

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: AECO02  
Lab Code: CHEM Case No.: P4861 SAS No.: P4861 SDG No.: P4861  
Instrument ID: BNA\_F Calibration Date(s): 11/21/2024 11/21/2024  
Calibration Time(s): 11:13 14:18

| LAB FILE ID:          |        | RRF2.5 = BF140528.D |        | RRF005 = BF140529.D |        | RRF010 = BF140530.D |       |       |
|-----------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|-------|
|                       |        | RRF020 = BF140531.D |        | RRF040 = BF140532.D |        | RRF050 = BF140533.D |       |       |
| COMPOUND              | RRF2.5 | RRF005              | RRF010 | RRF020              | RRF040 | RRF050              | RRF   | % RSD |
| Pyridine              |        | 0.981               | 1.019  | 1.121               | 1.192  | 1.062               | 1.084 | 6.5   |
| 2-Fluorophenol        |        | 1.261               | 1.233  | 1.202               | 1.174  | 1.117               | 1.172 | 5.4   |
| Phenol-d6             |        | 1.729               | 1.617  | 1.559               | 1.602  | 1.465               | 1.550 | 7.1   |
| 1,4-Dichlorobenzene   |        | 1.613               | 1.501  | 1.456               | 1.428  | 1.358               | 1.435 | 7.0   |
| 2-Methylphenol        |        | 1.121               | 1.034  | 1.033               | 1.042  | 0.956               | 1.010 | 6.7   |
| 3+4-Methylphenols     |        | 1.495               | 1.362  | 1.305               | 1.347  | 1.211               | 1.298 | 9.0   |
| Nitrobenzene-d5       |        | 0.409               | 0.403  | 0.395               | 0.392  | 0.377               | 0.391 | 3.2   |
| Hexachloroethane      |        | 0.598               | 0.545  | 0.549               | 0.537  | 0.514               | 0.536 | 6.2   |
| Nitrobenzene          |        | 0.439               | 0.409  | 0.409               | 0.401  | 0.388               | 0.404 | 4.3   |
| Hexachlorobutadiene   |        | 0.227               | 0.225  | 0.219               | 0.212  | 0.209               | 0.215 | 4.2   |
| 2,4,6-Trichlorophenol |        | 0.384               | 0.358  | 0.375               | 0.366  | 0.364               | 0.367 | 2.5   |
| 2-Fluorobiphenyl      |        | 1.550               | 1.402  | 1.423               | 1.291  | 1.255               | 1.342 | 8.9   |
| 2,4,5-Trichlorophenol |        | 0.402               | 0.396  | 0.410               | 0.404  | 0.390               | 0.399 | 1.8   |
| 2,4-Dinitrotoluene    |        | 0.403               | 0.403  | 0.416               | 0.404  | 0.386               | 0.397 | 3.2   |
| 2,4,6-Tribromophenol  |        | 0.222               | 0.209  | 0.220               | 0.216  | 0.210               | 0.214 | 2.5   |
| Hexachlorobenzene     |        | 0.257               | 0.240  | 0.239               | 0.233  | 0.232               | 0.238 | 3.7   |
| Pentachlorophenol     |        |                     | 0.071  | 0.090               | 0.116  | 0.115               | 0.105 | 19.2  |
| Terphenyl-d14         |        | 1.351               | 1.254  | 1.308               | 1.283  | 1.228               | 1.284 | 3.3   |

All other compounds must meet a minimum RRF of 0.010.

Form VI SV-1

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
 Method File : 8270-BF111324.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Wed Nov 13 14:40:06 2024  
 Response Via : Initial Calibration

