

Method Path : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\  
 Method File : 8270-BM020524.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Tue Feb 06 07:03:31 2024  
 Response Via : Initial Calibration

## Calibration Files

2.5 =BM043972.D 5 =BM043973.D 10 =BM043974.D 20 =BM043975.D 40 =BM043976.D 50 =BM043977.D 60 =BM043978.D 80 =BM043979.D

|       | Compound              | 2.5            | 5     | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           | 0.539          | 0.543 | 0.516 | 0.506 | 0.512 | 0.538 | 0.510 | 0.523 |       | 2.98  |
| 3)    | Pyridine              | 1.508          | 1.646 | 1.653 | 1.752 | 1.748 | 1.455 | 1.388 | 1.593 |       | 9.03  |
| 4)    | n-Nitrosodimet...     | 0.660          | 0.659 | 0.685 | 0.690 | 0.692 | 0.722 | 0.684 | 0.685 |       | 3.09  |
| 5) S  | 2-Fluorophenol        | 1.269          | 1.316 | 1.342 | 1.335 | 1.381 | 1.441 | 1.398 | 1.354 |       | 4.20  |
| 6)    | Aniline               | 1.817          | 1.860 | 1.975 | 2.025 | 2.048 | 2.108 | 2.104 | 1.991 |       | 5.75  |
| 7) S  | Phenol-d6             | 1.773          | 1.868 | 1.998 | 2.037 | 2.071 | 2.149 | 2.111 | 2.001 |       | 6.76  |
| 8)    | 2-Chlorophenol        | 1.415          | 1.449 | 1.503 | 1.498 | 1.525 | 1.589 | 1.546 | 1.504 |       | 3.87  |
| 9)    | Benzaldehyde          | 1.300          | 1.239 | 1.112 | 0.958 | 0.888 | 0.845 |       | 1.057 |       | 17.88 |
| 10) C | Phenol                | 1.847          | 1.889 | 1.991 | 2.006 | 2.031 | 2.098 | 2.064 | 1.990 |       | 4.58  |
| 11)   | bis(2-Chloroet...     | 1.529          | 1.538 | 1.563 | 1.561 | 1.560 | 1.606 | 1.559 | 1.559 |       | 1.58  |
| 12)   | 1,3-Dichlorobe...     | 1.663          | 1.623 | 1.611 | 1.572 | 1.616 | 1.666 | 1.613 | 1.623 |       | 2.00  |
| 13) C | 1,4-Dichlorobe...     | 1.643          | 1.628 | 1.645 | 1.610 | 1.641 | 1.690 | 1.636 | 1.642 |       | 1.48  |
| 14)   | 1,2-Dichlorobe...     | 1.648          | 1.614 | 1.638 | 1.581 | 1.596 | 1.655 | 1.603 | 1.619 |       | 1.73  |
| 15)   | Benzyl Alcohol        | 1.243          | 1.310 | 1.366 | 1.395 | 1.400 | 1.451 | 1.436 | 1.372 |       | 5.33  |
| 16)   | 2,2'-oxybis(1-...     | 2.099          | 2.102 | 2.122 | 2.074 | 2.072 | 2.114 | 2.055 | 2.091 |       | 1.17  |
| 17)   | 2-Methylphenol        | 1.119          | 1.198 | 1.276 | 1.303 | 1.311 | 1.353 | 1.344 | 1.272 |       | 6.67  |
| 18)   | Hexachloroethane      | 0.601          | 0.623 | 0.617 | 0.609 | 0.614 | 0.631 | 0.618 | 0.616 |       | 1.54  |
| 19) P | n-Nitroso-di-n...     | 1.241          | 1.250 | 1.281 | 1.351 | 1.355 | 1.342 | 1.372 | 1.341 | 1.317 | 3.89  |
| 20)   | 3+4-Methylphenols     | 1.555          | 1.667 | 1.815 | 1.835 | 1.859 | 1.925 | 1.909 | 1.795 |       | 7.55  |
| 21) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |       |
| 22)   | Acetophenone          | 0.541          | 0.534 | 0.541 | 0.533 | 0.541 | 0.556 | 0.548 | 0.542 |       | 1.48  |
| 23) S | Nitrobenzene-d5       | 0.393          | 0.402 | 0.410 | 0.412 | 0.423 | 0.436 | 0.428 | 0.415 |       | 3.66  |
| 24)   | Nitrobenzene          | 0.404          | 0.406 | 0.418 | 0.410 | 0.423 | 0.431 | 0.422 | 0.416 |       | 2.46  |
| 25)   | Isophorone            | 0.706          | 0.728 | 0.771 | 0.778 | 0.795 | 0.814 | 0.814 | 0.772 |       | 5.39  |
| 26) C | 2-Nitrophenol         | 0.136          | 0.145 | 0.161 | 0.171 | 0.181 | 0.191 | 0.193 | 0.168 |       | 13.30 |
| 27)   | 2,4-Dimethylph...     | 0.204          | 0.216 | 0.228 | 0.234 | 0.239 | 0.248 | 0.248 | 0.231 |       | 7.05  |
| 28)   | bis(2-Chloroet...     | 0.477          | 0.466 | 0.467 | 0.462 | 0.472 | 0.481 | 0.476 | 0.472 |       | 1.46  |
| 29) C | 2,4-Dichloroph...     | 0.247          | 0.267 | 0.287 | 0.301 | 0.312 | 0.323 | 0.324 | 0.295 |       | 9.91  |
| 30)   | 1,2,4-Trichlor...     | 0.333          | 0.327 | 0.327 | 0.325 | 0.335 | 0.344 | 0.339 | 0.333 |       | 2.15  |
| 31)   | Naphthalene           | 1.101          | 1.102 | 1.105 | 1.087 | 1.117 | 1.151 | 1.140 | 1.115 |       | 2.07  |
| 32)   | Benzoic acid          |                | 0.161 | 0.194 | 0.225 | 0.251 | 0.265 | 0.277 | 0.229 |       | 19.48 |
| 33)   | 4-Chloroaniline       | 0.418          | 0.432 | 0.454 | 0.463 | 0.469 | 0.484 | 0.486 | 0.458 |       | 5.56  |
| 34) C | Hexachlorobuta...     | 0.183          | 0.180 | 0.182 | 0.175 | 0.181 | 0.187 | 0.182 | 0.182 |       | 2.00  |
| 35)   | Caprolactam           | 0.096          | 0.104 | 0.119 | 0.126 | 0.128 | 0.135 | 0.137 | 0.121 |       | 12.80 |
| 36) C | 4-Chloro-3-met...     | 0.309          | 0.330 | 0.361 | 0.370 | 0.377 | 0.389 | 0.389 | 0.361 |       | 8.43  |
| 37)   | 2-Methylnaphth...     | 0.761          | 0.758 | 0.772 | 0.764 | 0.782 | 0.802 | 0.802 | 0.777 |       | 2.41  |
| 38)   | 1-Methylnaphth...     | 0.762          | 0.755 | 0.772 | 0.766 | 0.781 | 0.800 | 0.798 | 0.776 |       | 2.25  |

