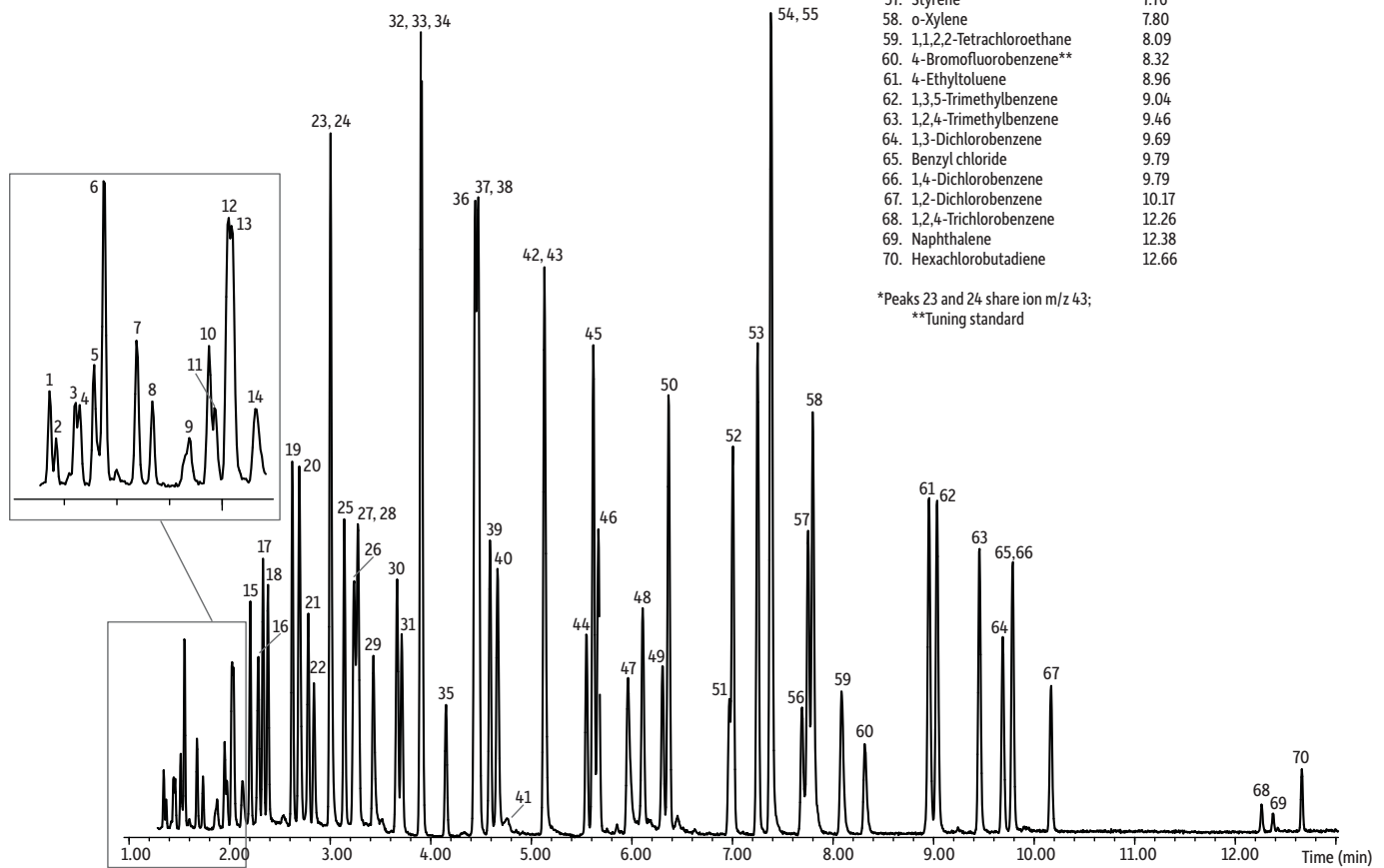


# TO-15 65 Component Mix on Rxi®-5ms (30 m)

Peaks	t <sub>r</sub> (min)	Peaks	t <sub>r</sub> (min)	Peaks	t <sub>r</sub> (min)
1. Propylene	1.35	19. <i>trans</i> -1,2-Dichloroethene	2.63	37. 1,2-Dichloropropane	4.46
2. Dichlorodifluoromethane (Freon® 12)	1.37	20. Methyl <i>tert</i> -butyl ether (MTBE)	2.70	38. Trichloroethylene	4.48
3. Chloromethane	1.44	21. 1,1-Dichloroethane	2.78	39. Bromodichloromethane	4.59
4. 1,2-Dichlorotetrafluoroethane (Freon® 114)	1.46	22. Vinyl acetate	2.84	40. Methyl methacrylate	4.67
5. Vinyl chloride	1.51	23. 2-Butanone (MEK)*	3.01	41. 1,4-Dioxane	4.75
6. 1,3-Butadiene	1.55	24. Hexane*	3.01	42. 4-Methyl-2-pentanone (MIBK)	5.13
7. Bromomethane	1.68	25. <i>cis</i> -1,2-Dichloroethene	3.14	43. <i>cis</i> -1,3-Dichloropropene	5.13
8. Chloroethane	1.74	26. Ethyl acetate	3.24	44. <i>trans</i> -1,3-Dichloropropene	5.55
9. Ethanol	1.86	27. Bromochloromethane (IS)	3.27	45. Toluene	5.62
10. Trichlorofluoromethane (Freon® 11)	1.95	28. Chloroform	3.28	46. 1,1,2-Trichloroethane	5.67
11. Acrolein	1.98	29. Tetrahydrofuran	3.43	47. 2-Hexanone (MBK)	5.96
12. Acetone	2.03	30. 1,1,1-Trichloroethane	3.67	48. Dibromochloromethane	6.11
13. Acetonitrile (contaminant)	2.04	31. 1,2-Dichloroethane	3.71	49. 1,2-Dibromoethane	6.31
14. Isopropyl alcohol	2.13	32. Benzene	3.90	50. Tetrachloroethene	6.37
15. 1,1-Dichloroethene	2.21	33. Carbon tetrachloride	3.90	51. Chlorobenzene- <i>d</i> 5 (IS)	6.97
16. 1,1,2-Trichlorotrifluoroethane (Freon® 113)	2.29	34. Cyclohexane	3.91	52. Chlorobenzene	7.01
17. Methylene chloride	2.33	35. 1,4-Difluorobenzene (IS)	4.15	53. Ethylbenzene	7.25
18. Carbon disulfide	2.38	36. Heptane	4.44	54. <i>m</i> -Xylene	7.39
				55. <i>p</i> -Xylene	7.39
				56. Bromoform	7.69
				57. Styrene	7.76
				58. <i>o</i> -Xylene	7.80
				59. 1,1,2,2-Tetrachloroethane	8.09
				60. 4-Bromofluorobenzene**	8.32
				61. 4-Ethyltoluene	8.96
				62. 1,3,5-Trimethylbenzene	9.04
				63. 1,2,4-Trimethylbenzene	9.46
				64. 1,3-Dichlorobenzene	9.69
				65. Benzyl chloride	9.79