## Calibration Files

2.5 =BF140332.D 5 =BF140333.D 10 =BF140334.D 20 =BF140335.D 40 =BF140340.D 50 =BF140337.D 60 =BF140338.D 80 =BF140339.D

| Compound |                       | 2.5            | 5     | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD |
|----------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| -----    |                       |                |       |       |       |       |       |       |       |       |      |
| 1) I     | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |      |
| 2)       | 1,4-Dioxane           | 0.582          | 0.546 | 0.530 | 0.515 | 0.495 | 0.506 | 0.480 | 0.522 | 6.53  |      |
| 3)       | Pyridine              | 1.430          | 1.343 | 1.323 | 1.316 | 1.189 | 1.237 | 1.147 | 1.283 | 7.61  |      |
| 4)       | n-Nitrosodimet...     | 0.658          | 0.632 | 0.651 | 0.659 | 0.644 | 0.671 | 0.627 | 0.649 | 2.39  |      |
| 5) S     | 2-Fluorophenol        | 1.329          | 1.257 | 1.223 | 1.150 | 1.090 | 1.118 | 1.032 | 1.171 | 8.84  |      |
| 6)       | Aniline               | 1.587          | 1.527 | 1.495 | 1.451 | 1.267 | 1.270 | 1.066 | 1.381 | 13.42 |      |
| 7) S     | Phenol-d6             | 1.773          | 1.691 | 1.643 | 1.605 | 1.483 | 1.507 | 1.407 | 1.587 | 8.09  |      |
| 8)       | 2-Chlorophenol        | 1.397          | 1.349 | 1.332 | 1.263 | 1.176 | 1.184 | 1.106 | 1.258 | 8.49  |      |
| 9)       | Benzaldehyde          | 1.101          | 1.087 | 1.017 | 0.891 | 0.828 | 0.783 | 0.951 | 14.32 |       |      |
| 10) C    | Phenol                | 1.799          | 1.793 | 1.743 | 1.724 | 1.582 | 1.597 | 1.478 | 1.674 | 7.31  |      |
| 11)      | bis(2-Chloroet...     | 1.359          | 1.294 | 1.306 | 1.263 | 1.227 | 1.249 | 1.179 | 1.268 | 4.60  |      |
| 12)      | 1,3-Dichlorobe...     | 1.585          | 1.475 | 1.454 | 1.374 | 1.291 | 1.317 | 1.221 | 1.388 | 8.98  |      |
| 13) C    | 1,4-Dichlorobe...     | 1.590          | 1.534 | 1.486 | 1.391 | 1.306 | 1.326 | 1.221 | 1.408 | 9.49  |      |
| 14)      | 1,2-Dichlorobe...     | 1.494          | 1.429 | 1.398 | 1.294 | 1.212 | 1.214 | 1.108 | 1.307 | 10.63 |      |
| 15)      | Benzyl Alcohol        | 1.172          | 1.193 | 1.199 | 1.211 | 1.100 | 1.108 | 1.020 | 1.143 | 6.10  |      |
| 16)      | 2,2'-oxybis(1-...     | 1.906          | 1.826 | 1.815 | 1.816 | 1.666 | 1.684 | 1.549 | 1.752 | 7.01  |      |
| 17)      | 2-Methylphenol        | 1.092          | 1.062 | 1.072 | 1.064 | 0.998 | 1.016 | 0.942 | 1.035 | 5.07  |      |
| 18)      | Hexachloroethane      | 0.562          | 0.543 | 0.550 | 0.514 | 0.500 | 0.506 | 0.468 | 0.520 | 6.30  |      |
| 19) P    | n-Nitroso-di-n...     | 1.032          | 1.029 | 1.003 | 0.986 | 0.982 | 0.883 | 0.905 | 0.848 | 0.959 | 7.30 |
| 20)      | 3+4-Methylphenols     | 1.436          | 1.427 | 1.359 | 1.351 | 1.200 | 1.198 | 1.091 | 1.294 | 10.21 |      |
|          |                       |                |       |       |       |       |       |       |       |       |      |
| 21) I    | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |      |
| 22)      | Acetophenone          | 0.532          | 0.508 | 0.481 | 0.450 | 0.434 | 0.441 | 0.411 | 0.465 | 9.35  |      |
| 23) S    | Nitrobenzene-d5       | 0.411          | 0.401 | 0.399 | 0.375 | 0.368 | 0.379 | 0.354 | 0.384 | 5.28  |      |
| 24)      | Nitrobenzene          | 0.423          | 0.421 | 0.406 | 0.393 | 0.390 | 0.394 | 0.371 | 0.400 | 4.61  |      |
| 25)      | Isophorone            | 0.736          | 0.702 | 0.692 | 0.674 | 0.654 | 0.671 | 0.634 | 0.680 | 4.87  |      |
| 26) C    | 2-Nitrophenol         | 0.175          | 0.179 | 0.181 | 0.179 | 0.175 | 0.181 | 0.171 | 0.177 | 1.99  |      |
| 27)      | 2,4-Dimethylph...     | 0.238          | 0.236 | 0.232 | 0.223 | 0.221 | 0.227 | 0.214 | 0.227 | 3.86  |      |
| 28)      | bis(2-Chloroet...     | 0.461          | 0.442 | 0.430 | 0.407 | 0.398 | 0.404 | 0.379 | 0.417 | 6.80  |      |
| 29) C    | 2,4-Dichloroph...     | 0.307          | 0.296 | 0.287 | 0.275 | 0.272 | 0.272 | 0.255 | 0.281 | 6.20  |      |
| 30)      | 1,2,4-Trichlor...     | 0.346          | 0.331 | 0.325 | 0.302 | 0.298 | 0.301 | 0.283 | 0.312 | 7.15  |      |
| 31)      | Naphthalene           | 1.160          | 1.105 | 1.064 | 0.982 | 0.950 | 0.955 | 0.886 | 1.015 | 9.60  |      |
| 32)      | Benzoic acid          | 0.162          | 0.178 | 0.180 | 0.212 | 0.215 | 0.226 | 0.226 | 0.200 | 13.01 |      |
| 33)      | 4-Chloroaniline       | 0.390          | 0.386 | 0.370 | 0.340 | 0.333 | 0.340 | 0.311 | 0.353 | 8.36  |      |
| 34) C    | Hexachlorobuta...     | 0.220          | 0.214 | 0.210 | 0.193 | 0.188 | 0.190 | 0.178 | 0.199 | 7.73  |      |
| 35)      | Caprolactam           | 0.098          | 0.093 | 0.094 | 0.092 | 0.091 | 0.095 | 0.089 | 0.093 | 3.27  |      |
| 36) C    | 4-Chloro-3-met...     | 0.331          | 0.327 | 0.320 | 0.309 | 0.299 | 0.304 | 0.287 | 0.311 | 5.14  |      |
| 37)      | 2-Methylnaphth...     | 0.751          | 0.706 | 0.683 | 0.632 | 0.610 | 0.607 | 0.565 | 0.651 | 10.01 |      |
| 38)      | 1-Methylnaphth...     | 0.734          | 0.696 | 0.673 | 0.625 | 0.589 | 0.592 | 0.550 | 0.637 | 10.39 |      |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
 Method File : 8270-BF111324.M

