

Method Path : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\  
 Method File : 8270E-BP082622.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Sat Aug 27 00:36:07 2022  
 Response Via : Initial Calibration

## Calibration Files

5 =BP011573.D 10 =BP011574.D 20 =BP011575.D 40 =BP011576.D 50 =BP011577.D 60 =BP011578.D 80 =BP011579.D

|       | Compound              | 5              | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           | 0.751          | 0.670 | 0.632 | 0.591 | 0.536 | 0.536 | 0.518 | 0.605 | 14.11 |
| 3)    | Pyridine              | 1.805          | 1.753 | 1.745 | 1.611 | 1.515 | 1.536 | 1.540 | 1.643 | 7.37  |
| 4)    | n-Nitrosodimet...     | 1.108          | 1.042 | 1.020 | 0.965 | 0.861 | 0.856 | 0.849 | 0.957 | 10.88 |
| 5) S  | 2-Fluorophenol        | 1.291          | 1.272 | 1.270 | 1.207 | 1.163 | 1.179 | 1.155 | 1.220 | 4.69  |
| 6)    | Aniline               | 1.826          | 1.990 | 2.042 | 1.960 | 1.865 | 1.874 | 1.907 | 1.923 | 4.00  |
| 7) S  | Phenol-d6             | 1.596          | 1.655 | 1.691 | 1.654 | 1.588 | 1.596 | 1.609 | 1.627 | 2.43  |
| 8)    | 2-Chlorophenol        | 1.391          | 1.455 | 1.442 | 1.368 | 1.348 | 1.365 | 1.360 | 1.390 | 3.04  |
| 9)    | Benzaldehyde          | 1.212          | 1.198 | 1.134 | 0.990 | 0.870 | 0.834 | 0.761 | 1.000 | 18.44 |
| 10) C | Phenol                | 1.689          | 1.743 | 1.785 | 1.740 | 1.636 | 1.661 | 1.674 | 1.704 | 3.12  |
| 11)   | bis(2-Chloroet...     | 1.358          | 1.375 | 1.402 | 1.345 | 1.252 | 1.257 | 1.243 | 1.319 | 5.00  |
| 12)   | 1,3-Dichlorobe...     | 1.549          | 1.571 | 1.541 | 1.446 | 1.438 | 1.433 | 1.404 | 1.483 | 4.59  |
| 13) C | 1,4-Dichlorobe...     | 1.567          | 1.586 | 1.568 | 1.473 | 1.455 | 1.468 | 1.441 | 1.508 | 4.13  |
| 14)   | 1,2-Dichlorobe...     | 1.523          | 1.538 | 1.519 | 1.429 | 1.429 | 1.418 | 1.404 | 1.466 | 3.96  |
| 15)   | Benzyl Alcohol        | 1.146          | 1.286 | 1.385 | 1.401 | 1.306 | 1.333 | 1.349 | 1.315 | 6.46  |
| 16)   | 2,2'-oxybis(1-...     | 2.106          | 2.172 | 2.184 | 2.041 | 1.824 | 1.815 | 1.768 | 1.987 | 9.05  |
| 17)   | 2-Methylphenol        | 1.102          | 1.188 | 1.269 | 1.228 | 1.169 | 1.169 | 1.189 | 1.188 | 4.40  |
| 18)   | Hexachloroethane      | 0.625          | 0.655 | 0.658 | 0.632 | 0.612 | 0.617 | 0.597 | 0.628 | 3.56  |
| 19) P | n-Nitroso-di-n...     | 1.140          | 1.239 | 1.328 | 1.270 | 1.170 | 1.186 | 1.198 | 1.219 | 5.31  |
| 20)   | 3+4-Methylphenols     | 1.477          | 1.689 | 1.778 | 1.721 | 1.638 | 1.670 | 1.680 | 1.665 | 5.65  |
| 21) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |
| 22)   | Acetophenone          | 0.532          | 0.556 | 0.569 | 0.535 | 0.535 | 0.544 | 0.541 | 0.544 | 2.47  |
| 23) S | Nitrobenzene-d5       | 0.417          | 0.439 | 0.446 | 0.424 | 0.419 | 0.427 | 0.422 | 0.428 | 2.50  |
| 24)   | Nitrobenzene          | 0.407          | 0.448 | 0.458 | 0.428 | 0.419 | 0.426 | 0.422 | 0.430 | 4.03  |
| 25)   | Isophorone            | 0.673          | 0.734 | 0.774 | 0.737 | 0.733 | 0.737 | 0.741 | 0.733 | 4.09  |
| 26) C | 2-Nitrophenol         | 0.144          | 0.151 | 0.168 | 0.173 | 0.181 | 0.187 | 0.190 | 0.171 | 10.21 |
| 27)   | 2,4-Dimethylph...     | 0.246          | 0.268 | 0.273 | 0.262 | 0.268 | 0.273 | 0.272 | 0.266 | 3.61  |
| 28)   | bis(2-Chloroet...     | 0.383          | 0.419 | 0.420 | 0.397 | 0.393 | 0.396 | 0.392 | 0.400 | 3.49  |
| 29) C | 2,4-Dichloroph...     | 0.267          | 0.282 | 0.301 | 0.291 | 0.310 | 0.313 | 0.315 | 0.297 | 6.03  |
| 30)   | 1,2,4-Trichlor...     | 0.315          | 0.320 | 0.313 | 0.294 | 0.317 | 0.323 | 0.320 | 0.314 | 3.11  |
| 31)   | Naphthalene           | 1.094          | 1.143 | 1.136 | 1.065 | 1.084 | 1.105 | 1.100 | 1.104 | 2.50  |
| 32)   | Benzoic acid          | 0.174          | 0.213 | 0.242 | 0.266 | 0.269 | 0.282 | 0.241 |       | 17.02 |
| 33)   | 4-Chloroaniline       | 0.413          | 0.444 | 0.475 | 0.455 | 0.470 | 0.474 | 0.480 | 0.459 | 5.22  |
| 34) C | Hexachlorobuta...     | 0.194          | 0.199 | 0.196 | 0.186 | 0.207 | 0.213 | 0.207 | 0.200 | 4.73  |
| 35)   | Caprolactam           | 0.093          | 0.107 | 0.121 | 0.118 | 0.121 | 0.121 | 0.124 | 0.115 | 9.62  |
| 36) C | 4-Chloro-3-met...     | 0.337          | 0.381 | 0.412 | 0.393 | 0.398 | 0.401 | 0.409 | 0.390 | 6.62  |
| 37)   | 2-Methylnaphth...     | 0.714          | 0.772 | 0.779 | 0.748 | 0.778 | 0.783 | 0.794 | 0.767 | 3.55  |
| 38)   | 1-Methylnaphth...     | 0.713          | 0.759 | 0.779 | 0.731 | 0.764 | 0.775 | 0.778 | 0.757 | 3.39  |