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|       |                   |                |       |       |       |       |       |       |       |       |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 39) I | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 40)   | 1,2,4,5-Tetrac... | 0.561          | 0.554 | 0.554 | 0.555 | 0.572 | 0.590 | 0.585 | 0.567 | 2.71  |
| 41) P | Hexachlorocycl... | 0.169          | 0.172 | 0.186 | 0.189 | 0.197 | 0.201 | 0.192 | 0.187 | 6.32  |
| 42) S | 2,4,6-Tribromo... | 0.206          | 0.219 | 0.242 | 0.249 | 0.257 | 0.267 | 0.267 | 0.244 | 9.57  |
| 43) C | 2,4,6-Trichlor... | 0.320          | 0.343 | 0.376 | 0.394 | 0.408 | 0.421 | 0.420 | 0.383 | 10.18 |
| 44)   | 2,4,5-Trichlor... | 0.368          | 0.401 | 0.436 | 0.442 | 0.461 | 0.475 | 0.477 | 0.437 | 9.19  |
| 45) S | 2-Fluorobiphenyl  | 1.439          | 1.423 | 1.453 | 1.439 | 1.472 | 1.504 | 1.458 | 1.456 | 1.83  |
| 46)   | 1,1'-Biphenyl     | 1.553          | 1.541 | 1.566 | 1.545 | 1.578 | 1.625 | 1.601 | 1.573 | 1.98  |
| 47)   | 2-Chloronaphth... | 1.225          | 1.231 | 1.253 | 1.233 | 1.267 | 1.296 | 1.276 | 1.254 | 2.12  |
| 48)   | 2-Nitroaniline    | 0.347          | 0.361 | 0.400 | 0.420 | 0.433 | 0.446 | 0.447 | 0.408 | 9.86  |
| 49)   | Acenaphthylene    | 1.785          | 1.837 | 1.920 | 1.924 | 1.953 | 2.006 | 1.997 | 1.917 | 4.23  |
| 50)   | Dimethylphthalate | 1.514          | 1.534 | 1.566 | 1.538 | 1.561 | 1.587 | 1.574 | 1.554 | 1.64  |
| 51)   | 2,6-Dinitrotol... | 0.288          | 0.311 | 0.342 | 0.349 | 0.360 | 0.369 | 0.371 | 0.341 | 9.15  |
| 52) C | Acenaphthene      | 1.177          | 1.180 | 1.216 | 1.196 | 1.227 | 1.262 | 1.249 | 1.215 | 2.72  |
| 53)   | 3-Nitroaniline    | 0.323          | 0.359 | 0.399 | 0.411 | 0.416 | 0.432 | 0.436 | 0.396 | 10.44 |
| 54) P | 2,4-Dinitrophenol |                | 0.114 | 0.147 | 0.173 | 0.190 | 0.207 | 0.217 | 0.175 | 22.23 |
| 55)   | Dibenzofuran      | 1.903          | 1.874 | 1.898 | 1.853 | 1.875 | 1.926 | 1.913 | 1.892 | 1.34  |
| 56) P | 4-Nitrophenol     | 0.269          | 0.304 | 0.347 | 0.365 | 0.371 | 0.382 | 0.386 | 0.346 | 12.69 |
| 57)   | 2,4-Dinitrotol... | 0.383          | 0.412 | 0.469 | 0.494 | 0.508 | 0.528 | 0.533 | 0.475 | 12.21 |
| 58)   | Fluorene          | 1.541          | 1.548 | 1.603 | 1.593 | 1.626 | 1.649 | 1.622 | 1.597 | 2.52  |
| 59)   | 2,3,4,6-Tetrac... | 0.341          | 0.347 | 0.382 | 0.384 | 0.391 | 0.399 | 0.397 | 0.377 | 6.29  |
| 60)   | Diethylphthalate  | 1.543          | 1.558 | 1.620 | 1.606 | 1.620 | 1.653 | 1.658 | 1.608 | 2.74  |