|       |                   |                |       |       |       |       |       |       |       |       |  |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 39) I | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 40)   | 1,2,4,5-Tetrac... | 0.646          | 0.585 | 0.583 | 0.531 | 0.524 | 0.517 | 0.485 | 0.553 | 9.85  |  |
| 41) P | Hexachlorocycl... | 0.111          | 0.143 | 0.139 | 0.156 | 0.159 | 0.145 | 0.142 | 12.04 |       |  |
| 42) S | 2,4,6-Tribromo... | 0.220          | 0.211 | 0.207 | 0.193 | 0.191 | 0.189 | 0.182 | 0.199 | 6.88  |  |
| 43) C | 2,4,6-Trichlor... | 0.380          | 0.374 | 0.374 | 0.360 | 0.360 | 0.352 | 0.341 | 0.363 | 3.87  |  |
| 44)   | 2,4,5-Trichlor... | 0.421          | 0.417 | 0.412 | 0.389 | 0.387 | 0.390 | 0.361 | 0.397 | 5.41  |  |
| 45) S | 2-Fluorobiphenyl  | 1.524          | 1.396 | 1.351 | 1.172 | 1.125 | 1.110 | 1.031 | 1.244 | 14.50 |  |
| 46)   | 1,1'-Biphenyl     | 1.690          | 1.571 | 1.565 | 1.404 | 1.368 | 1.343 | 1.244 | 1.455 | 10.80 |  |
| 47)   | 2-Chloronaphth... | 1.279          | 1.182 | 1.149 | 1.065 | 1.064 | 1.049 | 0.971 | 1.108 | 9.20  |  |
| 48)   | 2-Nitroaniline    | 0.378          | 0.365 | 0.384 | 0.364 | 0.365 | 0.366 | 0.351 | 0.368 | 2.91  |  |
| 49)   | Acenaphthylene    | 1.940          | 1.802 | 1.786 | 1.636 | 1.582 | 1.552 | 1.441 | 1.677 | 10.29 |  |
| 50)   | Dimethylphthalate | 1.464          | 1.358 | 1.371 | 1.261 | 1.246 | 1.244 | 1.181 | 1.304 | 7.47  |  |
| 51)   | 2,6-Dinitrotol... | 0.317          | 0.303 | 0.313 | 0.297 | 0.291 | 0.289 | 0.268 | 0.297 | 5.57  |  |
| 52) C | Acenaphthene      | 1.259          | 1.204 | 1.192 | 1.096 | 1.091 | 1.079 | 1.006 | 1.133 | 7.78  |  |
| 53)   | 3-Nitroaniline    | 0.333          | 0.327 | 0.335 | 0.310 | 0.307 | 0.298 | 0.275 | 0.312 | 6.92  |  |
| 54) P | 2,4-Dinitrophenol | 0.109          | 0.148 | 0.147 | 0.178 | 0.170 | 0.168 | 0.153 | 16.27 |       |  |
| 55)   | Dibenzofuran      | 1.904          | 1.736 | 1.715 | 1.558 | 1.502 | 1.466 | 1.344 | 1.603 | 11.92 |  |
| 56) P | 4-Nitrophenol     | 0.199          | 0.217 | 0.239 | 0.236 | 0.240 | 0.237 | 0.225 | 0.228 | 6.67  |  |
| 57)   | 2,4-Dinitrotol... | 0.414          | 0.400 | 0.417 | 0.387 | 0.387 | 0.382 | 0.351 | 0.391 | 5.77  |  |
| 58)   | Fluorene          | 1.525          | 1.403 | 1.365 | 1.202 | 1.168 | 1.137 | 1.066 | 1.267 | 13.14 |  |
| 59)   | 2,3,4,6-Tetrac... | 0.322          | 0.328 | 0.326 | 0.318 | 0.308 | 0.302 | 0.288 | 0.313 | 4.61  |  |
| 60)   | Diethylphthalate  | 1.525          | 1.417 | 1.398 | 1.287 | 1.272 | 1.246 | 1.185 | 1.333 | 8.85  |  |
| 61)   | 4-Chlorophenyl... | 0.739          | 0.688 | 0.669 | 0.604 | 0.583 | 0.567 | 0.528 | 0.625 | 12.01 |  |
