

- Ideal for GC-MS application
- Exceptionally low column bleed even at 350°C
- Alternative confirmation column for EPA & Pharmaceutical methods
- Stable to 360°C/370°C
- Excellent chromatographic inertness

Replacement for: OV-17, SP-2250, DB-17MS, DB-17ht, Rtx-50, SPB-50, HP-50+ and HP-17

OPERATING TEMPERATURES

Minimum Temp:	20°C
Maximum Cycling Temp:	370°C
Maximum Continuous Temp:	360°C

APPLICATION AREAS

Various EPA methods, ie. 604, 608, 8060, 8081; triazines/herbicides, drug screening, steroids and a variety of pharmaceutical applications.

Figure 1: Horse Racing Drug Standard

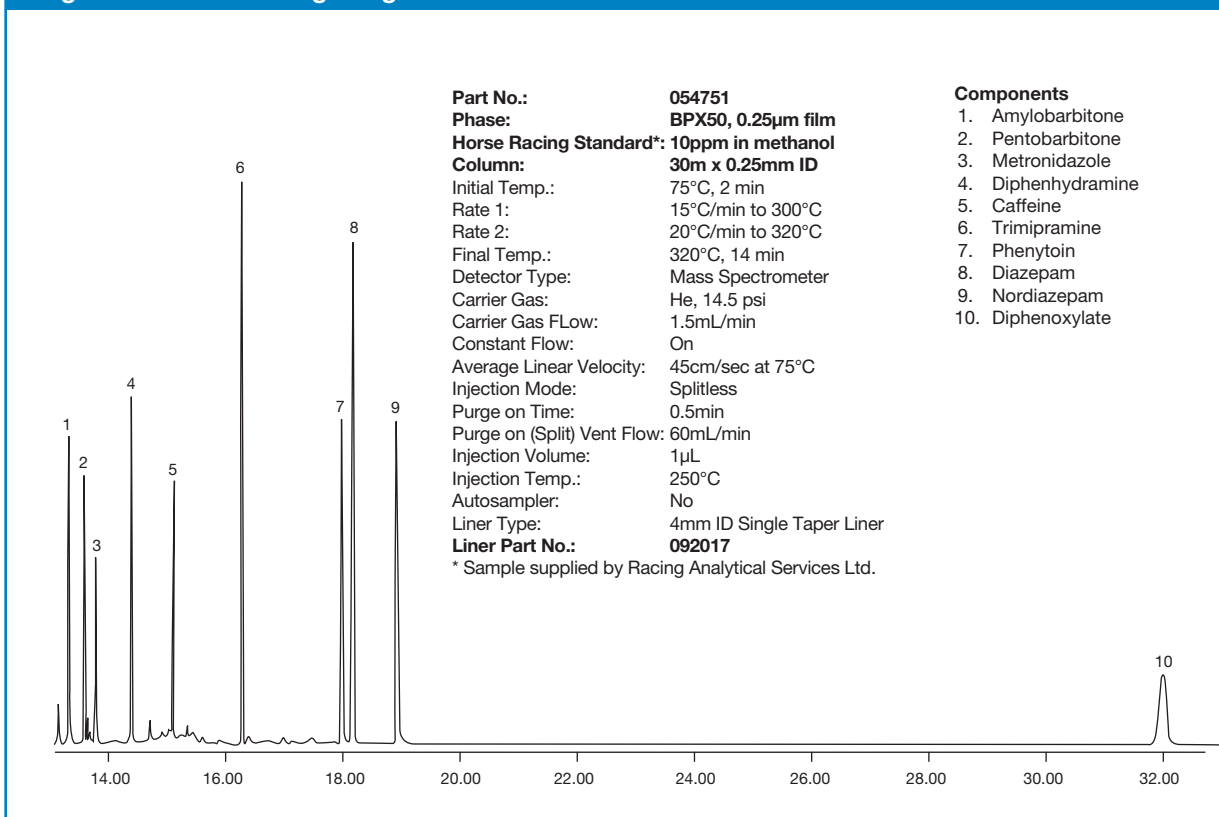
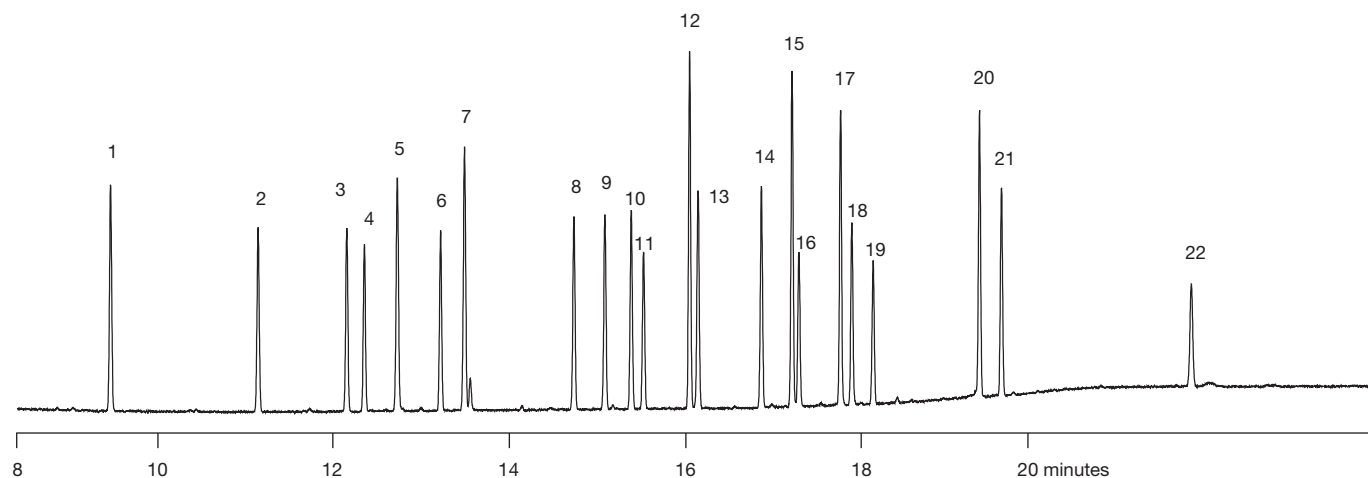


