

Method Path : Z:\svoasrv\HPCHEM1\BNA\_P\Methods\  
 Method File : 8270E-BP031722.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Mar 17 18:26:53 2022  
 Response Via : Initial Calibration

## Calibration Files

5 =BP009440.D 10 =BP009441.D 20 =BP009442.D 40 =BP009443.D 50 =BP009444.D 60 =BP009445.D 80 =BP009446.D

|       | Compound              | 5              | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           | 0.528          | 0.489 | 0.478 | 0.430 | 0.415 | 0.416 | 0.421 | 0.454 | 9.81  |
| 3)    | Pyridine              | 1.291          | 1.226 | 1.314 | 1.191 | 1.182 | 1.175 | 1.175 | 1.222 | 4.75  |
| 4)    | n-Nitrosodimet...     | 0.477          | 0.456 | 0.463 | 0.433 | 0.454 | 0.437 | 0.430 | 0.450 | 3.91  |
| 5) S  | 2-Fluorophenol        | 1.252          | 1.191 | 1.200 | 1.107 | 1.101 | 1.093 | 1.074 | 1.146 | 5.94  |
| 6)    | Aniline               | 1.839          | 1.811 | 1.923 | 1.706 | 1.744 | 1.690 | 1.647 | 1.766 | 5.46  |
| 7) S  | Phenol-d6             | 1.660          | 1.610 | 1.664 | 1.484 | 1.515 | 1.469 | 1.441 | 1.549 | 6.05  |
| 8)    | 2-Chlorophenol        | 1.414          | 1.389 | 1.387 | 1.252 | 1.265 | 1.233 | 1.203 | 1.306 | 6.68  |
| 9)    | Benzaldehyde          | 0.958          | 0.936 | 0.938 | 0.695 | 0.711 | 0.688 |       | 0.821 | 16.46 |
| 10) C | Phenol                | 1.682          | 1.579 | 1.659 | 1.493 | 1.530 | 1.482 | 1.455 | 1.554 | 5.71  |
| 11)   | bis(2-Chloroet...     | 1.350          | 1.283 | 1.315 | 1.179 | 1.199 | 1.163 | 1.121 | 1.230 | 7.00  |
| 12)   | 1,3-Dichlorobe...     | 1.650          | 1.564 | 1.551 | 1.412 | 1.409 | 1.390 | 1.344 | 1.474 | 7.67  |
| 13) C | 1,4-Dichlorobe...     | 1.692          | 1.610 | 1.587 | 1.442 | 1.445 | 1.411 | 1.364 | 1.507 | 8.07  |
| 14)   | 1,2-Dichlorobe...     | 1.652          | 1.552 | 1.541 | 1.393 | 1.391 | 1.357 | 1.314 | 1.457 | 8.55  |
| 15)   | Benzyl Alcohol        | 1.281          | 1.256 | 1.355 | 1.191 | 1.231 | 1.178 | 1.154 | 1.235 | 5.61  |
| 16)   | 2,2'-oxybis(1-...     | 1.437          | 1.414 | 1.450 | 1.276 | 1.290 | 1.256 | 1.209 | 1.333 | 7.35  |
| 17)   | 2-Methylphenol        | 1.118          | 1.120 | 1.167 | 1.026 | 1.052 | 1.014 | 0.999 | 1.071 | 5.97  |
| 18)   | Hexachloroethane      | 0.598          | 0.559 | 0.551 | 0.506 | 0.504 | 0.498 | 0.483 | 0.528 | 7.87  |
| 19) P | n-Nitroso-di-n...     | 1.040          | 1.058 | 1.103 | 0.934 | 0.944 | 0.905 | 0.874 | 0.980 | 8.82  |
| 20)   | 3+4-Methylphenols     | 1.516          | 1.516 | 1.653 | 1.418 | 1.458 | 1.390 | 1.359 | 1.473 | 6.75  |
| 21) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |
| 22)   | Acetophenone          | 0.522          | 0.504 | 0.516 | 0.481 | 0.486 | 0.480 | 0.477 | 0.495 | 3.77  |
| 23) S | Nitrobenzene-d5       | 0.386          | 0.373 | 0.387 | 0.369 | 0.377 | 0.371 | 0.371 | 0.376 | 1.98  |
| 24)   | Nitrobenzene          | 0.362          | 0.353 | 0.367 | 0.346 | 0.355 | 0.351 | 0.353 | 0.356 | 1.99  |
| 25)   | Isophorone            | 0.672          | 0.652 | 0.681 | 0.620 | 0.640 | 0.613 | 0.615 | 0.642 | 4.28  |