| 62)   | 4-Nitroaniline    | 0.335          | 0.325 | 0.328 | 0.319 | 0.316 | 0.313 | 0.297 | 0.319 | 3.86  |  |
| 63)   | Azobenzene        | 1.498          | 1.391 | 1.380 | 1.293 | 1.251 | 1.244 | 1.163 | 1.317 | 8.55  |  |
| 64) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 65)   | 4,6-Dinitro-2-... | 0.080          | 0.098 | 0.113 | 0.109 | 0.117 | 0.120 | 0.116 | 0.108 | 13.00 |  |
| 66) c | n-Nitrosodiphe... | 0.651          | 0.630 | 0.600 | 0.559 | 0.541 | 0.541 | 0.522 | 0.578 | 8.57  |  |
| 67)   | 4-Bromophenyl-... | 0.227          | 0.210 | 0.209 | 0.194 | 0.191 | 0.188 | 0.180 | 0.200 | 8.14  |  |
| 68)   | Hexachlorobenzene | 0.251          | 0.242 | 0.232 | 0.218 | 0.209 | 0.215 | 0.208 | 0.225 | 7.54  |  |
| 69)   | Atrazine          | 0.191          | 0.183 | 0.135 | 0.145 | 0.155 | 0.205 | 0.209 | 0.175 | 17.03 |  |
| 70) C | Pentachlorophenol | 0.097          | 0.108 | 0.124 | 0.127 | 0.131 | 0.130 | 0.130 | 0.121 | 10.87 |  |
| 71)   | Phenanthrene      | 1.096          | 1.053 | 0.986 | 0.903 | 0.868 | 0.851 | 0.820 | 0.940 | 11.33 |  |
| 72)   | Anthracene        | 1.071          | 1.018 | 0.966 | 0.889 | 0.860 | 0.839 | 0.803 | 0.921 | 10.81 |  |
| 73)   | Carbazole         | 1.053          | 1.009 | 0.963 | 0.876 | 0.846 | 0.834 | 0.783 | 0.909 | 11.02 |  |
| 74)   | Di-n-butylphth... | 1.214          | 1.177 | 1.150 | 1.074 | 1.036 | 1.023 | 0.964 | 1.091 | 8.37  |  |
| 75) C | Fluoranthene      | 1.256          | 1.201 | 1.141 | 1.018 | 0.962 | 0.933 | 0.867 | 1.054 | 13.92 |  |
| 76) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 77)   | Benzidine         | 0.634          | 0.684 | 0.653 | 0.742 | 0.953 | 0.939 | 0.768 | 18.64 |       |  |
| 78)   | Pyrene            | 1.748          | 1.706 | 1.643 | 1.679 | 1.728 | 1.800 | 1.672 | 1.711 | 3.08  |  |
| 79) S | Terphenyl-d14     | 1.226          | 1.185 | 1.108 | 1.123 | 1.139 | 1.190 | 1.093 | 1.152 | 4.26  |  |
| 80)   | Butylbenzylpht... | 0.640          | 0.638 | 0.654 | 0.690 | 0.670 | 0.681 | 0.628 | 0.657 | 3.56  |  |
| 81)   | Benzo(a)anthra... | 1.451          | 1.418 | 1.351 | 1.263 | 1.229 | 1.294 | 1.195 | 1.314 | 7.31  |  |
| 82)   | 3,3'-Dichlorob... | 0.438          | 0.431 | 0.433 | 0.402 | 0.406 | 0.416 | 0.399 | 0.418 | 3.79  |  |
| 83)   | Chrysene          | 1.394          | 1.241 | 1.235 | 1.168 | 1.137 | 1.123 | 1.099 | 1.199 | 8.44  |  |
| 84)   | Bis(2-ethylhex... | 0.886          | 0.890 | 0.897 | 0.927 | 0.858 | 0.869 | 0.813 | 0.877 | 4.07  |  |
| 85) c | Di-n-octyl pht... | 1.231          | 1.217 | 1.270 | 1.290 | 1.187 | 1.241 | 1.212 | 1.235 | 2.86  |  |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
Method File : 8270-BF111324.M

