

## Fragrance Reference Standard

Conditions and compound list for all chromatograms:

**Column:** DB-WAX  
30 m x 0.25 mm I.D., 0.25 µm

**J&W P/N:** 122-7032

**Carrier:** Helium at 25 cm/sec,  
measured at 150°C

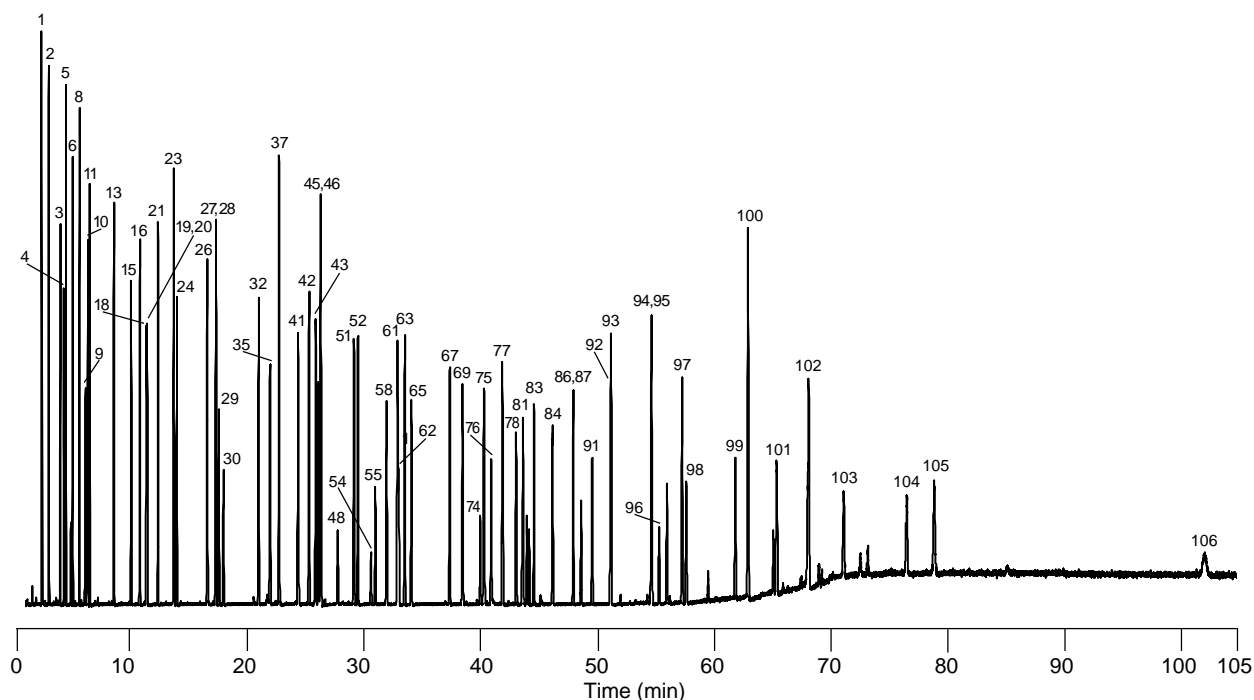
**Oven:** 45°C for 2 min  
45-250°C at 3°/min  
250°C for 34 min

**Injector:** Split 1:50, 250°C  
1 µL of a 1:20 dilution  
of neat sample in acetone

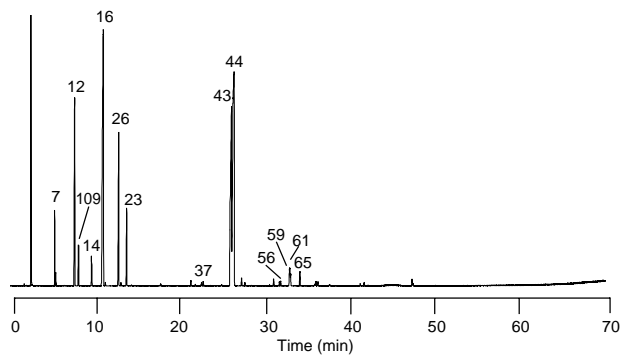
**Detector:** MSD, 250°C transfer line

Many thanks to Carl Frey, Manager of Analytical Services, Dragoco, and Kevin Myung, Director of Flavor and Perfumery Research, Bush Boake Allen, Inc. for contributing to this work.

