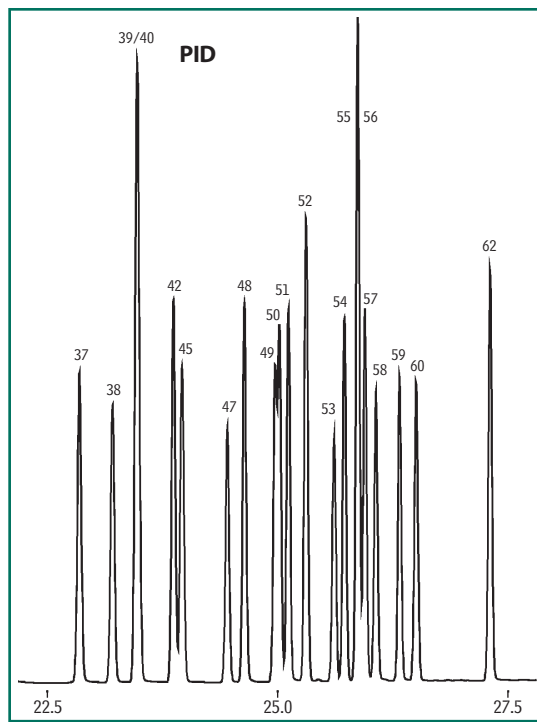


Volatile Organics
US EPA Method 8021
Rtx®-VRX

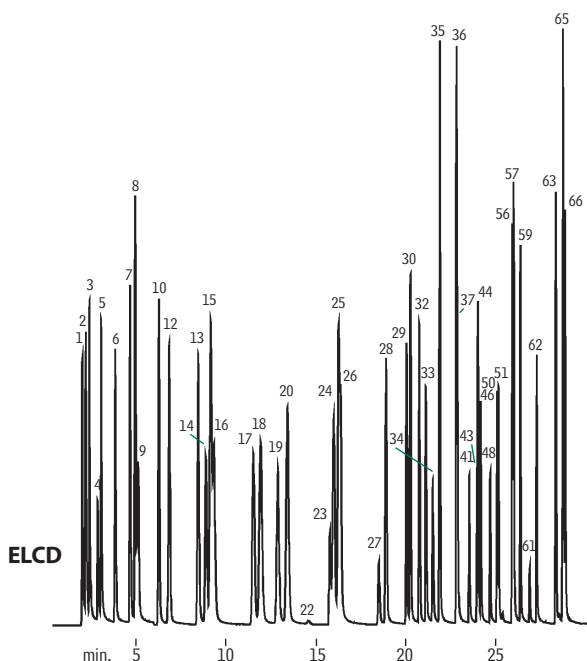
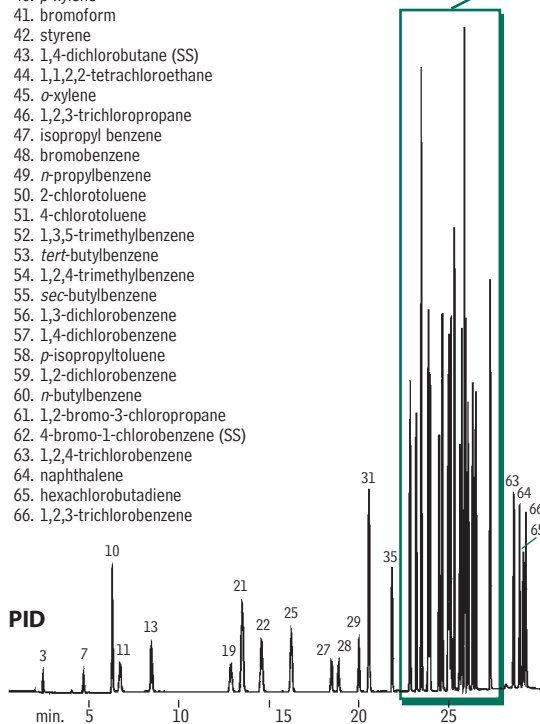
• Good choice for waste water analysis.

