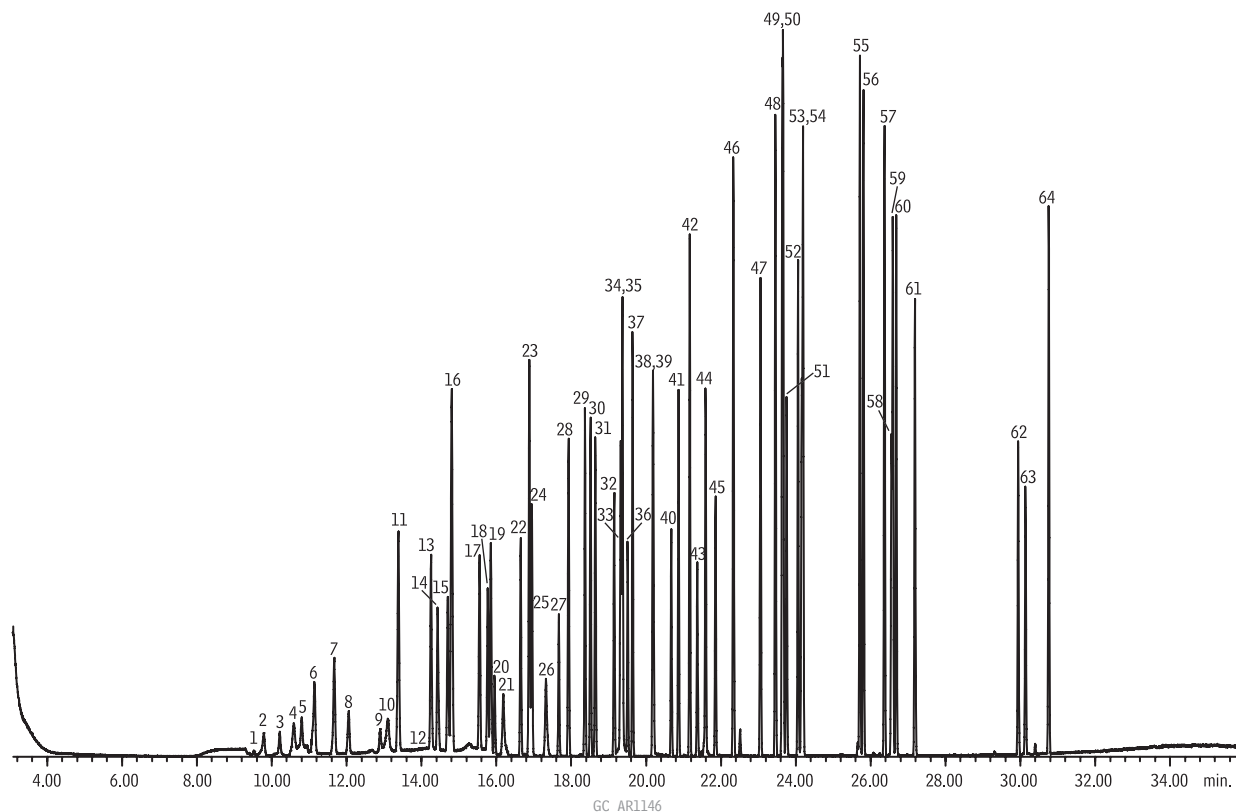


US EPA TO-15 Compounds on Rxi®-1ms



Peaks	RT (min.)	Peaks	RT (min.)	Peaks	RT (min.)
1. Propylene	9.521	22. <i>cis</i> -1,2-Dichloroethene	16.651	44. Dibromochloromethane	21.590
2. Freon®-12 (dichlorodifluoromethane)	9.781	23. Hexane	16.883	45. Ethylene dibromide (1,2-Dibromoethane)	21.856
3. Chloromethane	10.216	24. Ethyl acetate	16.898	46. Tetrachloroethene	22.333
4. Freon®-114 (dichlorotetrafluoroethane)	10.589	25. Chloroform	16.947	47. Chlorobenzene	23.055
5. Vinyl chloride	10.797	26. Tetrahydrofuran	17.330	48. Ethylbenzene	23.456
6. 1,3-Butadiene	11.139	27. 1,2-Dichloroethane	17.666	49. <i>p</i> -Xylene	23.660
7. Bromomethane	11.672	28. 1,1,1-Trichloroethane	17.929	50. <i>m</i> -Xylene	23.660
8. Chloroethane	12.057	29. Benzene	18.366	51. Bromoform	23.752
9. Acrolein (2-propenal)	12.901	30. Carbon tetrachloride	18.516	52. Styrene	24.061
10. Acetone	13.100	31. Cyclohexane	18.645	53. 1,1,2,2-Tetrachloroethane	24.162
11. Freon®-11 (trichlorofluoromethane)	13.384	32. 1,2-Dichloropropane	19.149	54. <i>o</i> -Xylene	24.193
12. 2-Propanol (Isopropanol)	14.097	33. Bromodichloromethane	19.324	55. 4-Ethyltoluene	25.713
13. 1,1-Dichloroethene	14.256	34. Trichloroethene	19.370	56. 1,3,5-Trimethylbenzene	25.807
14. Methylene chloride	14.433	35. 1,4-Dioxane	19.415	57. 1,2,4-Trimethylbenzene	26.370
15. Carbon disulfide	14.699	36. Methyl methacrylate	19.507	58. Benzyl chloride	26.554
16. Freon®-113 (1,1,2-trichloro-1,2,2-trifluoroethane)	14.806	37. Heptane	19.639	59. 1,3-Dichlorobenzene	26.593
17. <i>trans</i> -1,2-Dichloroethene	15.550	38. <i>cis</i> -1,3-Dichloropropene	20.183	60. 1,4-Dichlorobenzene	26.685
