

Polychlorinated Biphenyls PCB Analysis

- Unique Selectivity Characteristics
- Maximum Operating Temperature of 370°C
- Ideal for ECD & GC/MS systems

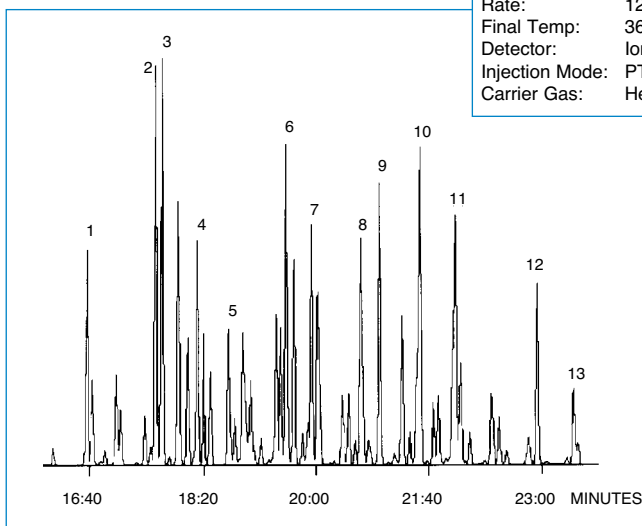
Carborane modified stationary phases have been shown to demonstrate unique selectivity characteristics towards complex mixtures of isomers. SGE has utilized these unique features and added 8% Phenyl to produce a stationary phase (HT8) which is ideally suited

to the analysis of PCBs.

The low bleed nature of the HT8 column also guarantees a low level of detection and compatibility with a variety of detector systems.

PRODUCT DATA

GC/MS Analysis of PCB mixture



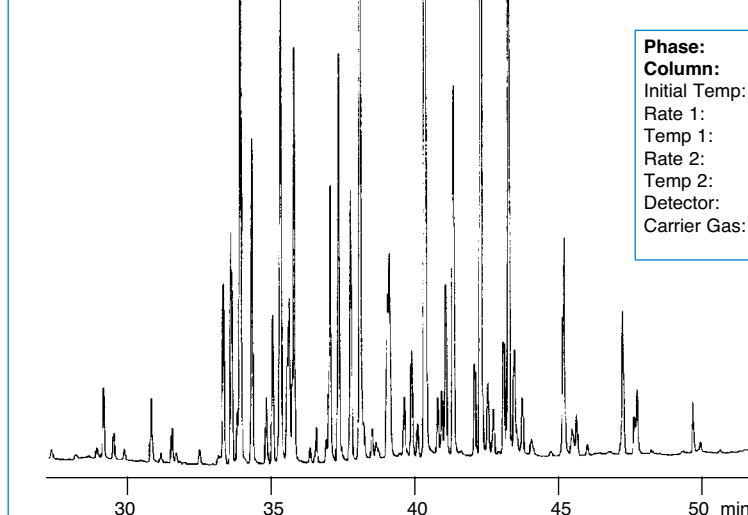
Phase: HT8, 0.25 μ m
Column: 25m x 0.22mm ID
Initial Temp: 60°C, 2min
Rate: 12°C/min
Final Temp: 360°C, 10min
Detector: Ion Trap MS
Injection Mode: PTV
Carrier Gas: He, 15psi

Performance Specifications

HT8 8% Phenyl (Equiv)
 Polycarborane-Siloxane
 Minimum Operating Temp.: -20°C
 Maximum Cycling Temp.: 370°C
 (Polyimide)

1. PCB 18
2. PCB 31
3. PCB 28
4. PCB 52
5. PCB 44
6. PCB 70
7. PCB 101
8. PCB 110
9. PCB 149
10. PCB 153
11. PCB 138
12. PCB 180
13. PCB 170