|       |                   |                |       |       |       |       |       |       |       |       |  |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 86) I | Perylene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 87)   | Indeno(1,2,3-c... | 1.116          | 1.150 | 1.138 | 1.258 | 1.316 | 1.354 | 1.317 | 1.235 | 8.02  |  |
| 88)   | Benzo(b)fluora... | 1.405          | 1.352 | 1.471 | 1.263 | 1.235 | 1.233 | 1.199 | 1.308 | 7.82  |  |
| 89)   | Benzo(k)fluora... | 1.286          | 1.241 | 1.120 | 1.060 | 0.952 | 0.935 | 0.888 | 1.069 | 14.47 |  |
| 90) C | Benzo(a)pyrene    | 1.100          | 1.053 | 1.054 | 1.005 | 0.970 | 0.980 | 0.948 | 1.016 | 5.40  |  |
| 91)   | Dibenzo(a,h)an... | 0.941          | 0.952 | 0.944 | 1.039 | 1.074 | 1.121 | 1.077 | 1.021 | 7.30  |  |
| 92)   | Benzo(g,h,i)pe... | 0.941          | 0.963 | 0.954 | 1.063 | 1.122 | 1.146 | 1.120 | 1.044 | 8.55  |  |

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(#) = Out of Range

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
 Method File : 8270-BF112124.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Nov 21 15:23:48 2024  
 Response Via : Initial Calibration

