-HT PT	25 m x 0.32 mm x 10 µm	19091P-S15PT	HP-PLOT Al2O3 S PT	50 m x 0.32 mm x 8 µm
115-3432PT	GS-Q PT	30 m x 0.53 mm	19095P-S23PT	HP-PLOT Al2O3 S PT	30 m x 0.53 mm x 15 µm
19091P-QO3PT	HP-PLOT Q PT	15 m x 0.32 mm x 20 µm	19095P-S25PT	HP-PLOT Al2O3 S PT	50 m x 0.53 mm x 15 µm
19091P-QO4PT	HP-PLOT Q PT	30 m x 0.32 mm x 20 µm	115-3532PT	GS-Alumina PT	30 m x 0.53 mm
19095P-QO3PT	HP-PLOT Q PT	15 m x 0.53 mm x 40 µm	115-3552PT	GS-Alumina PT	50 m x 0.53 mm
19095P-QO4PT	HP-PLOT Q PT	30 m x 0.53 mm x 40 µm	19095P-M25PT	HP-PLOT Al2O3 M PT	50 m x 0.53 mm x 15 µm
CP7584PT	PoraPLOT U PT	25 m x 0.53 mm x 20 µm	CP7534PT	CP-Molsieve 5A PT	30 m x 0.32 mm x 10 µm
19095P-UO4PT	HP-PLOT U PT	30 m x 0.53 mm x 20 µm	CP7536PT	CP-Molsieve 5A PT	25 m x 0.32 mm x 30 µm
CP7515PT	CP-Al2O3/KCl PT	50 m x 0.32 mm x 5 µm	CP7538PT	CP-Molsieve 5A PT	25 m x 0.53 mm x 50 µm
CP7517PT	CP-Al2O3/KCl PT	25 m x 0.53 mm x 10 µm	CP7539PT	CP-Molsieve 5A PT	50 m x 0.53 mm x 50 µm

*PLOT PT columns have 2.5 m of integrated particle traps on both ends which extend the stated length of the column by 5 meters.

For additional proof chromatograms, or to order now, visit **agilent.com/chem/PLOTPT**

Or find your local Agilent Representative or Agilent Authorized Distributor at **agilent.com/chem/contactus**

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