|                                                                                   |                   |                |       |       |       |       |       |       |       |       |
|-----------------------------------------------------------------------------------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\svoasrv\HPCHEM1\BNA_P\Methods\<br>Method File : 8270E-BP082622.M |                   |                |       |       |       |       |       |       |       |       |
| 39) I                                                                             | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 40)                                                                               | 1,2,4,5-Tetrac... | 0.498          | 0.497 | 0.500 | 0.483 | 0.520 | 0.542 | 0.545 | 0.512 | 4.64  |
| 41) P                                                                             | Hexachlorocycl... |                | 0.179 | 0.212 | 0.238 | 0.267 | 0.282 | 0.280 | 0.243 | 17.03 |
| 42) S                                                                             | 2,4,6-Tribromo... | 0.205          | 0.214 | 0.231 | 0.228 | 0.297 | 0.306 | 0.312 | 0.256 | 18.28 |
| 43) C                                                                             | 2,4,6-Trichlor... | 0.328          | 0.339 | 0.367 | 0.361 | 0.382 | 0.394 | 0.397 | 0.367 | 7.21  |
| 44)                                                                               | 2,4,5-Trichlor... | 0.370          | 0.390 | 0.415 | 0.409 | 0.433 | 0.447 | 0.449 | 0.416 | 7.09  |
| 45) S                                                                             | 2-Fluorobiphenyl  | 1.327          | 1.328 | 1.329 | 1.281 | 1.318 | 1.362 | 1.363 | 1.330 | 2.09  |
| 46)                                                                               | 1,1'-Biphenyl     | 1.492          | 1.515 | 1.528 | 1.457 | 1.461 | 1.515 | 1.508 | 1.497 | 1.84  |
| 47)                                                                               | 2-Chloronaphth... | 1.137          | 1.146 | 1.157 | 1.108 | 1.117 | 1.163 | 1.168 | 1.142 | 2.01  |
| 48)                                                                               | 2-Nitroaniline    | 0.363          | 0.408 | 0.462 | 0.476 | 0.451 | 0.464 | 0.469 | 0.442 | 9.34  |
| 49)                                                                               | Acenaphthylene    | 1.813          | 1.911 | 1.967 | 1.895 | 1.903 | 1.960 | 1.961 | 1.916 | 2.85  |
| 50)                                                                               | Dimethylphthalate | 1.612          | 1.667 | 1.693 | 1.593 | 1.619 | 1.653 | 1.645 | 1.640 | 2.11  |
| 51)                                                                               | 2,6-Dinitrotol... | 0.291          | 0.313 | 0.345 | 0.335 | 0.340 | 0.350 | 0.352 | 0.332 | 6.73  |
| 52) C                                                                             | Acenaphthene      | 1.141          | 1.170 | 1.198 | 1.141 | 1.137 | 1.177 | 1.182 | 1.164 | 2.06  |
| 53)                                                                               | 3-Nitroaniline    | 0.289          | 0.334 | 0.390 | 0.390 | 0.392 | 0.401 | 0.407 | 0.372 | 11.72 |
| 54) P                                                                             | 2,4-Dinitrophenol | 0.134          | 0.148 | 0.185 | 0.199 | 0.214 | 0.226 | 0.230 | 0.191 | 19.69 |
| 55)                                                                               | Dibenzofuran      | 1.786          | 1.843 | 1.872 | 1.771 | 1.808 | 1.853 | 1.865 | 1.828 | 2.19  |
| 56) P                                                                             | 4-Nitrophenol     | 0.215          | 0.271 | 0.313 | 0.322 | 0.323 | 0.336 | 0.337 | 0.303 | 14.68 |
| 57)                                                                               | 2,4-Dinitrotol... | 0.392          | 0.442 | 0.495 | 0.484 | 0.497 | 0.514 | 0.518 | 0.477 | 9.47  |
| 58)                                                                               | Fluorene          | 1.471          | 1.558 | 1.604 | 1.516 | 1.547 | 1.595 | 1.625 | 1.559 | 3.45  |
| 59)                                                                               | 2,3,4,6-Tetrac... | 0.349          | 0.363 | 0.378 | 0.367 | 0.404 | 0.411 | 0.415 | 0.384 | 6.78  |
| 60)                                                                               | Diethylphthalate  | 1.775          | 1.866 | 1.933 | 1.816 | 1.807 | 1.860 | 1.845 | 1.843 | 2.76  |