## Calibration Files

2.5 =BF140528.D 5 =BF140529.D 10 =BF140530.D 20 =BF140531.D 40 =BF140532.D 50 =BF140533.D 60 =BF140534.D 80 =BF140535.D

|       | Compound              | 2.5            | 5     | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           | 0.501          | 0.502 | 0.576 | 0.489 | 0.452 | 0.454 | 0.477 | 0.493 |       | 8.46  |
| 3)    | Pyridine              | 0.981          | 1.019 | 1.121 | 1.192 | 1.062 | 1.087 | 1.128 | 1.084 |       | 6.54  |
| 4)    | n-Nitrosodimet...     | 0.616          | 0.611 | 0.661 | 0.648 | 0.632 | 0.632 | 0.660 | 0.637 |       | 3.15  |
| 5) S  | 2-Fluorophenol        | 1.261          | 1.233 | 1.202 | 1.174 | 1.117 | 1.127 | 1.091 | 1.172 |       | 5.40  |
| 6)    | Aniline               | 1.159          | 1.195 | 1.133 | 1.251 | 1.042 | 1.020 | 0.835 | 1.091 |       | 12.73 |
| 7) S  | Phenol-d6             | 1.729          | 1.617 | 1.559 | 1.602 | 1.465 | 1.470 | 1.407 | 1.550 |       | 7.14  |
| 8)    | 2-Chlorophenol        | 1.385          | 1.328 | 1.278 | 1.283 | 1.201 | 1.208 | 1.145 | 1.261 |       | 6.51  |
| 9)    | Benzaldehyde          |                | 1.007 | 0.970 | 0.738 | 0.752 | 0.635 |       | 0.820 |       | 19.55 |
| 10) C | Phenol                | 1.723          | 1.648 | 1.620 | 1.667 | 1.514 | 1.490 | 1.417 | 1.583 |       | 6.98  |
| 11)   | bis(2-Chloroet...     | 1.292          | 1.242 | 1.214 | 1.246 | 1.146 | 1.200 | 1.138 | 1.211 |       | 4.56  |
| 12)   | 1,3-Dichlorobe...     | 1.600          | 1.493 | 1.433 | 1.399 | 1.345 | 1.361 | 1.288 | 1.417 |       | 7.31  |
| 13) C | 1,4-Dichlorobe...     | 1.613          | 1.501 | 1.456 | 1.428 | 1.358 | 1.372 | 1.314 | 1.435 |       | 7.04  |
| 14)   | 1,2-Dichlorobe...     | 1.503          | 1.434 | 1.375 | 1.355 | 1.268 | 1.266 | 1.210 | 1.344 |       | 7.71  |
| 15)   | Benzyl Alcohol        | 1.234          | 1.174 | 1.161 | 1.224 | 1.113 | 1.090 | 1.048 | 1.149 |       | 5.98  |
| 16)   | 2,2'-oxybis(1-...     | 1.650          | 1.480 | 1.434 | 1.463 | 1.335 | 1.377 | 1.276 | 1.431 |       | 8.43  |
| 17)   | 2-Methylphenol        | 1.121          | 1.034 | 1.033 | 1.042 | 0.956 | 0.959 | 0.922 | 1.009 |       | 6.74  |
| 18)   | Hexachloroethane      | 0.598          | 0.545 | 0.549 | 0.537 | 0.514 | 0.510 | 0.499 | 0.536 |       | 6.17  |
| 19) P | n-Nitroso-di-n...     | 0.972          | 1.002 | 0.949 | 0.916 | 0.946 | 0.856 | 0.857 | 0.829 | 0.916 | 6.82  |
| 20)   | 3+4-Methylphenols     | 1.495          | 1.362 | 1.305 | 1.347 | 1.211 | 1.209 | 1.154 | 1.298 |       | 8.98  |
| 21) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |       |
| 22)   | Acetophenone          | 0.536          | 0.511 | 0.494 | 0.481 | 0.463 | 0.460 | 0.468 | 0.488 |       | 5.75  |
| 23) S | Nitrobenzene-d5       | 0.409          | 0.403 | 0.395 | 0.392 | 0.377 | 0.377 | 0.383 | 0.391 |       | 3.21  |
| 24)   | Nitrobenzene          | 0.439          | 0.409 | 0.409 | 0.401 | 0.388 | 0.391 | 0.392 | 0.404 |       | 4.35  |
| 25)   | Isophorone            | 0.694          | 0.654 | 0.657 | 0.662 | 0.629 | 0.634 | 0.635 | 0.652 |       | 3.44  |
| 26) C | 2-Nitrophenol         | 0.178          | 0.172 | 0.185 | 0.180 | 0.178 | 0.180 | 0.180 | 0.179 |       | 2.17  |
| 27)   | 2,4-Dimethylph...     | 0.221          | 0.214 | 0.213 | 0.224 | 0.204 | 0.207 | 0.218 | 0.214 |       | 3.40  |
| 28)   | bis(2-Chloroet...     | 0.428          | 0.408 | 0.403 | 0.397 | 0.378 | 0.384 | 0.383 | 0.397 |       | 4.37  |
| 29) C | 2,4-Dichloroph...     | 0.301          | 0.291 | 0.290 | 0.282 | 0.277 | 0.274 | 0.271 | 0.284 |       | 3.82  |
| 30)   | 1,2,4-Trichlor...     | 0.342          | 0.338 | 0.332 | 0.317 | 0.317 | 0.312 | 0.312 | 0.324 |       | 3.91  |
| 31)   | Naphthalene           | 1.116          | 1.075 | 1.062 | 1.013 | 0.993 | 0.983 | 0.970 | 1.030 |       | 5.32  |
| 32)   | Benzoic acid          |                | 0.101 | 0.126 | 0.177 | 0.185 | 0.192 | 0.202 | 0.164 |       | 24.72 |
| 33)   | 4-Chloroaniline       | 0.308          | 0.318 | 0.309 | 0.325 | 0.303 | 0.308 | 0.289 | 0.308 |       | 3.71  |
| 34) C | Hexachlorobuta...     | 0.227          | 0.225 | 0.219 | 0.212 | 0.209 | 0.207 | 0.204 | 0.215 |       | 4.15  |
| 35)   | Caprolactam           | 0.091          | 0.091 | 0.091 | 0.090 | 0.085 | 0.085 | 0.083 | 0.088 |       | 3.99  |
| 36) C | 4-Chloro-3-met...     | 0.348          | 0.318 | 0.317 | 0.327 | 0.307 | 0.307 | 0.301 | 0.318 |       | 4.95  |
| 37)   | 2-Methylnaphth...     | 0.724          | 0.680 | 0.669 | 0.650 | 0.623 | 0.620 | 0.615 | 0.654 |       | 6.09  |
| 38)   | 1-Methylnaphth...     | 0.707          | 0.665 | 0.659 | 0.638 | 0.611 | 0.608 | 0.601 | 0.641 |       | 5.98  |