1. dichlorodifluoromethane
2. chloromethane
3. vinyl chloride
4. bromomethane
5. chloroethane
6. trichlorofluoromethane
7. 1,1-dichloroethene
8. methylene chloride
9. Freon®113
10. *trans*-1,2-dichloroethene
11. methyl *tert*-butyl ether
12. 1,1-dichloroethane
13. *cis*-1,2-dichloroethene
14. bromochloromethane
15. chloroform
16. 2,2-dichloropropane
17. 1,2-dichloroethane
18. 1,1,1-trichloroethane
19. 1,1-dichloropropene
20. carbon tetrachloride
21. benzene
22. fluorobenzene (SS)
23. dibromomethane
24. 1,2-dichloropropane
25. trichloroethene
26. bromodichloromethane
27. 2-chloroethyl vinyl ether
28. *cis*-1,3-dichloropropene
29. *trans*-1,3-dichloropropene
30. 1,1,2-trichloroethane
31. toluene
32. 1,3-dichloropropane
33. dibromochloromethane
34. 1,2-dibromoethane
35. tetrachloroethene
36. 1,1,1,2-tetrachloroethane
37. chlorobenzene
38. ethyl benzene
39. *m*-xylene
40. *p*-xylene
41. bromoform
42. styrene
43. 1,4-dichlorobutane (SS)
44. 1,1,2,2-tetrachloroethane
45. *o*-xylene
46. 1,2,3-trichloropropane
47. isopropyl benzene
48. bromobenzene
49. *n*-propylbenzene
50. 2-chlorotoluene
51. 4-chlorotoluene
52. 1,3,5-trimethylbenzene
53. *tert*-butylbenzene
54. 1,2,4-trimethylbenzene
55. *sec*-butylbenzene
56. 1,3-dichlorobenzene
57. 1,4-dichlorobenzene
58. *p*-isopropyltoluene
59. 1,2-dichlorobenzene
60. *n*-butylbenzene
61. 1,2-bromo-3-chloropropane
62. 4-bromo-1-chlorobenzene (SS)
63. 1,2,4-trichlorobenzene
64. naphthalene
65. hexachlorobutadiene
66. 1,2,3-trichlorobenzene

75m, 0.45mm ID, 2.55µm Rtx®-VRX (cat.# 19309)
 Conc.: 20ppb in 5mL of RO water (see below)
 Concentrator: Tekmar LSC-3000 Purge and Trap
 Trap: Vocabr 3000
 Purge: 11 min. @ 40mL/min.
 Dry purge: 1 min. @ 40mL/min. (MCS by-passed with Silcosteel® tubing)
 Desorb preheat: 245°C
 Desorb: 250°C for 2 min.
 Bake: 260°C for 8 min.
 Interface: direct
 Transfer line: 0.32mm ID Siltek® tubing
 GC: Finnigan 9001
 GC program: 35°C (hold 12 min.) to 60°C @ 5°C/min. (hold 1 min.) to 220°C @ 17°C/min. (hold 3 min.)
 Carrier gas: helium 9mL/min.
 Detectors: µGold Tandem PID/HALL 2000
 PID: makeup 7mL/min., purge 7mL/min, set @ 0.35mV base temp. 200°C.
 ELCD Hall 2000: RxnGas 25mL/min., RxnTemp.: 940°C, propanol flow 470µL/min.



| Reference Standard | cat.# |
|----------------------------------|--------|
| 502.2 Cal2000 MegaMix™ | 30431 |
| 502.2 Calibration Mix#1A | 30439 |
| 4-bromochlorobenzene | 30230 |
| 2-chloroethyl vinyl ether | 30265 |
| 1,4-dichlorobutane | 30227 |
| fluorobenzene | 30030 |
| methyl- <i>tert</i> -butyl-ether | 30402 |
| Freon® 113 | custom |



GC_EV00001

Acknowledgement: Finnigan 9001 GC, µGold Tandem Photoionization/HALL® 2000 Electrolytic Conductivity Detector provided courtesy of Thermo Finnigan GC & GC/MS Division, 2215 Grand Avenue Pkwy, Austin, Texas 78728