| 26) C | 2-Nitrophenol         | 0.180          | 0.176 | 0.188 | 0.183 | 0.193 | 0.189 | 0.188 | 0.185 | 3.17  |
| 27)   | 2,4-Dimethylph...     | 0.260          | 0.256 | 0.277 | 0.256 | 0.264 | 0.258 | 0.259 | 0.261 | 2.88  |
| 28)   | bis(2-Chloroet...     | 0.439          | 0.424 | 0.439 | 0.408 | 0.411 | 0.406 | 0.399 | 0.418 | 3.89  |
| 29) C | 2,4-Dichloroph...     | 0.323          | 0.308 | 0.333 | 0.315 | 0.324 | 0.315 | 0.315 | 0.319 | 2.54  |
| 30)   | 1,2,4-Trichlor...     | 0.394          | 0.374 | 0.376 | 0.361 | 0.363 | 0.360 | 0.357 | 0.370 | 3.49  |
| 31)   | Naphthalene           | 1.117          | 1.047 | 1.065 | 0.996 | 1.009 | 0.992 | 0.986 | 1.030 | 4.73  |
| 32)   | Benzoic acid          |                | 0.146 | 0.206 | 0.205 | 0.228 | 0.219 | 0.223 | 0.204 | 14.80 |
| 33)   | 4-Chloroaniline       | 0.427          | 0.418 | 0.447 | 0.410 | 0.424 | 0.406 | 0.410 | 0.420 | 3.35  |
| 34) C | Hexachlorobuta...     | 0.270          | 0.252 | 0.252 | 0.244 | 0.247 | 0.245 | 0.243 | 0.250 | 3.71  |
| 35)   | Caprolactam           | 0.112          | 0.109 | 0.120 | 0.101 | 0.111 | 0.097 | 0.103 | 0.108 | 7.18  |
| 36) C | 4-Chloro-3-met...     | 0.355          | 0.346 | 0.370 | 0.329 | 0.345 | 0.323 | 0.332 | 0.343 | 4.81  |
| 37)   | 2-Methylnaphth...     | 0.792          | 0.736 | 0.763 | 0.692 | 0.707 | 0.686 | 0.683 | 0.723 | 5.86  |
| 38)   | 1-Methylnaphth...     | 0.773          | 0.720 | 0.749 | 0.676 | 0.688 | 0.661 | 0.662 | 0.704 | 6.31  |

|                                                 |                   |                |       |       |       |       |       |       |       |       |
|-------------------------------------------------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\svoasrv\HPCHEM1\BNA_P\Methods\ |                   |                |       |       |       |       |       |       |       |       |
| Method File : 8270E-BP031722.M                  |                   |                |       |       |       |       |       |       |       |       |
| 39) I                                           | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 40)                                             | 1,2,4,5-Tetrac... | 0.680          | 0.657 | 0.666 | 0.655 | 0.653 | 0.671 | 0.664 | 0.664 | 1.46  |
| 41) P                                           | Hexachlorocycl... | 0.120          | 0.188 | 0.243 | 0.282 | 0.284 | 0.287 | 0.234 |       | 28.90 |
| 42) S                                           | 2,4,6-Tribromo... | 0.348          | 0.332 | 0.342 | 0.322 | 0.337 | 0.305 | 0.324 | 0.330 | 4.39  |
| 43) C                                           | 2,4,6-Trichlor... | 0.424          | 0.424 | 0.453 | 0.438 | 0.448 | 0.445 | 0.446 | 0.440 | 2.62  |
| 44)                                             | 2,4,5-Trichlor... | 0.488          | 0.465 | 0.483 | 0.473 | 0.480 | 0.475 | 0.481 | 0.478 | 1.56  |
| 45) S                                           | 2-Fluorobiphenyl  | 1.558          | 1.477 | 1.474 | 1.426 | 1.361 | 1.416 | 1.386 | 1.443 | 4.58  |