18. 1,1-Dichloroethane	15.770	39. 4-Methyl-2-pentanone (MIBK)	20.226	61. 1,2-Dichlorobenzene	27.184
19. Methyl <i>tert</i> -butyl ether (MTBE)	15.852	40. <i>trans</i> -1,3-Dichloropropene	20.675	62. 1,2,4-Trichlorobenzene	29.942
20. Vinyl acetate	15.953	41. 1,1,2-Trichloroethane	20.868	63. Naphthalene	30.135
21. 2-Butanone (MEK)	16.189	42. Toluene	21.168	64. Hexachloro-1,3-butadiene	30.759
		43. 2-Hexanone (MBK)	21.370		

Column Rxi®-1ms, 60 m, 0.25 mm ID, 1.00 µm (cat.# 13356)
Sample TO-15 65 Component Mix (cat.# 34436)
Diluent: Nitrogen
Conc.: 10 ppbv, 300 mL sample
Injection
Liner: 0.75 mm Straight/SPME Liner (cat.# 21110)
Inj. Temp.: 200 °C
Oven
Oven Temp: -50 °C (hold 2.00 min.) to 210 °C at 9.00 °C/min. (hold 5.00 min.)
Carrier Gas He, constant flow
Flow Rate: 1.2 mL/min.
Linear Velocity: 27 cm/sec.
Detector MS
Mode: Scan
Transfer Line Temp.: 280 °C

Analyzer Type: Quadrupole
Source Temp.: 230 °C
Quad Temp.: 150 °C
Electron Energy: 1258.8 eV
Solvent Delay Time: 3 min.
Tune Type: PFTBA
Ionization Mode: EI
Scan Range: 29 - 280 amu
Scan Rate: 5.45 scans/sec.
Preconcentrator Nutech 8900DS
Trap 1 Settings
Type/Sorbent : Nickel Tube
Cooling temp: -160 °C
Preheat temp: 20 °C
Preheat time: 5 sec
Desorb temp: 20 °C
Desorb flow: 80 mL/min
Desorb time: 240 sec

Bakeout temp: 180 °C
Flush flow: 100 mL/min
Flush time: 10 sec
Sweep flow: 0 mL/min
Sweep time: 0 sec
Trap 2 Settings
Type/Sorbent: Tenax
Cooling temp: -20 °C
Desorb temp: 200 °C
Desorb time: 180 sec
Bakeout temp: 220 °C
Bakeout time: 240 sec
Cryofocuser
Cooling temp: 200 °C
Desorb temp: 200 °C
Inject time: 60 sec
Instrument HP6890 GC & 5973 MSD