

Method Path : Z:\svoasrv\HPCHEM1\BNA\_M\Methods\  
 Method File : 8270-BM032621.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Mar 25 16:05:40 2021  
 Response Via : Initial Calibration

## Calibration Files

5 =BM029216.D 10 =BM029217.D 20 =BM029218.D 40 =BM029219.D 50 =BM029220.D 60 =BM029221.D 80 =BM029222.D

| Compound                   | 5              | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD  |
|----------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----                      |                |       |       |       |       |       |       |       |       |
| 1) I 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2) 1,4-Dioxane             | 0.535          | 0.582 | 0.575 | 0.517 | 0.500 | 0.483 | 0.499 | 0.527 | 7.31  |
| 3) Pyridine                | 1.078          | 1.186 | 1.356 | 1.373 | 1.299 | 1.269 | 1.337 | 1.271 | 8.31  |
| 4) n-Nitrosodimet...       | 0.405          | 0.535 | 0.580 | 0.629 | 0.614 | 0.618 | 0.613 | 0.571 | 13.98 |
| 5) S 2-Fluorophenol        | 1.084          | 1.197 | 1.257 | 1.170 | 1.140 | 1.112 | 1.162 | 1.160 | 4.89  |
| 6) Aniline                 | 1.698          | 1.806 | 1.920 | 1.856 | 1.780 | 1.757 | 1.810 | 1.804 | 3.94  |
| 7) S Phenol-d6             | 1.534          | 1.698 | 1.777 | 1.716 | 1.633 | 1.620 | 1.677 | 1.665 | 4.69  |
| 8) 2-Chlorophenol          | 1.228          | 1.381 | 1.415 | 1.316 | 1.274 | 1.243 | 1.308 | 1.309 | 5.28  |
| 9) Benzaldehyde            | 1.100          | 1.173 | 1.197 | 1.046 | 0.952 | 0.926 | 0.924 | 1.046 | 11.05 |
| 10) C Phenol               | 1.538          | 1.675 | 1.789 | 1.685 | 1.608 | 1.575 | 1.644 | 1.645 | 5.03  |
| 11) bis(2-Chloroet...      | 1.075          | 1.186 | 1.305 | 1.222 | 1.134 | 1.141 | 1.177 | 1.177 | 6.20  |
| 12) 1,3-Dichlorobe...      | 1.472          | 1.539 | 1.587 | 1.453 | 1.402 | 1.380 | 1.418 | 1.465 | 5.14  |
| 13) C 1,4-Dichlorobe...    | 1.481          | 1.573 | 1.607 | 1.482 | 1.422 | 1.395 | 1.436 | 1.485 | 5.30  |
| 14) 1,2-Dichlorobe...      | 1.413          | 1.502 | 1.543 | 1.424 | 1.371 | 1.348 | 1.389 | 1.427 | 4.96  |
| 15) Benzyl Alcohol         | 1.070          | 1.177 | 1.280 | 1.269 | 1.198 | 1.194 | 1.243 | 1.205 | 5.90  |
| 16) 2,2'-oxybis(1-...      | 1.820          | 1.912 | 1.968 | 1.843 | 1.692 | 1.673 | 1.725 | 1.805 | 6.24  |
| 17) 2-Methylphenol         | 0.960          | 1.071 | 1.140 | 1.099 | 1.033 | 1.030 | 1.066 | 1.057 | 5.41  |
| 18) Hexachloroethane       | 0.520          | 0.547 | 0.587 | 0.546 | 0.518 | 0.519 | 0.540 | 0.540 | 4.57  |
| 19) P n-Nitroso-di-n...    | 0.972          | 1.072 | 1.120 | 1.159 | 1.053 | 1.048 | 1.095 | 1.074 | 5.53  |
| 20) 3+4-Methylphenols      | 1.215          | 1.391 | 1.514 | 1.491 | 1.413 | 1.409 | 1.469 | 1.415 | 7.01  |
|                            |                |       |       |       |       |       |       |       |       |
| 21) I Naphthalene-d8       | -----ISTD----- |       |       |       |       |       |       |       |       |
| 22) Acetophenone           | 0.476          | 0.493 | 0.525 | 0.503 | 0.489 | 0.491 | 0.528 | 0.501 | 3.86  |
| 23) S Nitrobenzene-d5      | 0.359          | 0.397 | 0.430 | 0.421 | 0.415 | 0.416 | 0.445 | 0.412 | 6.71  |
| 24) Nitrobenzene           | 0.392          | 0.427 | 0.451 | 0.435 | 0.426 | 0.423 | 0.454 | 0.430 | 4.79  |
| 25) Isophorone             | 0.599          | 0.658 | 0.735 | 0.743 | 0.717 | 0.722 | 0.780 | 0.708 | 8.54  |
| 26) C 2-Nitrophenol        | 0.110          | 0.123 | 0.149 | 0.159 | 0.157 | 0.162 |       | 0.143 | 14.98 |
| 27) 2,4-Dimethylph...      | 0.244          | 0.267 | 0.293 | 0.280 | 0.271 | 0.275 | 0.294 | 0.275 | 6.29  |
| 28) bis(2-Chloroet...      | 0.350          | 0.362 | 0.392 | 0.383 | 0.365 | 0.367 | 0.400 | 0.374 | 4.82  |
| 29) C 2,4-Dichloroph...    | 0.254          | 0.281 | 0.310 | 0.310 | 0.301 | 0.304 | 0.331 | 0.299 | 8.26  |
| 30) 1,2,4-Trichlor...      | 0.320          | 0.353 | 0.357 | 0.333 | 0.326 | 0.332 | 0.353 | 0.339 | 4.42  |
| 31) Naphthalene            | 1.007          | 1.068 | 1.122 | 1.046 | 1.017 | 1.025 | 1.096 | 1.054 | 4.07  |
| 32) Benzoic acid           |                | 0.117 | 0.145 | 0.178 | 0.174 | 0.183 |       | 0.160 | 17.47 |
| 33) 4-Chloroaniline        | 0.362          | 0.399 | 0.435 | 0.431 | 0.415 | 0.418 | 0.456 | 0.417 | 7.21  |
| 34) C Hexachlorobuta...    | 0.189          | 0.201 | 0.208 | 0.193 | 0.191 | 0.191 | 0.206 | 0.197 | 3.97  |
| 35) Caprolactam            |                | 0.066 | 0.085 | 0.097 | 0.093 | 0.098 | 0.106 | 0.091 | 15.38 |
| 36) C 4-Chloro-3-met...    | 0.262          | 0.294 | 0.331 | 0.338 | 0.321 | 0.330 | 0.358 | 0.319 | 9.88  |
| 37) 2-Methylnaphth...      | 0.681          | 0.736 | 0.767 | 0.751 | 0.719 | 0.725 | 0.781 | 0.737 | 4.50  |
| 38) 1-Methylnaphth...      | 0.650          | 0.698 | 0.740 | 0.709 | 0.686 | 0.689 | 0.737 | 0.701 | 4.44  |

