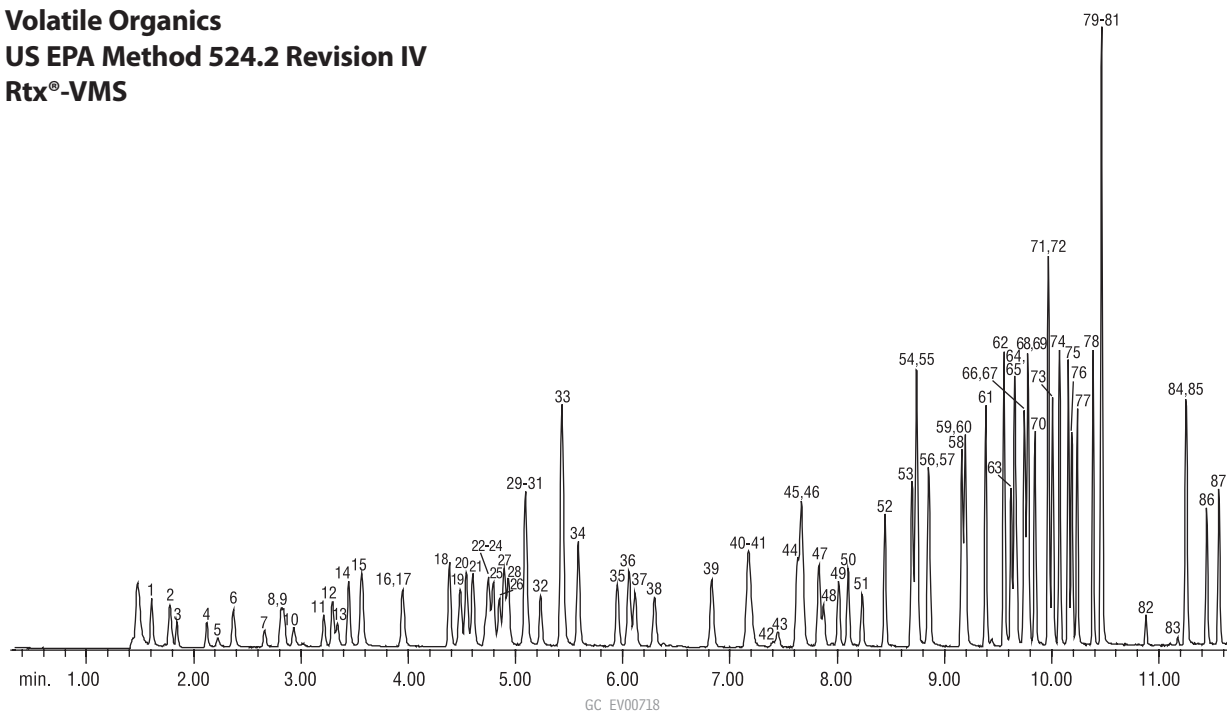


Volatile Organics

US EPA Method 524.2 Revision IV

Rtx®-VMS



GC_EV00718

Purge and Trap Conditions:

Concentrator: Tekmar LSC-3100 purge and trap
 Trap: Vocarb 3000 (type K)
 Purge: 11 min. @ 40mL/min. @ ambient temperature.
 Dry purge: 1 min. @ 40mL/min. (MCS bypassed using Silcosteel® tubing)
 Desorb preheat: 245°C
 Desorb: 250°C for 2 min., flow 33mL/min.
 Bake: 260°C for 8 min.
 Interface: Silcosteel® transfer line
 1:30 split at injection port. 1mm ID split inlet liner
 (cat.# 20972)