Figure 2. EPA Method 8081 Organochlorine Pesticides



Selectivity

The BPX50 (50% phenyl polysilphenylene-siloxane) column is the ultimate medium polarity column. It offers the lowest bleed levels possible whilst providing excellent chromatographic inertness.

Offering operating temperatures and column bleed levels more typical of the high performance MS grade non-polar 5% phenylpolysiloxane columns, BPX50 is the ideal choice for the confirmation of EPA and pharmaceutical applications. The BPX50 can also be utilised as the primary analytical column for many applications.

Historically, low column bleed and high operating temperatures have been a fundamental problem with 50% phenyl columns, often limiting their use in GC-MS application. BPX50 has overcome these limitations, allowing EPA methods 604, 608, 8060, 8081, triazines/herbicides, drug screening, steroids and a variety of pharmaceutical applications to be routinely analysed.

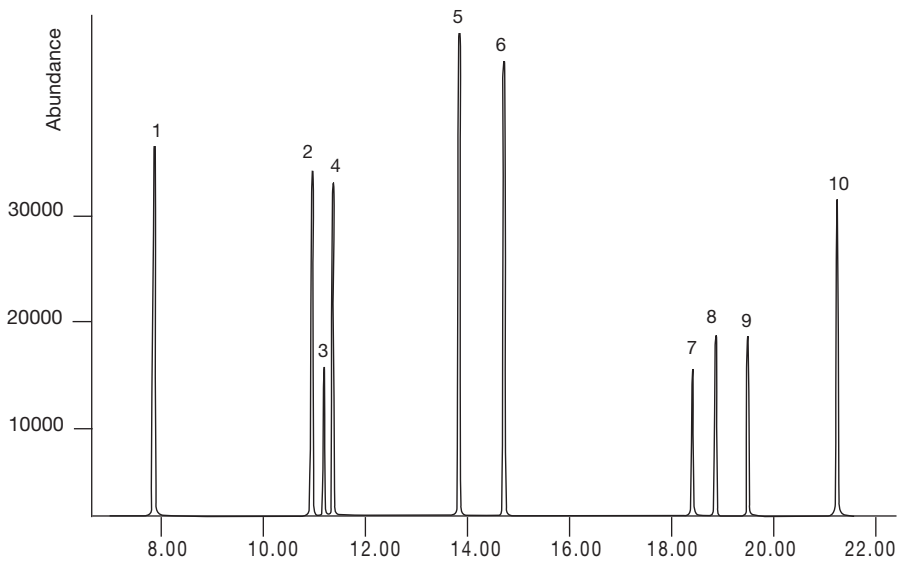
CONDITIONS:

