

Method Path : Z:\HPCHEM1\BNA\_M\METHODS\  
 Method File : SOM02.2-EPA-BM030915.M  
 Title : SVOA CALIBRATION  
 Last Update : Tue Mar 10 05:01:27 2015  
 Response Via : Initial Calibration

## Calibration Files

5 =BM000669.D 10 =BM000670.D 20 =BM000671.D  
 40 =BM000672.D 80 =BM000673.D 160 =BM000674.D

|       | Compound              | 5              | 10    | 20    | 40    | 80    | 160   | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzene-d | -----ISTD----- |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           | 0.518          | 0.437 | 0.463 | 0.421 | 0.417 |       | 0.451 | 9.16  |
| 3) S  | 1,4-Dioxane-d8        | 0.414          | 0.377 | 0.355 | 0.343 | 0.347 |       | 0.367 | 7.95  |
| 4)    | Benzaldehyde          |                | 0.974 | 0.960 | 0.997 | 1.068 | 1.054 | 1.011 | 4.78  |
| 5) S  | Phenol-d5             |                | 1.399 | 1.376 | 1.414 | 1.458 | 1.518 | 1.433 | 3.94  |
| 6)    | Phenol                |                | 1.512 | 1.456 | 1.476 | 1.510 | 1.565 | 1.504 | 2.76  |
| 7) S  | Bis-(2-Chloroethy     |                | 0.915 | 0.873 | 0.847 | 0.862 | 0.869 | 0.873 | 2.89  |
| 8)    | Bis(2-Chloroethyl     |                | 1.241 | 1.159 | 1.150 | 1.171 | 1.176 | 1.179 | 3.04  |
| 9) S  | 2-Chlorophenol-d4     | 1.193          | 1.177 | 1.144 | 1.153 | 1.195 |       | 1.172 | 1.97  |
| 10)   | 2-Chlorophenol        | 1.211          | 1.213 | 1.187 | 1.186 | 1.212 |       | 1.202 | 1.15  |
| 11)   | 2-Methylphenol        |                | 1.113 | 1.095 | 1.105 | 1.149 | 1.197 | 1.132 | 3.70  |
| 12)   | 2,2'-oxybis(1-Chl     |                | 2.220 | 2.083 | 2.062 | 2.028 | 2.048 | 2.088 | 3.66  |
| 13) S | 4-Methylphenol-d8     |                | 1.123 | 1.077 | 1.114 | 1.154 | 1.202 | 1.134 | 4.14  |
| 14)   | Acetophenone          |                | 1.835 | 1.724 | 1.763 | 1.778 | 1.834 | 1.787 | 2.67  |
| 15) P | N-Nitroso-di-n-pr     | 0.783          | 0.844 | 0.819 | 0.856 | 0.884 |       | 0.837 | 4.58  |
| 16)   | 4-Methylphenol        |                | 1.265 | 1.184 | 1.213 | 1.250 | 1.293 | 1.241 | 3.45  |
| 17)   | Hexachloroethane      | 0.487          | 0.479 | 0.466 | 0.472 | 0.474 |       | 0.476 | 1.59  |
| 18) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |
| 19) S | Nitrobenzene-d5       | 0.107          | 0.122 | 0.122 | 0.130 | 0.139 |       | 0.124 | 9.69  |
| 20)   | Nitrobenzene          | 0.307          | 0.322 | 0.309 | 0.320 | 0.326 |       | 0.317 | 2.61  |
| 21)   | Isophorone            | 0.492          | 0.536 | 0.534 | 0.571 | 0.600 |       | 0.547 | 7.50  |
| 22) S | 2-Nitrophenol-d4      | 0.115          | 0.126 | 0.131 | 0.141 | 0.154 |       | 0.133 | 11.22 |
| 23) C | 2-Nitrophenol         | 0.129          | 0.145 | 0.148 | 0.152 | 0.164 |       | 0.148 | 8.55  |
| 24)   | 2,4-Dimethylpheno     | 0.317          | 0.326 | 0.312 | 0.319 | 0.329 |       | 0.321 | 2.17  |