| 46)                                             | 1,1'-Biphenyl     | 1.598          | 1.512 | 1.520 | 1.463 | 1.436 | 1.469 | 1.446 | 1.492 | 3.78  |
| 47)                                             | 2-Chloronaphth... | 1.236          | 1.181 | 1.201 | 1.155 | 1.136 | 1.162 | 1.153 | 1.175 | 2.90  |
| 48)                                             | 2-Nitroaniline    | 0.304          | 0.307 | 0.330 | 0.318 | 0.334 | 0.318 | 0.328 | 0.320 | 3.64  |
| 49)                                             | Acenaphthylene    | 1.925          | 1.844 | 1.871 | 1.770 | 1.762 | 1.754 | 1.768 | 1.813 | 3.70  |
| 50)                                             | Dimethylphthalate | 1.662          | 1.572 | 1.578 | 1.472 | 1.474 | 1.402 | 1.448 | 1.515 | 5.99  |
| 51)                                             | 2,6-Dinitrotol... | 0.317          | 0.316 | 0.331 | 0.315 | 0.323 | 0.307 | 0.314 | 0.318 | 2.39  |
| 52) C                                           | Acenaphthene      | 1.158          | 1.117 | 1.118 | 1.056 | 1.048 | 1.034 | 1.052 | 1.083 | 4.35  |
| 53)                                             | 3-Nitroaniline    | 0.327          | 0.331 | 0.349 | 0.330 | 0.347 | 0.321 | 0.344 | 0.335 | 3.28  |
| 54) P                                           | 2,4-Dinitrophenol | 0.119          | 0.164 | 0.175 | 0.206 | 0.182 | 0.200 | 0.174 |       | 17.91 |
| 55)                                             | Dibenzofuran      | 1.974          | 1.887 | 1.890 | 1.766 | 1.749 | 1.731 | 1.742 | 1.820 | 5.27  |
| 56) P                                           | 4-Nitrophenol     | 0.197          | 0.253 | 0.254 | 0.277 | 0.247 | 0.274 | 0.250 |       | 11.55 |
| 57)                                             | 2,4-Dinitrotol... | 0.425          | 0.436 | 0.460 | 0.433 | 0.451 | 0.412 | 0.440 | 0.437 | 3.65  |
| 58)                                             | Fluorene          | 1.565          | 1.497 | 1.511 | 1.383 | 1.375 | 1.324 | 1.364 | 1.431 | 6.39  |
| 59)                                             | 2,3,4,6-Tetrac... | 0.451          | 0.423 | 0.455 | 0.425 | 0.438 | 0.410 | 0.428 | 0.433 | 3.69  |
| 60)                                             | Diethylphthalate  | 1.697          | 1.575 | 1.595 | 1.469 | 1.479 | 1.363 | 1.440 | 1.517 | 7.39  |
| 61)                                             | 4-Chlorophenyl... | 0.866          | 0.822 | 0.821 | 0.764 | 0.760 | 0.738 | 0.748 | 0.788 | 6.08  |
| 62)                                             | 4-Nitroaniline    | 0.339          | 0.344 | 0.375 | 0.350 | 0.371 | 0.324 | 0.363 | 0.352 | 5.21  |
| 63)                                             | Azobenzene        | 1.408          | 1.361 | 1.375 | 1.289 | 1.294 | 1.238 | 1.271 | 1.319 | 4.71  |
| 64) I                                           | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 65)                                             | 4,6-Dinitro-2-... | 0.101          | 0.109 | 0.132 | 0.134 | 0.143 | 0.139 | 0.143 | 0.129 | 13.09 |