Part No.:	054751
Phase:	BPX50, 0.25 µm
Column:	30m x 0.25mm ID
Injector Temp.:	240°C
Injection Volume:	1µL
Autosampler Syringe:	5µL Fixed Needle (p/n 001810)
Septa:	Auto-Sep T (p/n 041882)
Injection Type:	Splitless
Purge On Time:	0.5min
Purge On (Spill) Vent:	60mL/min
Liner Type:	Single taper (p/n 092017)
Carrier Gas:	Helium
Constant Flow:	On
Pressure:	14.1psi
Column Flow:	1.3mL/min
Linear Velocity:	30cm/sec @ 40°C
Initial Temp.:	40°C for 1min
Rate 1:	30°C/min to 190°C for 3min
Rate 2:	10°C/min to 300°C for 5min
Run Time:	25min
Detector Type:	FID @ 310°C

COMPONENTS:

1. 2,4,5,6-Tetrachloro - meta-xylene (Internal Standard)
2. α-BHC
3. γ-BHC
4. β-BHC
5. δ-BHC
6. Heptachlor
7. Aldrin
8. Heptachlorepoxo
9. γ-Chlordane
10. α-Chlordane
11. Endosulfan A
12. p, p' - DDE
13. Dieldrin
14. Endrin
15. p, p' - DDD
16. Endosulfan B
17. Endrin Aldehyde
18. p, p' - DDT
19. Endosulfan Sulfate
20. Methoxychlor
21. Endrin Ketone
22. Decachlorobiphenyl (Internal Standard)

Figure 3. Analysis of EPA Phenols - 5ng/component



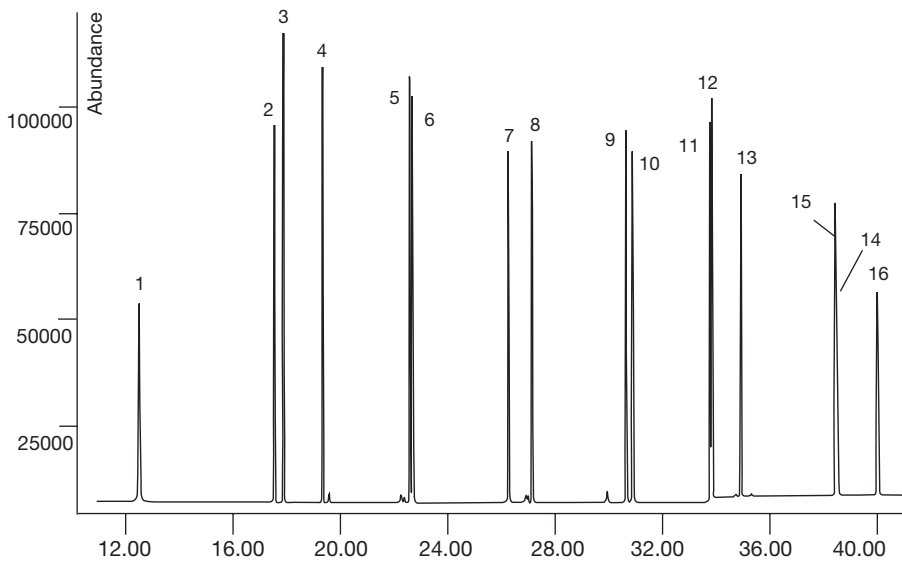
Inertness

Components

- 1 2-Chlorophenol
- 2 2,4-Dimethylphenol
- 3 2-Nitrophenol
- 4 2,4-Dichlorophenol
- 5 4-Chloro-3-methylphenol
- 6 2,4,6 - Trichlorophenol
- 7 2,4-Dinitrophenol
- 8 4-Nitrophenol
- 9 2-Methyl-4,6-dinitrophenol
- 10 Pentachlorophenol

Part No: 054751
Phase: BPX50, 0.25 μ m
Column: 30m x 0.25mm ID
Initial Temp.: 50°C, 1 min
Rate: 8°C/min
Final Temp.: 250°C, 5 min
Inject. Mode: Split, 40:1
Detector: HP5973 MSD