Column: Rtx®-VMS, 30m, 0.25mm ID, 1.4µm (cat.# 19915)
 Sample: 502.2 Calibration Mix #1 (cat.# 30042)
 Drinking Water VOA MegaMix®, 524.2 Rev 4 (cat.# 30601)
 524 Internal Standard/Surrogate Mix (cat.# 30201)
 Ketone Mix, EPA Method 524.2 Rev 4.1 (cat.# 30602)
 Compounds at 20 ppb each in 5mL RO water
 (ketones at 50ppb; internal standards at 40ppb)
 Inj. temp.: 250°C
 Carrier gas: helium, constant flow
 Flow rate: 1.1mL/min.
 Dead time: 1.48 min. @ 40°C
 Oven temp.: 40°C (hold 2 min.) to 85°C @ 14°C/min. (hold 2 min.) to
 220°C @ 30°C/min. (hold 4 min.).
 Det: Agilent 5971A GC/MS
 Transfer line temp.: 280°C
 Scan range: 35-300amu
 Tune: PFTBA/BFB
 Ionization: EI

- | | | | | |
|--------------------------------------|---------------------------|---------------------------------------|-----------------------------------------|---------------------------------|
| 1. dichlorodifluoromethane | 19. 2,2-dichloropropane | 37. bromodichloromethane | 55. 1,1,1,2-tetrachloroethane | 73. 1,2,4-trimethylbenzene |
| 2. chloromethane | 20. bromochloromethane | 38. methyl methacrylate | 56. <i>m</i> -xylene | 74. <i>sec</i> -butylbenzene |
| 3. vinyl chloride | 21. chloroform | 39. <i>cis</i> -1,3-dichloropropene | 57. <i>p</i> -xylene | 75. <i>p</i> -isopropyltoluene |
| 4. bromomethane | 22. methyl acrylate | 40. toluene | 58. <i>o</i> -xylene | 76. 1,3-dichlorobenzene |
| 5. chloroethane | 23. carbon tetrachloride | 41. chloroacetonitrile | 59. styrene | 77. 1,4-dichlorobenzene |
| 6. trichlorofluoromethane | 24. tetrahydrofuran | 42. 2-nitropropane | 60. bromoform | 78. <i>n</i> -butylbenzene |
| 7. diethyl ether | 25. 1,1,1-trichloroethane | 43. 1,1-dichloropropanone | 61. isopropylbenzene | 79. hexachloroethane |
| 8. 1,1-dichloroethene | 26. 2-butanone | 44. 4-methyl-2-pentanone | 62. 4-bromofluorobenzene | 80. 1,2-dichlorobenzene-d4 |
| 9. carbon disulfide | 27. 1,1-dichloropropene | 45. tetrachloroethene | 63. bromobenzene | 81. 1,2-dichlorobenzene |
| 10. iodomethane | 28. 1-chlorobutane | 46. <i>trans</i> -1,3-dichloropropene | 64. <i>n</i> -propylbenzene | 82. 1,2-dibromo-3-chloropropane |
| 11. allyl chloride | 29. propionitrile | 47. 1,1,2-trichloroethane | 65. 1,1,2,2-tetrachloroethane | 83. nitrobenzene |
| 12. methylene chloride | 30. methacrylonitrile | 48. ethyl methacrylate | 66. 2-chlorotoluene | 84. hexachlorobutadiene |
| 13. acetone | 31. benzene | 49. dibromochloromethane | 67. 1,2,3-trichloropropane | 85. 1,2,4-trichlorobenzene |
| 14. <i>trans</i> -1,2-dichloroethene | 32. 1,2-dichloroethane | 50. 1,3-dichloropropane | 68. 1,3,5-trimethylbenzene | 86. naphthalene |
| 15. methyl <i>tert</i> -butyl ether | 33. fluorobenzene | 51. 1,2-dibromoethane | 69. <i>trans</i> -1,4-dichloro-2-butene | 87. 1,2,3-trichlorobenzene |
| 16. 1,1-dichloroethane | 34. trichloroethene | 52. 2-hexanone | 70. 4-chlorotoluene | |
| 17. acrylonitrile | 35. dibromomethane | 53. chlorobenzene | 71. <i>tert</i> -butylbenzene | |
| 18. <i>cis</i> -1,2-dichloroethene | 36. 1,2-dichloropropane | 54. ethylbenzene | 72. pentachloroethane | |

*Peaks 42 & 43 share an ion (43).

Chromatogram Search Tool

Search by compound name, synonym,
 CAS # or keyword

www.restek.com/chromatograms

