

Method Path : Z:\SVOASRV\HPCHEM1\BNA\_G\METHODS\  
 Method File : 8270-BG061719.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Mon Jun 17 14:58:02 2019  
 Response Via : Initial Calibration

## Calibration Files

10 =BG041267.D 20 =BG041268.D 40 =BG041269.D 50 =BG041270.D 60 =BG041271.D 80 =BG041272.D 100 =BG041273.D

| Compound |                       | 10             | 20    | 40    | 50    | 60    | 80    | 100   | Avg   | %RSD  |
|----------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----    |                       |                |       |       |       |       |       |       |       |       |
| 1) I     | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2)       | 1,4-Dioxane           | 0.577          | 0.587 | 0.515 | 0.508 | 0.585 | 0.509 | 0.540 | 0.546 | 6.65  |
| 3)       | Pyridine              | 1.339          | 1.390 | 1.473 | 1.493 | 1.608 | 1.393 | 1.440 | 1.448 | 6.09  |
| 4)       | n-Nitrosodimet...     | 0.692          | 0.716 | 0.785 | 0.787 | 0.796 | 0.797 | 0.832 | 0.772 | 6.40  |
| 5) S     | 2-Fluorophenol        | 0.993          | 1.014 | 1.108 | 1.087 | 1.170 | 1.104 | 1.143 | 1.088 | 5.91  |
| 6)       | Aniline               | 2.147          | 2.091 | 2.282 | 2.190 | 2.277 | 2.170 | 2.193 | 2.193 | 3.12  |
| 7) S     | Phenol-d6             | 1.448          | 1.498 | 1.633 | 1.590 | 1.633 | 1.596 | 1.645 | 1.578 | 4.80  |
| 8)       | 2-Chlorophenol        | 1.247          | 1.235 | 1.325 | 1.258 | 1.324 | 1.273 | 1.290 | 1.279 | 2.80  |
| 9)       | Benzaldehyde          | 1.195          | 1.130 | 1.002 | 0.947 | 0.944 | 0.837 |       | 1.009 | 13.07 |
| 10) C    | Phenol                | 1.571          | 1.640 | 1.777 | 1.674 | 1.763 | 1.719 | 1.732 | 1.697 | 4.31  |
| 11)      | bis(2-Chloroet...     | 1.240          | 1.246 | 1.348 | 1.262 | 1.334 | 1.283 | 1.299 | 1.287 | 3.27  |
| 12)      | 1,3-Dichlorobe...     | 1.542          | 1.552 | 1.648 | 1.587 | 1.658 | 1.600 | 1.623 | 1.601 | 2.79  |
| 13) C    | 1,4-Dichlorobe...     | 1.595          | 1.623 | 1.666 | 1.624 | 1.662 | 1.621 | 1.660 | 1.636 | 1.66  |
| 14)      | 1,2-Dichlorobe...     | 1.589          | 1.503 | 1.583 | 1.544 | 1.627 | 1.540 | 1.552 | 1.562 | 2.59  |
| 15)      | Benzyl Alcohol        | 1.495          | 1.419 | 1.555 | 1.484 | 1.529 | 1.549 | 1.552 | 1.512 | 3.29  |
| 16)      | 2,2'-oxybis(1-...     | 2.121          | 2.085 | 2.220 | 2.097 | 2.126 | 2.043 | 2.060 | 2.107 | 2.75  |
| 17)      | 2-Methylphenol        | 1.140          | 1.189 | 1.260 | 1.191 | 1.252 | 1.231 | 1.229 | 1.213 | 3.48  |
| 18)      | Hexachloroethane      | 0.656          | 0.627 | 0.651 | 0.641 | 0.668 | 0.651 | 0.645 | 0.648 | 2.00  |