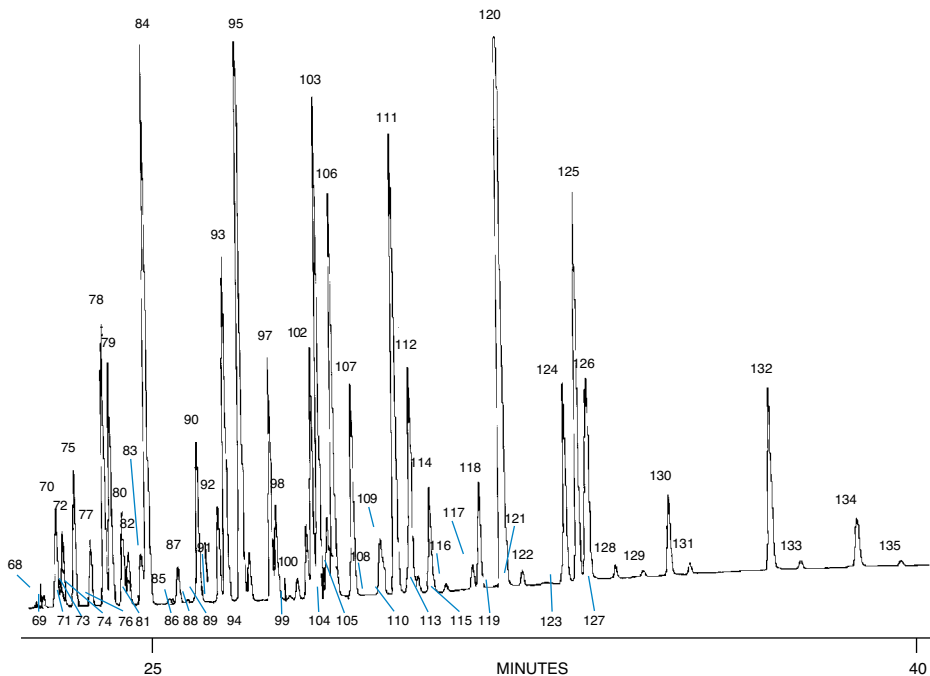
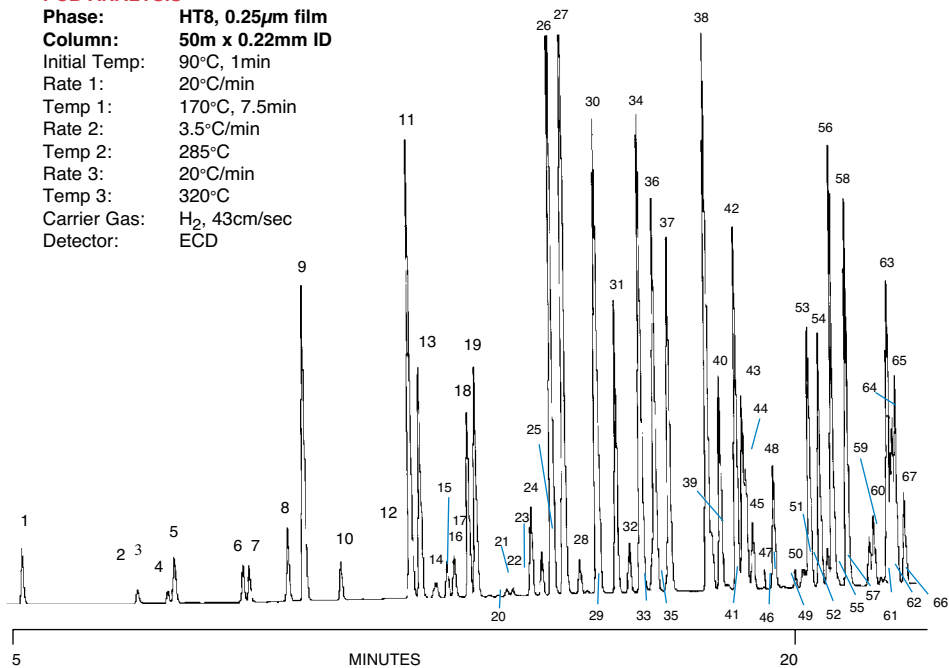
Arocolor 1254