Figure 4. 16 EPA Polynuclear Aromatic Hydrocarbons



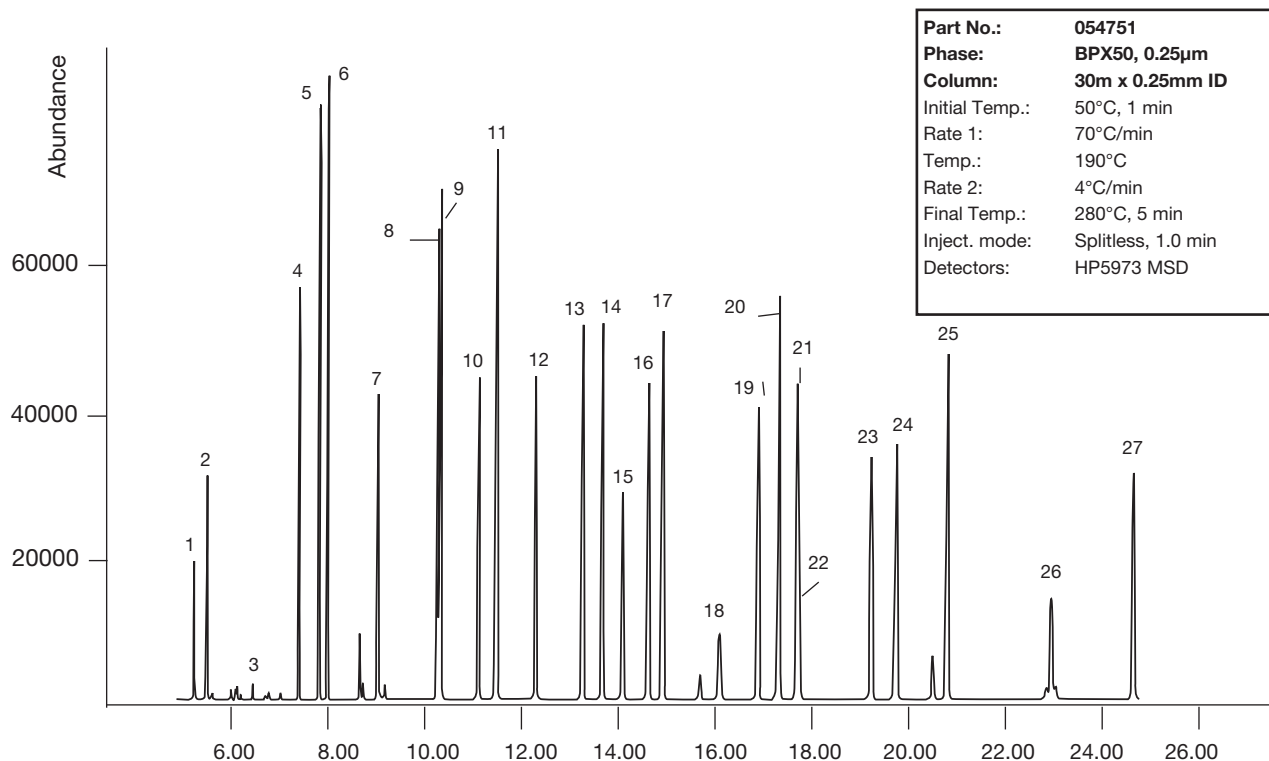
Thermal stability

Components

- 1 Naphthalene
- 2 Acenaphthylene
- 3 Acenaphthene
- 4 Fluorene
- 5 Phenanthrene
- 6 Anthracene
- 7 Pyrene
- 8 Fluoranthene
- 9 Benzo (a) anthracene
- 10 Chrysene
- 11 Benzo (b) Fluoranthene
- 12 Benzo (k) Fluoranthene
- 13 Benzo (a) pyrene
- 14 Indeno (1,2,3-cd) pyrene
- 15 Dibenzo (a,h) anthracene
- 16 Benzo (g,h,i) perylene

Part No.: 054751
Phase: BPX50, 0.25 μ m
Column: 30m x 0.25mm ID
Initial Temp.: 50°C, 1min
Rate: 8°C/min
Final Temp.: 300°C, 10min
Inject. mode: Split, 40:1
Detector: HP 5973 MSD

Figure 5. Analyses of some commonly used Herbicides & Pesticides



Compound Range

Components

1. Methyldymron decom. I	8. Propyzamide	18. Methyldymron
2. Methyldymron decom. II	9. Diazinon	19. Butamifos
3. Trichlorfon (DEP)	10. Simazine (CAT)	20. Flutolanil
4. Etridiazole	11. Terbutcarb (MBPMC)	21. Napropamide
5. Benfluralin	12. Chlorothalonil (TPN)	22. Captan
6. Chloroneb	13. Tolclofos - methyl	23. Isoxathion
7. Pencycuron	14. Chlorpyrifos	24. Isoprothiolane
	15. Fenitrothion (MEP)	25. Mepronil
	16. Pendimethalin	26. Iprodione
	17. Isophenphos	27. Pyridaphenthion

BPX50 CAPILLARY COLUMNS ORDERING INFORMATION

ID (mm)	Film	15 metre	30 metre
0.25	0.25µm	054750	054751
0.32	0.25µm	054760	054761
0.53	0.50µm	054770	054771



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