| 19) P    | n-Nitroso-di-n...     | 1.286          | 1.243 | 1.343 | 1.264 | 1.269 | 1.276 | 1.251 | 1.276 | 2.59  |
| 20)      | 3+4-Methylphenols     | 1.556          | 1.424 | 1.714 | 1.626 | 1.672 | 1.650 | 1.661 | 1.615 | 6.02  |
|          |                       |                |       |       |       |       |       |       |       |       |
| 21) I    | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |
| 22)      | Acetophenone          | 0.580          | 0.580 | 0.575 | 0.594 | 0.577 | 0.582 | 0.586 | 0.582 | 1.06  |
| 23) S    | Nitrobenzene-d5       | 0.471          | 0.464 | 0.473 | 0.492 | 0.474 | 0.479 | 0.475 | 0.476 | 1.79  |
| 24)      | Nitrobenzene          | 0.458          | 0.481 | 0.480 | 0.484 | 0.479 | 0.480 | 0.485 | 0.478 | 1.91  |
| 25)      | Isophorone            | 0.875          | 0.874 | 0.876 | 0.888 | 0.861 | 0.879 | 0.855 | 0.872 | 1.28  |
| 26) C    | 2-Nitrophenol         | 0.177          | 0.183 | 0.192 | 0.202 | 0.196 | 0.203 | 0.204 | 0.194 | 5.45  |
| 27)      | 2,4-Dimethylph...     | 0.276          | 0.285 | 0.285 | 0.304 | 0.296 | 0.288 | 0.301 | 0.291 | 3.51  |
| 28)      | bis(2-Chloroet...     | 0.422          | 0.461 | 0.466 | 0.471 | 0.452 | 0.457 | 0.453 | 0.455 | 3.55  |
| 29) C    | 2,4-Dichloroph...     | 0.310          | 0.341 | 0.368 | 0.371 | 0.377 | 0.374 | 0.381 | 0.360 | 7.10  |
| 30)      | 1,2,4-Trichlor...     | 0.453          | 0.459 | 0.464 | 0.468 | 0.459 | 0.463 | 0.466 | 0.462 | 1.06  |
| 31)      | Naphthalene           | 1.080          | 1.077 | 1.094 | 1.105 | 1.088 | 1.083 | 1.083 | 1.087 | 0.91  |
| 32)      | Benzoic acid          | 0.175          | 0.154 | 0.206 | 0.206 | 0.204 |       |       | 0.189 | 12.52 |
| 33)      | 4-Chloroaniline       | 0.409          | 0.439 | 0.467 | 0.493 | 0.476 | 0.476 | 0.471 | 0.462 | 6.13  |
| 34) C    | Hexachlorobuta...     | 0.388          | 0.370 | 0.353 | 0.366 | 0.365 | 0.360 | 0.362 | 0.366 | 3.02  |
| 35)      | Caprolactam           | 0.122          | 0.121 | 0.122 | 0.128 | 0.130 | 0.124 | 0.122 | 0.124 | 2.88  |
| 36) C    | 4-Chloro-3-met...     | 0.403          | 0.398 | 0.417 | 0.427 | 0.429 | 0.427 | 0.413 | 0.416 | 2.93  |
| 37)      | 2-Methylnaphth...     | 0.780          | 0.801 | 0.806 | 0.821 | 0.798 | 0.808 | 0.789 | 0.801 | 1.69  |
| 38)      | 1-Methylnaphth...     | 0.787          | 0.757 | 0.769 | 0.784 | 0.757 | 0.765 | 0.744 | 0.766 | 2.02  |

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|       |                   |                |       |       |       |       |       |       |       |       |  |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 39) I | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 40)   | 1,2,4,5-Tetrac... | 0.809          | 0.818 | 0.831 | 0.834 | 0.826 | 0.828 | 0.834 | 0.826 | 1.15  |  |