				66. 1,4-Dichlorobenzene	9.79
				67. 1,2-Dichlorobenzene	10.17
				68. 1,2,4-Trichlorobenzene	12.26
				69. Naphthalene	12.38
				70. Hexachlorobutadiene	12.66



\*Peaks 23 and 24 share ion m/z 43;  
\*\*Tuning standard

<b>Column</b>	Rxi®-5ms, 30 m, 0.32 mm ID, 1.00 µm (cat.# 13454)	<b>Solvent Delay</b>	Time: 1.0 min	<b>Cooling temp:</b>	-35 °C
<b>Sample</b>	TO-15 65 component mix (cat.# 34436) TO-14A internal standard/tuning mix (cat.# 34408)	<b>Time:</b>	1.0 min	<b>Desorb temp:</b>	190 °C
<b>Diluent:</b>	Nitrogen	<b>Tune Type:</b>	BFB	<b>Desorb time:</b>	30 sec
<b>Conc.:</b>	10.0 ppbv 200 cc injection	<b>Ionization Mode:</b>	EI	<b>Bakeout temp:</b>	200 °C
<b>Injection Oven</b>	Direct	<b>Scan Range:</b>	35-250 amu	<b>Bakeout time:</b>	10 sec
<b>Oven Temp:</b>	32 °C (hold 1 min) to 150 °C at 11 °C/min to 230 °C at 33 °C/min	<b>Scan Rate:</b>	3.32 scans/sec	<b>Cryofocuser</b>	
<b>Carrier Gas</b>	He, constant flow	<b>Preconcentrator</b>	Nutech 8900DS	<b>Cooling temp:</b>	-160 °C
<b>Flow Rate:</b>	2.0 mL/min	<b>Trap 1 Settings</b>		<b>Inject time:</b>	140 sec
<b>Linear Velocity:</b>	51 cm/sec @ 32 °C	<b>Type/Sorbent :</b>	Glass beads	<b>Internal Standard</b>	
<b>Detector</b>	MS	<b>Cooling temp:</b>	-155 °C	<b>Purge flow:</b>	100 mL/min
<b>Mode:</b>	Scan	<b>Preheat temp:</b>	5 °C	<b>Purge time:</b>	6 sec
<b>Transfer Line</b>		<b>Preheat time:</b>	0 sec	<b>Vol.:</b>	20 mL
<b>Temp.:</b>	230 °C	<b>Desorb temp:</b>	20 °C	<b>ISTD flow:</b>	100 mL/min
<b>Analyzer Type:</b>	Quadrupole	<b>Desorb flow:</b>	5 mL/min	<b>Standard</b>	
<b>Source Temp.:</b>	230 °C	<b>Desorb time:</b>	360 sec	<b>Size:</b>	200 mL
<b>Quad Temp.:</b>	150 °C	<b>Bakeout temp:</b>	200 °C	<b>Purge flow:</b>	100 mL/min
<b>Electron Energy:</b>	69.9 eV	<b>Flush flow:</b>	120 mL/min	<b>Purge time:</b>	6 sec
		<b>Flush time:</b>	60 sec	<b>Sample flow:</b>	100 mL/min
		<b>Sweep flow:</b>	120 mL/min	<b>Instrument</b>	HP6890 GC & 5973 MSD
		<b>Sweep time:</b>	60 sec	<b>Acknowledgement</b>	Nutech
		<b>Trap 2 Settings</b>			
		<b>Type/Sorbent:</b>	Tenax®		