| 61)   | 4-Chlorophenyl... | 0.731          | 0.729 | 0.746 | 0.743 | 0.750 | 0.764 | 0.754 | 0.745 | 1.66  |
| 62)   | 4-Nitroaniline    | 0.346          | 0.386 | 0.437 | 0.455 | 0.459 | 0.473 | 0.478 | 0.433 | 11.39 |
| 63)   | Azobenzene        | 1.485          | 1.543 | 1.631 | 1.635 | 1.632 | 1.670 | 1.648 | 1.606 | 4.14  |
| 64) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |
| 65)   | 4,6-Dinitro-2-... |                | 0.079 | 0.099 | 0.111 | 0.120 | 0.129 | 0.134 | 0.112 | 18.15 |
| 66) c | n-Nitrosodiphe... | 0.552          | 0.572 | 0.595 | 0.593 | 0.611 | 0.626 | 0.621 | 0.596 | 4.50  |
| 67)   | 4-Bromophenyl-... | 0.186          | 0.185 | 0.193 | 0.194 | 0.200 | 0.210 | 0.211 | 0.197 | 5.32  |
| 68)   | Hexachlorobenzene | 0.231          | 0.232 | 0.233 | 0.229 | 0.234 | 0.243 | 0.242 | 0.235 | 2.37  |
| 69)   | Atrazine          | 0.170          | 0.169 | 0.176 | 0.173 | 0.162 | 0.159 | 0.145 | 0.165 | 6.28  |
| 70) C | Pentachlorophenol | 0.118          | 0.133 | 0.153 | 0.161 | 0.166 | 0.175 | 0.173 | 0.154 | 14.00 |
| 71)   | Phenanthrene      | 1.082          | 1.077 | 1.106 | 1.105 | 1.119 | 1.159 | 1.150 | 1.114 | 2.81  |
| 72)   | Anthracene        | 1.006          | 1.036 | 1.088 | 1.098 | 1.112 | 1.156 | 1.138 | 1.091 | 4.91  |
| 73)   | Carbazole         | 1.043          | 1.075 | 1.129 | 1.144 | 1.154 | 1.185 | 1.176 | 1.129 | 4.65  |
| 74)   | Di-n-butylphth... | 1.083          | 1.135 | 1.229 | 1.273 | 1.294 | 1.341 | 1.317 | 1.239 | 7.77  |
| 75) C | Fluoranthene      | 1.302          | 1.314 | 1.365 | 1.392 | 1.393 | 1.450 | 1.428 | 1.378 | 4.00  |
| 76) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |
| 77)   | Benzidine         | 0.183          | 0.120 | 0.129 | 0.351 | 0.326 | 0.338 | 0.330 | 0.254 | 41.39 |
| 78)   | Pyrene            | 1.278          | 1.293 | 1.359 | 1.369 | 1.421 | 1.466 | 1.437 | 1.375 | 5.19  |
| 79) S | Terphenyl-d14     | 1.032          | 1.045 | 1.087 | 1.090 | 1.089 | 1.036 | 0.873 | 1.036 | 7.37  |
| 80)   | Butylbenzylpht... | 0.433          | 0.466 | 0.531 | 0.565 | 0.584 | 0.612 | 0.620 | 0.544 | 13.23 |
| 81)   | Benzo(a)anthra... | 1.369          | 1.360 | 1.400 | 1.404 | 1.423 | 1.453 | 1.412 | 1.403 | 2.25  |
| 82)   | 3,3'-Dichlorob... | 0.386          | 0.398 | 0.436 | 0.472 | 0.473 | 0.489 | 0.487 | 0.449 | 9.49  |
| 83)   | Chrysene          | 1.336          | 1.328 | 1.340 | 1.341 | 1.342 | 1.375 | 1.348 | 1.344 | 1.12  |
| 84)   | Bis(2-ethylhex... | 0.669          | 0.721 | 0.803 | 0.847 | 0.867 | 0.892 | 0.868 | 0.810 | 10.40 |
| 85) c | Di-n-octyl pht... | 1.134          | 1.193 | 1.350 | 1.463 | 1.500 | 1.568 | 1.555 | 1.395 | 12.49 |