| 41) P | Hexachlorocycl... | 0.507          | 0.538 | 0.568 | 0.558 | 0.574 | 0.567 | 0.582 | 0.556 | 4.62  |  |
| 42) S | 2,4,6-Tribromo... | 0.290          | 0.303 | 0.307 | 0.318 | 0.321 | 0.305 | 0.306 | 0.307 | 3.31  |  |
| 43) C | 2,4,6-Trichlor... | 0.486          | 0.497 | 0.509 | 0.527 | 0.519 | 0.523 | 0.515 | 0.511 | 2.92  |  |
| 44)   | 2,4,5-Trichlor... | 0.498          | 0.511 | 0.538 | 0.536 | 0.532 | 0.533 | 0.533 | 0.526 | 2.88  |  |
| 45) S | 2-Fluorobiphenyl  | 1.524          | 1.506 | 1.489 | 1.485 | 1.462 | 1.428 | 1.407 | 1.472 | 2.86  |  |
| 46)   | 1,1'-Biphenyl     | 1.557          | 1.470 | 1.509 | 1.548 | 1.511 | 1.494 | 1.494 | 1.512 | 2.05  |  |
| 47)   | 2-Chloronaphth... | 1.267          | 1.312 | 1.298 | 1.318 | 1.324 | 1.290 | 1.304 | 1.302 | 1.48  |  |
| 48)   | 2-Nitroaniline    | 0.436          | 0.455 | 0.484 | 0.503 | 0.496 | 0.472 | 0.492 | 0.477 | 5.08  |  |
| 49)   | Acenaphthylene    | 2.061          | 1.985 | 1.971 | 2.013 | 1.985 | 1.910 | 1.902 | 1.975 | 2.82  |  |
| 50)   | Dimethylphthalate | 1.837          | 1.783 | 1.775 | 1.811 | 1.819 | 1.725 | 1.707 | 1.780 | 2.71  |  |
| 51)   | 2,6-Dinitrotol... | 0.356          | 0.365 | 0.372 | 0.396 | 0.389 | 0.372 | 0.378 | 0.375 | 3.60  |  |
| 52) C | Acenaphthene      | 1.192          | 1.134 | 1.152 | 1.176 | 1.172 | 1.142 | 1.152 | 1.160 | 1.77  |  |
| 53)   | 3-Nitroaniline    | 0.336          | 0.339 | 0.372 | 0.388 | 0.396 | 0.378 | 0.379 | 0.370 | 6.35  |  |
| 54) P | 2,4-Dinitrophenol | 0.145          | 0.221 | 0.242 | 0.260 | 0.272 | 0.269 | 0.272 | 0.240 | 19.12 |  |
| 55)   | Dibenzofuran      | 2.081          | 2.029 | 2.026 | 2.060 | 2.034 | 1.957 | 1.931 | 2.017 | 2.67  |  |
| 56) P | 4-Nitrophenol     | 0.178          | 0.214 | 0.275 | 0.285 | 0.292 | 0.275 | 0.279 | 0.257 | 16.91 |  |
| 57)   | 2,4-Dinitrotol... | 0.511          | 0.545 | 0.539 | 0.575 | 0.573 | 0.543 | 0.554 | 0.548 | 3.95  |  |
| 58)   | Fluorene          | 1.619          | 1.568 | 1.587 | 1.624 | 1.623 | 1.548 | 1.536 | 1.586 | 2.34  |  |
| 59)   | 2,3,4,6-Tetrac... | 0.567          | 0.534 | 0.559 | 0.550 | 0.565 | 0.524 | 0.507 | 0.544 | 4.18  |  |
| 60)   | Diethylphthalate  | 1.826          | 1.818 | 1.800 | 1.858 | 1.874 | 1.752 | 1.733 | 1.809 | 2.85  |  |
| 61)   | 4-Chlorophenyl... | 1.012          | 1.069 | 1.029 | 1.045 | 1.043 | 1.025 | 1.003 | 1.032 | 2.16  |  |
| 62)   | 4-Nitroaniline    | 0.365          | 0.372 | 0.391 | 0.422 | 0.424 | 0.409 | 0.384 | 0.395 | 5.93  |  |
