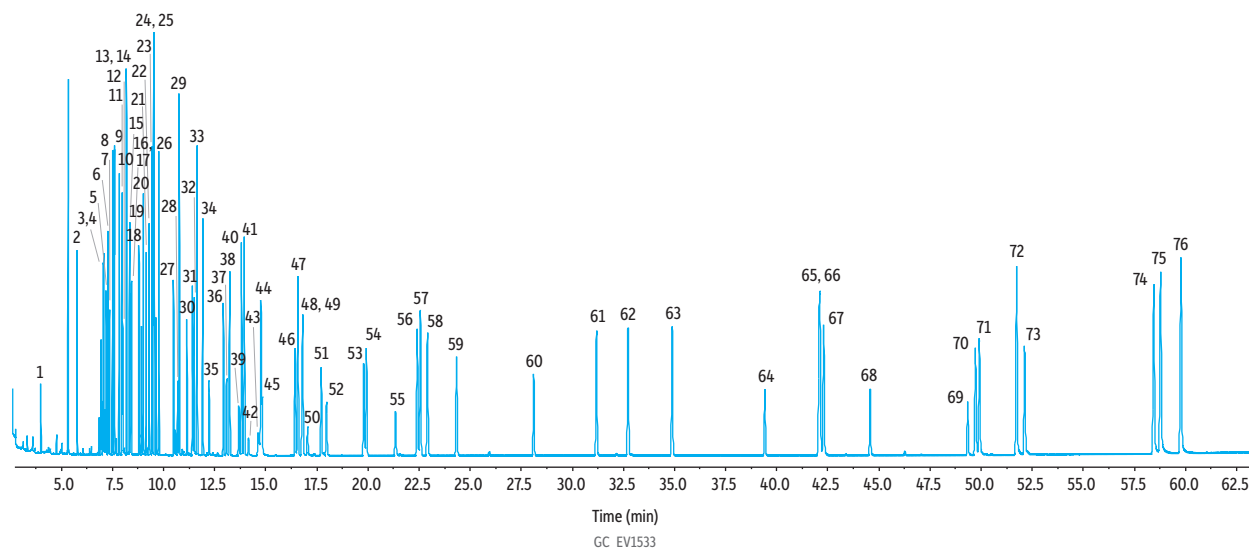


# HJ 834-2017 Volatiles and Semivolatiles on RMX-5Sil MS (Method Conditions)



Peaks	tR (min)	Peaks	tR (min)	Peaks	tR (min)
1. Bis(N-methoxy-N-methylamino)methane	3.989	26. p-Chloroaniline	9.630	51. Azobenzene	17.714
2. Phenol, 2-fluoro-	5.769	27. 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	9.767	52. Phenol, 2,4,6-tribromo-	17.972
3. Phenol-d6-	7.057	28. Phenol, 2-chloro-5-methyl-	10.486	53. Benzene, 1-bromo-4-phenoxy-	19.798
4. Phenol	7.069	29. Naphthalene, 1-methyl-	10.766	54. Benzene, hexachloro-	19.924
5. Bis(2-chloroethyl) ether	7.194	30. Hexachlorocyclopentadiene	11.140	55. Phenol, pentachloro-	21.347
6. Phenol, 2-chloro-	7.269	31. Phenol, 2,4,6-trichloro-	11.412	56. Phenanthrene-D10	22.411
7. Benzene, 1,3-dichloro-	7.496	32. Phenol, 2,4,5-trichloro-	11.486	57. 9H-Fluorene, 9-methylene-	22.561
8. 1,4-Dichlorobenzene-D4	7.579	33. 1,1'-Biphenyl, 2-fluoro-	11.640	58. Anthracene	22.911
9. Benzene, 1,4-dichloro-	7.602	34. Naphthalene, 1-chloro-	11.915	59. Carbazole	24.334
10. Benzene, 1,2-dichloro-	7.825	35. Dimethyl (2-nitroanilino)maleate	12.221	60. Dibutyl phthalate	28.107
11. Phenol, 2-methyl-	7.956	36. Dimethyl phthalate	12.926	61. Fluoranthene	31.814
12. Bis(2-chloro-1-methylethyl) ether	7.995	37. Benzene, 2-methyl-1,3-dinitro-	13.078	62. Pyrene	32.727
13. 1-Propanamine, N-nitroso-N-propyl-	8.183	38. Biphenylene	13.231	63. p-Terphenyl-d14	34.881
14. p-Cresol	8.183	39. m-Nitroaniline	13.680	64. Benzyl butyl phthalate	39.418
15. Ethane, hexachloro-	8.336	40. Acenaphthene-d10	13.813	65. Benz[a]anthracene	42.103
16. Nitrobenzene-D5	8.393	41. Acenaphthene	13.947	66. Chrysene-D12	42.103
17. Benzene, nitro-	8.421	42. Phenol, 2,4-dinitro-	14.149	67. Chrysene	42.298
18. Isophorone	8.795	43. Phenol, 4-nitro-	14.626	68. Bis(2-ethylhexyl) phthalate	44.571