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|       |                   |                |       |       |       |       |       |       |       |      |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|------|
| 86) I | Perylene-d12      | -----ISTD----- |       |       |       |       |       |       |       |      |
| 87)   | Indeno(1,2,3-c... | 1.404          | 1.438 | 1.508 | 1.540 | 1.525 | 1.546 | 1.514 | 1.497 | 3.61 |
| 88)   | Benzo(b)fluora... | 1.148          | 1.203 | 1.243 | 1.266 | 1.280 | 1.353 | 1.313 | 1.258 | 5.41 |
| 89)   | Benzo(k)fluora... | 1.156          | 1.137 | 1.211 | 1.201 | 1.253 | 1.248 | 1.243 | 1.207 | 3.80 |
| 90) C | Benzo(a)pyrene    | 1.014          | 1.039 | 1.100 | 1.126 | 1.147 | 1.183 | 1.175 | 1.112 | 5.86 |
| 91)   | Dibenzo(a,h)an... | 1.169          | 1.192 | 1.242 | 1.268 | 1.254 | 1.268 | 1.247 | 1.234 | 3.13 |
| 92)   | Benzo(g,h,i)pe... | 1.210          | 1.241 | 1.275 | 1.291 | 1.267 | 1.280 | 1.247 | 1.259 | 2.21 |

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(#) = Out of Range