| 25)   | Bis(2-Chloroethox     | 0.373          | 0.376 | 0.366 | 0.361 | 0.369 |       | 0.369 | 1.59  |
| 26) S | 2,4-Dichloropheno     | 0.252          | 0.265 | 0.266 | 0.275 | 0.286 |       | 0.269 | 4.63  |
| 27) C | 2,4-Dichloropheno     | 0.262          | 0.272 | 0.264 | 0.273 | 0.280 |       | 0.270 | 2.68  |
| 28)   | Naphthalene           | 1.090          | 1.018 | 0.969 | 0.945 | 0.961 |       | 0.997 | 5.92  |
| 29) S | 4-Chloroaniline-d     |                | 0.127 | 0.133 | 0.143 | 0.148 | 0.137 | 0.138 | 5.88  |
| 30)   | 4-Chloroaniline       |                | 0.145 | 0.145 | 0.156 | 0.159 | 0.148 | 0.151 | 4.25  |
| 31) C | Hexachlorobutadie     | 0.191          | 0.171 | 0.170 | 0.162 | 0.166 |       | 0.172 | 6.37  |
| 32)   | Caprolactam           |                | 0.060 | 0.065 | 0.075 | 0.086 | 0.086 | 0.074 | 15.92 |
| 33) C | 4-Chloro-3-methyl     | 0.245          | 0.276 | 0.267 | 0.283 | 0.294 |       | 0.273 | 6.79  |
| 34)   | 2-Methylnaphthale     | 0.720          | 0.701 | 0.663 | 0.667 | 0.675 |       | 0.685 | 3.56  |
| 35) I | Acenaphthene-d10      | -----ISTD----- |       |       |       |       |       |       |       |
| 36)   | 1,2,4,5-Tetrachlo     | 0.631          | 0.593 | 0.566 | 0.560 | 0.563 |       | 0.583 | 5.19  |
| 37)   | Hexachlorocyclope     |                | 0.307 | 0.308 | 0.322 | 0.345 | 0.344 | 0.325 | 5.70  |
| 38) C | 2,4,6-Trichloroph     | 0.270          | 0.297 | 0.313 | 0.339 | 0.364 |       | 0.317 | 11.60 |
| 39)   | 2,4,5-Trichloroph     | 0.330          | 0.359 | 0.362 | 0.371 | 0.398 |       | 0.364 | 6.66  |
| 40)   | 1,1'-Biphenyl         | 1.734          | 1.640 | 1.522 | 1.500 | 1.519 |       | 1.583 | 6.38  |
| 41)   | 2-Chloronaphthale     | 1.323          | 1.244 | 1.177 | 1.159 | 1.175 |       | 1.216 | 5.64  |
| 42)   | 2-Nitroaniline        | 0.212          | 0.257 | 0.270 | 0.307 | 0.345 |       | 0.278 | 18.14 |
| 43) S | Dimethylphthalate     | 1.280          | 1.307 | 1.276 | 1.295 | 1.328 |       | 1.297 | 1.62  |
| 44)   | Dimethylphthalate     | 1.447          | 1.417 | 1.372 | 1.398 | 1.421 |       | 1.411 | 1.98  |
| 45)   | 2,6-Dinitrotoluen     | 0.197          | 0.236 | 0.248 | 0.275 | 0.301 |       | 0.252 | 15.66 |
| 46) S | Acenaphthylene-d8     | 1.787          | 1.814 | 1.767 | 1.805 | 1.840 |       | 1.803 | 1.52  |
| 47)   | Acenaphthylene        | 1.998          | 2.002 | 1.923 | 1.933 | 1.960 |       | 1.963 | 1.85  |
| 48)   | 3-Nitroaniline        |                | 0.201 | 0.222 | 0.256 | 0.271 | 0.242 | 0.238 | 11.59 |
| 49) C | Acenaphthene          | 1.407          | 1.308 | 1.241 | 1.231 | 1.254 |       | 1.288 | 5.63  |
| 50)   | 2,4-Dinitrophenol     |                | 0.077 | 0.099 | 0.139 | 0.175 | 0.184 | 0.135 | 34.64 |
| 51) S | 4-Nitrophenol-d4      |                | 0.195 | 0.215 | 0.251 | 0.277 | 0.272 | 0.242 | 14.83 |