| 61)                                                                               | 4-Chlorophenyl... | 0.654          | 0.696 | 0.712 | 0.662 | 0.716 | 0.730 | 0.743 | 0.702 | 4.77  |
| 62)                                                                               | 4-Nitroaniline    | 0.248          | 0.326 | 0.387 | 0.399 | 0.403 | 0.418 | 0.422 | 0.372 | 17.01 |
| 63)                                                                               | Azobenzene        | 1.675          | 1.912 | 1.999 | 1.888 | 1.774 | 1.801 | 1.785 | 1.834 | 5.82  |
| 64) I                                                                             | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 65)                                                                               | 4,6-Dinitro-2-... | 0.089          | 0.105 | 0.120 | 0.122 | 0.131 | 0.137 | 0.139 | 0.121 | 15.05 |
| 66) c                                                                             | n-Nitrosodiphe... | 0.592          | 0.625 | 0.628 | 0.599 | 0.599 | 0.616 | 0.621 | 0.611 | 2.34  |
| 67)                                                                               | 4-Bromophenyl-... | 0.191          | 0.190 | 0.196 | 0.185 | 0.210 | 0.216 | 0.219 | 0.201 | 6.81  |
| 68)                                                                               | Hexachlorobenzene | 0.213          | 0.219 | 0.223 | 0.212 | 0.251 | 0.258 | 0.259 | 0.234 | 9.15  |
| 69)                                                                               | Atrazine          | 0.200          | 0.214 | 0.223 | 0.209 | 0.211 | 0.216 | 0.213 | 0.212 | 3.25  |
| 70) C                                                                             | Pentachlorophenol | 0.114          | 0.128 | 0.143 | 0.141 | 0.163 | 0.170 | 0.170 | 0.147 | 14.71 |
| 71)                                                                               | Phenanthrene      | 1.139          | 1.199 | 1.190 | 1.123 | 1.137 | 1.160 | 1.168 | 1.159 | 2.44  |
| 72)                                                                               | Anthracene        | 1.047          | 1.135 | 1.152 | 1.100 | 1.117 | 1.144 | 1.152 | 1.121 | 3.36  |
| 73)                                                                               | Carbazole         | 1.028          | 1.100 | 1.120 | 1.053 | 1.057 | 1.085 | 1.091 | 1.076 | 2.94  |
| 74)                                                                               | Di-n-butylphth... | 1.384          | 1.486 | 1.577 | 1.518 | 1.480 | 1.535 | 1.527 | 1.501 | 4.08  |
| 75) C                                                                             | Fluoranthene      | 1.293          | 1.373 | 1.402 | 1.308 | 1.365 | 1.395 | 1.412 | 1.364 | 3.39  |
| 76) I                                                                             | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 77)                                                                               | Benzidine         | 0.433          | 0.403 | 0.436 | 0.508 | 0.419 | 0.428 | 0.412 | 0.434 | 7.97  |
| 78)                                                                               | Pyrene            | 1.261          | 1.291 | 1.341 | 1.311 | 1.294 | 1.336 | 1.321 | 1.308 | 2.16  |
| 79) S                                                                             | Terphenyl-d14     | 0.954          | 0.974 | 1.013 | 1.016 | 1.050 | 1.095 | 1.109 | 1.030 | 5.62  |
| 80)                                                                               | Butylbenzylpht... | 0.599          | 0.646 | 0.709 | 0.721 | 0.666 | 0.692 | 0.681 | 0.673 | 6.11  |
| 81)                                                                               | Benzo(a)anthra... | 1.323          | 1.377 | 1.383 | 1.330 | 1.322 | 1.375 | 1.367 | 1.354 | 2.02  |
| 82)                                                                               | 3,3'-Dichlorob... | 0.387          | 0.441 | 0.465 | 0.454 | 0.465 | 0.485 | 0.495 | 0.456 | 7.73  |
| 83)                                                                               | Chrysene          | 1.282          | 1.334 | 1.345 | 1.267 | 1.262 | 1.322 | 1.307 | 1.303 | 2.54  |
| 84)                                                                               | Bis(2-ethylhex... | 0.873          | 0.979 | 1.082 | 1.099 | 1.008 | 1.058 | 1.036 | 1.019 | 7.51  |
| 85) c                                                                             | Di-n-octyl pht... | 1.503          | 1.709 | 1.850 | 1.815 | 1.670 | 1.723 | 1.725 | 1.714 | 6.55  |