Phase: HT8, 0.25 μ m film
Column: 50m x 0.22mm ID
Initial Temp: 60°C
Rate 1: 40°C/min
Temp 1: 200°C
Rate 2: 3°C/min
Temp 2: 320°C
Detector: ECD
Carrier Gas: He, 40psi

PCB ANALYSIS

Phase: HT8, 0.25µm film
Column: 50m x 0.22mm ID
Initial Temp: 90°C, 1min
Rate 1: 20°C/min
Temp 1: 170°C, 7.5min
Rate 2: 3.5°C/min
Temp 2: 285°C
Rate 3: 20°C/min
Temp 3: 320°C
Carrier Gas: H₂, 43cm/sec
Detector: ECD



Chromatogram courtesy of Environmental Institute, EC Joint Research Center, Ispra, Italy

PCB Congeners	
1. PCB1	69. PCB83
2. PCB2	70. PCB136
3. PCB3	71. PCB86
4. PCB10	72. PCB97
5. PCB4	73. PCB89
6. PCB9	74. PCB115
7. PCB7	75. PCB87
8. PCB6	76. PCB154
9. PCB8/5	77. PCB85
10. PCB19	78. PCB10/81
11. PCB18	79. PCB151
12. PCB11	80. PCB144
13. PCB17	81. PCB147
14. PCB13	82. PCB135
15. PCB24	83. PCB77/82
16. PCB27	84. PCB149
17. PCB15	85. PCB124
18. PCB32	86. PCB143
19. PCB16	87. PCB134/107/131
20. PCB54	88. PCB123
21. PCB23	89. PCB133
22. PCB34	90. PCB118
23. PCB29	91. PCB165
24. PCB26	92. PCB146/114
25. PCB25	93. PCB132/179
26. PCB31	94. PCB122
27. PCB28/53	95. PCB153
28. PCB51	96. PCB176
29. PCB21	97. PCB141
30. PCB33/45/20	98. PCB105
31. PCB22	99. PCB137
32. PCB46	100. PCB130
33. PCB36	101. PCB178
34. PCB52/69	102. PCB163
35. PCB43	103. PCB138
36. PCB49	104. PCB160
37. PCB47/48/75	105. PCB158/175
38. PCB44	106. PCB187/182
39. PCB59	107. PCB183/129
40. PCB42	108. PCB126
41. PCB35	109. PCB185
42. PCB64	110. PCB159/202
43. PCB71/103	111. PCB174/128
44. PCB41	112. PCB177/201
45. PCB37	113. PCB167
46. PCB68	114. PCB171
47. PCB100	115. PCB197
48. PCB40	116. PCB173
49. PCB57	117. PCB200
50. PCB67	118. PCB156/172
51. PCB63	119. PCB157
52. PCB102	120. PCB180
53. PCB95	121. PCB193
54. PCB74	122. PCB191
55. PCB121/155/91	123. PCB198
56. PCB70	124. PCB199
57. PCB80	125. PCB170
58. PCB66	126. PCB190/196/203
59. PCB96/55	127. PCB169
60. PCB84/92	128. PCB208
61. PCB125	129. PCB207
62. PCB90	130. PCB195
63. PCB101	131. PCB189
64. PCB60	132. PCB194
65. PCB56	133. PCB205
66. PCB152	134. PCB206
67. PCB99	135. PCB209
68. PCB119	

Part No. 054676

Ordering Information for HT8 8% Phenyl (equiv.) Polycarborane-siloxane

ID mm	FILM (d _f) microns	12 METRE Part No.	Description	25 METRE Part No.	Description	50 METRE Part No.	Description
0.22	0.25	054674	12QC2/HT8-0.25	054675	25QC2/HT8-0.25	054676	50QC2/HT8-0.25
0.32	0.25	054679	12QC3/HT8-0.25	054680	25QC3/HT8-0.25	-	-
0.53	0.50	054684	12QC5/HT8-0.5	054685	25QC5/HT8-0.5	-	-

"Manufactured under licence from Hewlett-Packard Company (US Patent 4,293 and counterpart patents)"



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