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|       |                   |                |       |       |       |       |       |       |       |       |  |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 39) I | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 40)   | 1,2,4,5-Tetrac... | 0.635          | 0.604 | 0.606 | 0.563 | 0.561 | 0.565 | 0.565 | 0.586 | 5.02  |  |
| 41) P | Hexachlorocycl... | 0.055          | 0.090 | 0.114 | 0.121 | 0.129 | 0.133 | 0.107 | 27.80 |       |  |
| 42) S | 2,4,6-Tribromo... | 0.222          | 0.209 | 0.220 | 0.216 | 0.210 | 0.210 | 0.211 | 0.214 | 2.52  |  |
| 43) C | 2,4,6-Trichlor... | 0.384          | 0.358 | 0.375 | 0.366 | 0.364 | 0.360 | 0.365 | 0.367 | 2.45  |  |
| 44)   | 2,4,5-Trichlor... | 0.402          | 0.396 | 0.410 | 0.404 | 0.390 | 0.397 | 0.392 | 0.399 | 1.80  |  |
| 45) S | 2-Fluorobiphenyl  | 1.550          | 1.402 | 1.423 | 1.291 | 1.255 | 1.240 | 1.235 | 1.342 | 8.90  |  |
| 46)   | 1,1'-Biphenyl     | 1.666          | 1.530 | 1.563 | 1.447 | 1.427 | 1.418 | 1.403 | 1.493 | 6.50  |  |
| 47)   | 2-Chloronaphth... | 1.251          | 1.145 | 1.162 | 1.106 | 1.082 | 1.084 | 1.091 | 1.131 | 5.39  |  |
| 48)   | 2-Nitroaniline    | 0.367          | 0.351 | 0.379 | 0.367 | 0.363 | 0.357 | 0.359 | 0.363 | 2.50  |  |
| 49)   | Acenaphthylene    | 1.890          | 1.765 | 1.808 | 1.662 | 1.628 | 1.623 | 1.590 | 1.710 | 6.58  |  |
| 50)   | Dimethylphthalate | 1.455          | 1.329 | 1.346 | 1.299 | 1.267 | 1.270 | 1.254 | 1.317 | 5.28  |  |
| 51)   | 2,6-Dinitrotol... | 0.314          | 0.299 | 0.307 | 0.301 | 0.291 | 0.293 | 0.286 | 0.299 | 3.24  |  |
| 52) C | Acenaphthene      | 1.182          | 1.110 | 1.134 | 1.063 | 1.052 | 1.037 | 1.026 | 1.086 | 5.29  |  |
| 53)   | 3-Nitroaniline    | 0.307          | 0.297 | 0.309 | 0.300 | 0.289 | 0.281 | 0.262 | 0.292 | 5.71  |  |
| 54) P | 2,4-Dinitrophenol | 0.057          | 0.089 | 0.140 | 0.145 | 0.150 | 0.154 | 0.122 | 32.70 |       |  |
| 55)   | Dibenzofuran      | 1.898          | 1.739 | 1.739 | 1.622 | 1.559 | 1.531 | 1.509 | 1.657 | 8.53  |  |
| 56) P | 4-Nitrophenol     | 0.160          | 0.195 | 0.207 | 0.212 | 0.214 | 0.208 | 0.199 | 10.31 |       |  |
| 57)   | 2,4-Dinitrotol... | 0.403          | 0.403 | 0.416 | 0.404 | 0.386 | 0.389 | 0.379 | 0.397 | 3.24  |  |
| 58)   | Fluorene          | 1.509          | 1.409 | 1.399 | 1.295 | 1.263 | 1.224 | 1.210 | 1.330 | 8.37  |  |
| 59)   | 2,3,4,6-Tetrac... | 0.307          | 0.296 | 0.308 | 0.312 | 0.305 | 0.305 | 0.312 | 0.306 | 1.72  |  |
| 60)   | Diethylphthalate  | 1.495          | 1.375 | 1.393 | 1.311 | 1.292 | 1.268 | 1.234 | 1.338 | 6.66  |  |
| 61)   | 4-Chlorophenyl... | 0.739          | 0.682 | 0.685 | 0.639 | 0.619 | 0.605 | 0.599 | 0.653 | 7.90  |  |
| 62)   | 4-Nitroaniline    | 0.307          | 0.301 | 0.315 | 0.312 | 0.310 | 0.309 | 0.291 | 0.306 | 2.67  |  |
| 63)   | Azobenzene        | 1.406          | 1.320 | 1.320 | 1.235 | 1.205 | 1.206 | 1.179 | 1.267 | 6.55  |  |
| 64) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 65)   | 4,6-Dinitro-2-... | 0.073          | 0.090 | 0.110 | 0.110 | 0.117 | 0.113 | 0.102 | 16.74 |       |  |