Method Path : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\

Method File : 8270E-BP082622.M

| 86) I | Perylene-d12      |       |       |       |       |       |       |       |       |  |      |
|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|------|
| 87)   | Indeno(1,2,3-c... | 1.388 | 1.475 | 1.478 | 1.369 | 1.349 | 1.384 | 1.438 | 1.412 |  | 3.67 |
| 88)   | Benzo(b)fluora... | 1.163 | 1.219 | 1.279 | 1.239 | 1.291 | 1.290 | 1.308 | 1.256 |  | 4.11 |
| 89)   | Benzo(k)fluora... | 1.224 | 1.274 | 1.301 | 1.319 | 1.315 | 1.358 | 1.367 | 1.308 |  | 3.74 |
| 90) C | Benzo(a)pyrene    | 0.972 | 1.049 | 1.063 | 1.054 | 1.058 | 1.086 | 1.097 | 1.054 |  | 3.81 |
| 91)   | Dibenzo(a,h)an... | 1.144 | 1.248 | 1.237 | 1.171 | 1.155 | 1.192 | 1.230 | 1.197 |  | 3.51 |
| 92)   | Benzo(g,h,i)pe... | 1.123 | 1.214 | 1.176 | 0.991 | 0.974 | 0.989 | 1.065 | 1.076 |  | 9.01 |

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(#) = Out of Range