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|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 52)   | 4-Nitrophenol     |                | 0.148 | 0.165 | 0.182 | 0.199 | 0.192 | 0.177 | 11.83 |
| 53)   | Dibenzofuran      | 2.003          | 1.875 | 1.775 | 1.732 | 1.778 |       | 1.833 | 5.93  |
| 54)   | 2,4-Dinitrotoluen | 0.291          | 0.353 | 0.368 | 0.402 | 0.439 |       | 0.370 | 14.96 |
| 55)   | 2,3,4,6-Tetrachlo | 0.236          | 0.271 | 0.281 | 0.306 | 0.329 |       | 0.285 | 12.38 |
| 56)   | Diethylphthalate  | 1.323          | 1.352 | 1.328 | 1.376 | 1.420 |       | 1.360 | 2.92  |
| 57) S | Fluorene-d10      | 1.389          | 1.309 | 1.251 | 1.249 | 1.266 |       | 1.293 | 4.57  |
| 58)   | Fluorene          | 1.595          | 1.510 | 1.429 | 1.431 | 1.446 |       | 1.482 | 4.79  |
| 59)   | 4-Chlorophenyl-ph | 0.781          | 0.728 | 0.698 | 0.683 | 0.684 |       | 0.715 | 5.79  |
| 60)   | 4-Nitroaniline    |                | 0.218 | 0.251 | 0.291 | 0.327 | 0.294 | 0.276 | 15.34 |
| 61) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |
| 62) S | 4,6-Dinitro-2-met |                | 0.086 | 0.097 | 0.106 | 0.115 | 0.120 | 0.105 | 13.25 |
| 63)   | 4,6-Dinitro-2-met |                | 0.094 | 0.101 | 0.111 | 0.119 | 0.123 | 0.110 | 11.14 |
| 64)   | N-Nitrosodiphenyl | 0.589          | 0.597 | 0.572 | 0.562 | 0.559 |       | 0.576 | 2.95  |
| 65)   | 4-Bromophenyl-phe | 0.196          | 0.186 | 0.181 | 0.179 | 0.177 |       | 0.184 | 4.26  |
| 66)   | Hexachlorobenzene | 0.220          | 0.208 | 0.198 | 0.197 | 0.196 |       | 0.204 | 5.13  |
| 67)   | Atrazine          |                | 0.137 | 0.151 | 0.155 | 0.163 | 0.160 | 0.153 | 6.61  |
| 68) C | Pentachlorophenol |                | 0.078 | 0.090 | 0.107 | 0.119 | 0.124 | 0.103 | 18.98 |
| 69)   | Phenanthrene      | 1.177          | 1.097 | 1.060 | 1.034 | 1.026 |       | 1.079 | 5.71  |
| 70) S | Anthracene-d10    | 0.923          | 0.890 | 0.871 | 0.863 | 0.874 |       | 0.884 | 2.67  |
| 71)   | Anthracene        | 1.146          | 1.106 | 1.074 | 1.059 | 1.053 |       | 1.088 | 3.55  |
| 72)   | Carbazole         |                | 0.956 | 0.949 | 0.954 | 0.961 | 0.919 | 0.948 | 1.77  |
| 73)   | Di-n-butylphthala | 0.852          | 0.905 | 1.010 | 1.078 | 1.112 |       | 0.991 | 11.19 |
| 74) C | Fluoranthene      |                | 1.125 | 1.161 | 1.160 | 1.158 | 1.064 | 1.134 | 3.66  |
| 75) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |
| 76) S | Pyrene-d10        | 0.916          | 0.958 | 0.866 | 0.867 | 0.869 |       | 0.895 | 4.58  |
| 77)   | Pyrene            | 1.280          | 1.304 | 1.168 | 1.154 | 1.145 |       | 1.210 | 6.26  |
| 78)   | Butylbenzylphthal | 0.326          | 0.371 | 0.412 | 0.456 | 0.483 |       | 0.410 | 15.46 |
| 79)   | 3,3'-Dichlorobenz |                | 0.299 | 0.320 | 0.339 | 0.335 | 0.295 | 0.318 | 6.34  |
| 80)   | Benzo(a)anthracen | 1.154          | 1.141 | 1.090 | 1.074 | 1.066 |       | 1.105 | 3.61  |
| 81)   | Bis(2-ethylhexyl) | 0.488          | 0.531 | 0.640 | 0.683 | 0.712 |       | 0.611 | 15.86 |
| 82)   | Chrysene          | 1.176          | 1.102 | 1.039 | 1.032 | 1.012 |       | 1.072 | 6.25  |
| 83) I | Perylene-d12      | -----ISTD----- |       |       |       |       |       |       |       |
| 84)   | Di-n-octyl phthal |                | 0.951 | 1.160 | 1.248 | 1.314 | 1.251 | 1.185 | 11.96 |
| 85)   | Benzo(b)fluoranth | 1.224          | 1.186 | 1.098 | 1.126 | 1.151 |       | 1.157 | 4.31  |
| 86)   | Benzo(k)fluoranth | 1.145          | 1.095 | 1.129 | 1.093 | 1.048 |       | 1.102 | 3.40  |
| 87) S | Benzo(a)pyrene-d1 | 0.861          | 0.844 | 0.842 | 0.847 | 0.854 |       | 0.849 | 0.92  |
| 88) C | Benzo(a)pyrene    | 1.148          | 1.105 | 1.076 | 1.078 | 1.073 |       | 1.096 | 2.91  |
| 89)   | Indeno(1,2,3-cd)p | 1.238          | 1.188 | 1.201 | 1.190 | 1.199 |       | 1.203 | 1.69  |
| 90)   | Dibenzo(a,h)anthr | 1.078          | 0.990 | 1.012 | 1.017 | 1.003 |       | 1.020 | 3.34  |
| 91)   | Benzo(g,h,i)peryl | 1.064          | 1.007 | 1.014 | 0.999 | 1.012 |       | 1.019 | 2.53  |

(#) = Out of Range