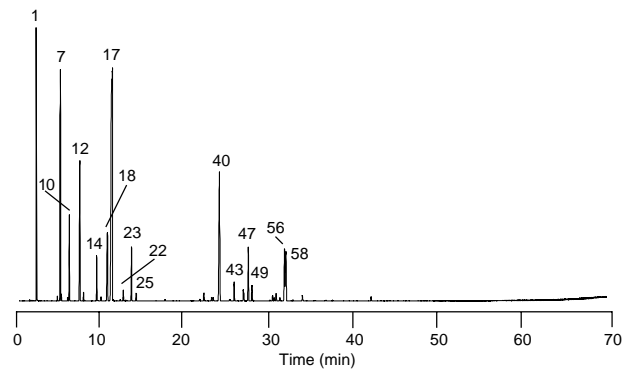
- |  |                          |                                   |
|--|--------------------------|-----------------------------------|
| 1. Acetone                             | 40. Camphor              | 79. Citronellyl tiglate           |
| 2. Ethyl acetate                       | 41. Benzaldehyde         | 80. Eugenyl methyl ether          |
| 3. Ethyl propionate                    | 42. Ethyl nonanoate      | 81. γ-Nonalactone                 |
| 4. 2,3-Butanedione (diacetyl)          | 43. Linalool             | 83. Ethyl tetradecanoate          |
| 5. Methyl butyrate                     | 44. Linalyl acetate      | 84. n-Amyl salicylate             |
| 6. Isobutyl acetate                    | 45. Vertenex (isomer 1)  | 85. Geranyl tiglate               |
| 7. α-Pinene                            | 46. Octanol              | 86. Ethyl pentadecanoate          |
| 8. Ethyl butyrate                      | 47. β-Caryophyllene      | 87. Isopropylmyristate            |
| 9. 2,3-Pentanedione (acetyl propionyl) | 48. Vertenex (isomer 2)  | 90. Phenylethyl tiglate           |
| 10. Camphene                           | 49. Terpinen-4-ol        | 91. Rosatol (rosetone)            |
| 11. Ethyl isovalerate                  | 50. Methyl benzoate      | 92. Eugenyl acetate               |
| 12. β-Pinene                           | 51. Hexylene glycol      | 93. Ethyl hexadecanoate           |
| 13. Ethyl pentanoate                   | 52. Ethyl decanoate      | 94. γ-Dodecalactone               |
| 14. Myrcene                            | 53. Citronellyl acetate  | 95. Dibenzyl ether                |
| 15. Allyl butyrate                     | 54. Isoborneol           | 96. Tonalid                       |
| 16. Limonene                           | 55. Neral                | 97. Ethyl octadecanoate           |
| 17. 1,8-Cineol                         | 56. α-Terpineol          | 98. Benzophenone                  |
| 18. 3,5,5-Trimethylhexanol             | 57. Geranyl formate      | 99. Benzyl benzoate               |
| 19. 3-Methylbutyl alcohol              | 58. Borneol              | 100. Cetearyl octanoate           |
| 20. 2-Methylbutyl alcohol              | 59. β-Bisabolene         | 101. Musk T (ethylene brassylate) |
| 21. Ethyl hexanoate                    | 60. Benzyl acetate       | 102. Cetearyl decanoate           |
| 22. γ-Terpinene                        | 61. Neryl acetate        | 103. Frambione (raspberry ketone) |
| 23. p-Cymene                           | 62. Geraniol             | 104. Cinnamyl phenyl acetate      |
| 24. Hexyl acetate                      | 63. Ethyl undecanoate    | 105. Phenyl ethyl cinnamate       |
| 25. Terpinolene                        | 64. δ-Cadinene           | 106. Cinnamyl cinnamate           |
| 26. Ethyl heptanoate                   | 65. Geranyl acetate      | 107. Benzyl salicylate            |
| 27. 2,6-Dimethylhept-5-enal (Melonal™) | 66. Citronellol          | 108. Heneicosane                  |
| 28. Rose oxide, cis-rose               | 67. Ethyl dodecanoate    | 109. Sabinene                     |
| 29. Hexanol                            | 68. Geraniol             | 110. Citronellyl formate          |
| 30. Rose oxide, trans-rose             | 69. Benzyl alcohol       |                                   |
| 31. Methyl-para-cresol                 | 70. Geranyl butyrate     |                                   |
| 32. Ethyl octanoate                    | 71. Nonadecane           |                                   |
| 33. cis-Linalool oxide                 | 72. Benzene ethanol      |                                   |
| 34. Menthone                           | 73. Nonadec-1-ene        |                                   |
| 35. Furfural                           | 74. Florazone (isomer 1) |                                   |
| 36. trans-Linalool oxide               | 75. Florazone (isomer 2) |                                   |
| 37. Octyl acetate                      | 76. Hydroxycitronellal   |                                   |
| 38. Isomenthone                        | 77. Dodecanol            |                                   |
| 39. α-Copaene                          | 78. Diphenyl oxide       |                                   |