19. Phenol, 2-nitro-	8.915	44. Dibenzofuran	14.763	69. Phthalic acid, hept-4-yl octyl ester	49.346
20. Phenol, 2,3-dimethyl-	9.002	45. Benzene, 1-methyl-2,4-dinitro-	14.820	70. Benzo[b]fluoranthene	49.728
21. Methane, bis(2-chloroethoxy)-	9.146	46. Diethyl phthalate	16.434	71. Benzo[k]fluoranthene	49.915
22. Phenol, 2,4-dichloro-	9.290	47. Fluorene	16.576	72. Benzo[a]pyrene	51.738
23. Benzene, 1,2,4-trichloro-	9.427	48. Benzene, 1-chloro-4-phenoxy-	16.802	73. Perylene - D12	52.132
24. Naphthalene-D8	9.508	49. Benzene, 1-chloro-3-phenoxy-	16.802	74. Indeno[1,2,3-cd]pyrene	58.454
25. Naphthalene	9.540	50. Phenol, 2-methyl, 4,6-dinitro-	17.043	75. Diben[a,h]anthracene	58.786
				76. Benzo[ghi]perylene	59.786

**Column** RMX-5Sil MS, 30 m, 0.25 mm ID, 0.25 µm (cat.# 17323)  
**Standard/Sample** 1000 ppm HJ 834-2017 VOC and SVOCs mixture 155 (LGC)  
 1000 ppm HJ 834-2017 substitutes mixture 156 (LGC)  
 1000 ppm HJ 834-2017 internal standard mixture 174 (internal standard)  
**Diluent:** Dichloromethane  
**Conc.:** 5 µg/mL  
**Injection**  
**Inj. Vol.:** 1 µL splitless (hold 1 min)  
**Liner:** Topaz 4.0 mm ID single taper inlet liner w/wool (cat.# 23303)  
**Inj. Temp.:** 280 °C  
**Oven**  
**Oven Temp.:** 35 °C (hold 2 min) to 150 °C at 15 °C/min (hold 5 min) to 290 °C at 3 °C/min (hold 2 min)  
**Carrier Gas** He, constant flow  
**Flow Rate:** 1 mL/min @ 35 °C  
**Detector** MS  
**Mode:** Scan  
**Scan Program:**

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	2.5	35-450	

**Transfer Line Temp.:** 280 °C  
**Source Temp.:** 230 °C  
**Quad Temp.:** 150 °C  
**Electron Energy:** 70 eV  
**Tune Type:** PFTBA  
**Ionization Mode:** EI  
**Instrument** Agilent 7890B GC & 5977B MSD  
**Sample Preparation** Reference standards were diluted to 5 ppm in dichloromethane.





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