| 66) c                                           | n-Nitrosodiphe... | 0.618          | 0.606 | 0.614 | 0.576 | 0.567 | 0.592 | 0.570 | 0.592 | 3.63  |
| 67)                                             | 4-Bromophenyl-... | 0.258          | 0.246 | 0.252 | 0.236 | 0.240 | 0.246 | 0.237 | 0.245 | 3.29  |
| 68)                                             | Hexachlorobenzene | 0.297          | 0.288 | 0.288 | 0.273 | 0.274 | 0.279 | 0.272 | 0.282 | 3.31  |
| 69)                                             | Atrazine          | 0.231          | 0.227 | 0.229 | 0.210 | 0.196 | 0.187 | 0.178 | 0.208 | 10.48 |
| 70) C                                           | Pentachlorophenol | 0.130          | 0.128 | 0.154 | 0.156 | 0.166 | 0.161 | 0.160 | 0.151 | 10.27 |
| 71)                                             | Phenanthrene      | 1.153          | 1.106 | 1.117 | 1.029 | 1.030 | 1.034 | 1.027 | 1.071 | 4.94  |
| 72)                                             | Anthracene        | 1.135          | 1.081 | 1.097 | 1.021 | 1.023 | 1.023 | 1.019 | 1.057 | 4.47  |
| 73)                                             | Carbazole         | 1.109          | 1.064 | 1.086 | 1.002 | 1.000 | 0.972 | 1.003 | 1.034 | 5.03  |
| 74)                                             | Di-n-butylphth... | 1.320          | 1.250 | 1.288 | 1.188 | 1.163 | 1.128 | 1.143 | 1.211 | 6.19  |
| 75) C                                           | Fluoranthene      | 1.424          | 1.345 | 1.356 | 1.247 | 1.253 | 1.194 | 1.254 | 1.296 | 6.20  |
| 76) I                                           | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 77)                                             | Benzidine         | 0.487          | 0.521 | 0.510 | 0.465 | 0.400 | 0.519 | 0.530 | 0.490 | 9.36  |
| 78)                                             | Pyrene            | 1.394          | 1.335 | 1.346 | 1.304 | 1.285 | 1.323 | 1.240 | 1.318 | 3.69  |
| 79) S                                           | Terphenyl-d14     | 1.221          | 1.171 | 1.159 | 1.111 | 1.037 | 1.096 | 1.006 | 1.114 | 6.83  |
| 80)                                             | Butylbenzylpht... | 0.601          | 0.563 | 0.584 | 0.556 | 0.546 | 0.543 | 0.529 | 0.560 | 4.43  |
| 81)                                             | Benzo(a)anthra... | 1.397          | 1.344 | 1.362 | 1.273 | 1.276 | 1.272 | 1.274 | 1.314 | 3.99  |
| 82)                                             | 3,3'-Dichlorob... | 0.544          | 0.523 | 0.533 | 0.491 | 0.488 | 0.482 | 0.492 | 0.508 | 4.93  |
| 83)                                             | Chrysene          | 1.344          | 1.278 | 1.294 | 1.210 | 1.190 | 1.207 | 1.186 | 1.244 | 4.90  |
| 84)                                             | Bis(2-ethylhex... | 0.855          | 0.825 | 0.825 | 0.767 | 0.731 | 0.742 | 0.721 | 0.781 | 6.85  |
| 85) c                                           | Di-n-octyl pht... | 1.450          | 1.457 | 1.419 | 1.305 | 1.271 | 1.247 | 1.272 | 1.346 | 6.85  |

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(#) = Out of Range