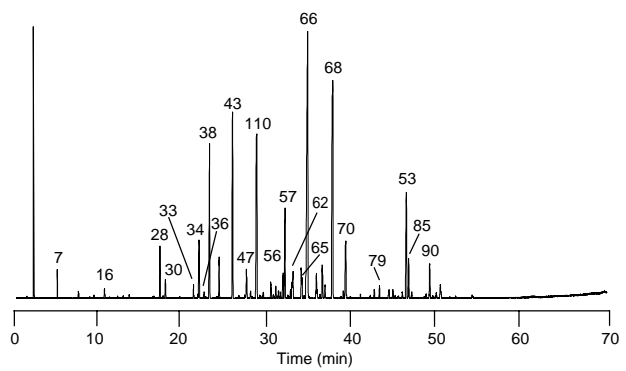
### Bergamot Oil



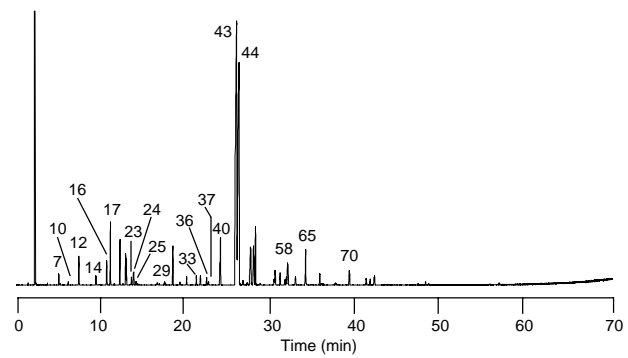
### Rosemary Oil



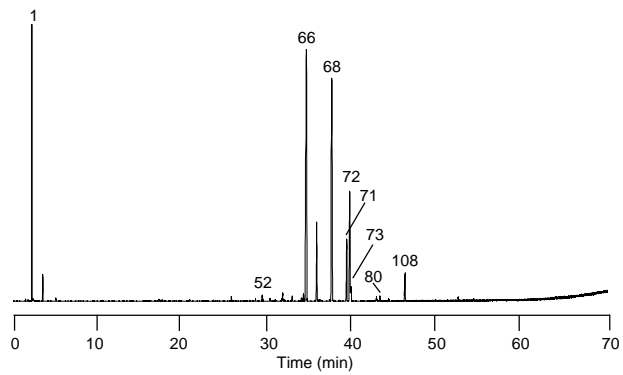
### Geranium Oil



### Lavender Oil



### Rose Oil



### Ylang Ylang Oil