| 66) c | n-Nitrosodiphe... | 0.632          | 0.618 | 0.597 | 0.578 | 0.577 | 0.580 | 0.558 | 0.591 | 4.39  |  |
| 67)   | 4-Bromophenyl-... | 0.218          | 0.215 | 0.206 | 0.200 | 0.200 | 0.205 | 0.198 | 0.206 | 3.79  |  |
| 68)   | Hexachlorobenzene | 0.257          | 0.240 | 0.239 | 0.233 | 0.232 | 0.236 | 0.232 | 0.238 | 3.65  |  |
| 69)   | Atrazine          | 0.181          | 0.171 | 0.131 | 0.140 | 0.147 | 0.196 | 0.198 | 0.166 | 16.37 |  |
| 70) C | Pentachlorophenol | 0.071          | 0.090 | 0.116 | 0.115 | 0.121 | 0.118 | 0.105 | 19.24 |       |  |
| 71)   | Phenanthrene      | 1.074          | 1.020 | 0.970 | 0.944 | 0.925 | 0.916 | 0.881 | 0.961 | 6.87  |  |
| 72)   | Anthracene        | 1.038          | 0.994 | 0.958 | 0.925 | 0.905 | 0.904 | 0.859 | 0.940 | 6.47  |  |
| 73)   | Carbazole         | 1.004          | 0.949 | 0.930 | 0.889 | 0.876 | 0.862 | 0.821 | 0.905 | 6.75  |  |
| 74)   | Di-n-butylphth... | 1.144          | 1.075 | 1.074 | 1.023 | 1.021 | 1.007 | 0.967 | 1.044 | 5.56  |  |
| 75) C | Fluoranthene      | 1.186          | 1.111 | 1.114 | 1.014 | 0.999 | 0.962 | 0.921 | 1.044 | 9.11  |  |
| 76) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 77)   | Benzidine         | 0.268          | 0.422 | 0.296 | 0.575 | 0.734 | 1.025 | 0.751 | 0.581 | 47.31 |  |
| 78)   | Pyrene            | 1.905          | 1.801 | 1.897 | 1.853 | 1.791 | 1.898 | 1.799 | 1.849 | 2.79  |  |
| 79) S | Terphenyl-d14     | 1.351          | 1.254 | 1.308 | 1.283 | 1.228 | 1.313 | 1.254 | 1.284 | 3.31  |  |
| 80)   | Butylbenzylpht... | 0.676          | 0.644 | 0.694 | 0.679 | 0.655 | 0.674 | 0.641 | 0.666 | 2.96  |  |
| 81)   | Benzo(a)anthra... | 1.409          | 1.319 | 1.379 | 1.286 | 1.295 | 1.338 | 1.242 | 1.324 | 4.30  |  |
| 82)   | 3,3'-Dichlorob... | 0.375          | 0.383 | 0.393 | 0.413 | 0.406 | 0.419 | 0.394 | 0.397 | 4.03  |  |
| 83)   | Chrysene          | 1.354          | 1.263 | 1.218 | 1.201 | 1.137 | 1.173 | 1.128 | 1.211 | 6.50  |  |
| 84)   | Bis(2-ethylhex... | 0.904          | 0.828 | 0.862 | 0.833 | 0.824 | 0.841 | 0.797 | 0.841 | 4.00  |  |
| 85) c | Di-n-octyl pht... | 1.198          | 1.133 | 1.147 | 1.132 | 1.147 | 1.169 | 1.121 | 1.150 | 2.29  |  |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
Method File : 8270-BF112124.M

|       |                   |                                                 |      |
|-------|-------------------|-------------------------------------------------|------|
| 86) I | Perylene-d12      | -----ISTD-----                                  |      |
| 87)   | Indeno(1,2,3-c... | 1.209 1.283 1.299 1.304 1.306 1.409 1.313 1.303 | 4.51 |
| 88)   | Benzo(b)fluora... | 1.347 1.256 1.380 1.186 1.248 1.207 1.168 1.256 | 6.41 |
| 89)   | Benzo(k)fluora... | 1.243 1.236 1.059 1.101 1.022 1.055 0.980 1.099 | 9.34 |
| 90) C | Benzo(a)pyrene    | 1.062 1.050 1.063 1.007 0.998 1.014 0.957 1.021 | 3.81 |
| 91)   | Dibenzo(a,h)an... | 1.015 1.038 1.063 1.068 1.075 1.149 1.064 1.067 | 3.90 |
| 92)   | Benzo(g,h,i)pe... | 1.033 1.090 1.078 1.085 1.094 1.161 1.083 1.089 | 3.48 |

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(#) = Out of Range