| 63)   | Azobenzene        | 1.643          | 1.644 | 1.616 | 1.661 | 1.643 | 1.556 | 1.532 | 1.614 | 3.09  |  |
| 64) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 65)   | 4,6-Dinitro-2-... | 0.109          | 0.119 | 0.134 | 0.134 | 0.134 | 0.137 | 0.141 | 0.130 | 8.75  |  |
| 66) c | n-Nitrosodiphe... | 0.515          | 0.521 | 0.538 | 0.540 | 0.533 | 0.539 | 0.532 | 0.531 | 1.81  |  |
| 67)   | 4-Bromophenyl-... | 0.252          | 0.256 | 0.258 | 0.257 | 0.261 | 0.260 | 0.266 | 0.259 | 1.71  |  |
| 68)   | Hexachlorobenzene | 0.273          | 0.272 | 0.280 | 0.276 | 0.277 | 0.282 | 0.278 | 0.277 | 1.27  |  |
| 69)   | Atrazine          | 0.234          | 0.239 | 0.209 | 0.178 | 0.158 | 0.114 | 0.081 | 0.173 | 34.56 |  |
| 70) C | Pentachlorophenol | 0.117          | 0.134 | 0.150 | 0.147 | 0.150 | 0.148 | 0.146 | 0.142 | 8.54  |  |
| 71)   | Phenanthrene      | 1.096          | 1.093 | 1.070 | 1.067 | 1.066 | 1.043 | 1.031 | 1.067 | 2.23  |  |
| 72)   | Anthracene        | 1.043          | 1.073 | 1.060 | 1.069 | 1.064 | 1.041 | 1.012 | 1.052 | 2.04  |  |
| 73)   | Carbazole         | 0.904          | 0.930 | 0.920 | 0.932 | 0.943 | 0.910 | 0.901 | 0.920 | 1.73  |  |
| 74)   | Di-n-butylphth... | 1.140          | 1.172 | 1.156 | 1.169 | 1.170 | 1.119 | 1.108 | 1.148 | 2.27  |  |
| 75) C | Fluoranthene      | 1.457          | 1.496 | 1.430 | 1.431 | 1.429 | 1.344 | 1.332 | 1.417 | 4.16  |  |
| 76) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 77)   | Benzidine         | 0.492          | 0.527 | 0.512 | 0.504 | 0.491 | 0.377 | 0.484 |       | 11.12 |  |
| 78)   | Pyrene            | 1.375          | 1.373 | 1.415 | 1.350 | 1.352 | 1.308 | 1.269 | 1.349 | 3.55  |  |
| 79) S | Terphenyl-d14     | 1.085          | 1.069 | 1.069 | 1.013 | 1.006 | 0.931 | 0.890 | 1.009 | 7.38  |  |
| 80)   | Butylbenzylpht... | 0.471          | 0.504 | 0.521 | 0.517 | 0.528 | 0.513 | 0.517 | 0.510 | 3.68  |  |
| 81)   | Benzo(a)anthra... | 1.358          | 1.368 | 1.386 | 1.367 | 1.379 | 1.316 | 1.305 | 1.354 | 2.32  |  |
| 82)   | 3,3'-Dichlorob... | 0.452          | 0.471 | 0.488 | 0.476 | 0.496 | 0.472 | 0.472 | 0.475 | 2.93  |  |
| 83)   | Chrysene          | 1.320          | 1.332 | 1.337 | 1.298 | 1.315 | 1.265 | 1.249 | 1.302 | 2.57  |  |
| 84)   | Bis(2-ethylhex... | 0.645          | 0.670 | 0.719 | 0.701 | 0.718 | 0.705 | 0.709 | 0.695 | 3.97  |  |
| 85) c | Di-n-octyl pht... | 1.087          | 1.142 | 1.200 | 1.192 | 1.230 | 1.189 | 1.194 | 1.176 | 4.02  |  |
| 86)   | Indeno(1,2,3-c... | 1.396          | 1.516 | 1.565 | 1.552 | 1.607 | 1.577 | 1.602 | 1.545 | 4.69  |  |

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(#) = Out of Range