|        |                                          |                |       |       |       |       |       |       |       |       |
|--------|------------------------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method | Path : Z:\svoasrv\HPCHEM1\BNA_M\Methods\ |                |       |       |       |       |       |       |       |       |
| Method | File : 8270-BM032621.M                   |                |       |       |       |       |       |       |       |       |
| 39) I  | Acenaphthene-d10                         | -----ISTD----- |       |       |       |       |       |       |       |       |
| 40)    | 1,2,4,5-Tetrac...                        | 0.540          | 0.562 | 0.587 | 0.546 | 0.548 | 0.550 | 0.590 | 0.560 | 3.60  |
| 41) P  | Hexachlorocycl...                        | 0.269          | 0.302 | 0.320 | 0.306 | 0.308 | 0.311 | 0.337 | 0.308 | 6.71  |
| 42) S  | 2,4,6-Tribromo...                        | 0.139          | 0.162 | 0.189 | 0.198 | 0.191 | 0.198 | 0.218 | 0.185 | 14.22 |
| 43) C  | 2,4,6-Trichlor...                        | 0.300          | 0.332 | 0.380 | 0.378 | 0.372 | 0.379 | 0.414 | 0.365 | 10.22 |
| 44)    | 2,4,5-Trichlor...                        | 0.339          | 0.382 | 0.420 | 0.415 | 0.413 | 0.419 | 0.451 | 0.406 | 8.77  |
| 45) S  | 2-Fluorobiphenyl                         | 1.337          | 1.430 | 1.499 | 1.386 | 1.370 | 1.378 | 1.472 | 1.410 | 4.16  |
| 46)    | 1,1'-Biphenyl                            | 1.441          | 1.551 | 1.626 | 1.505 | 1.473 | 1.472 | 1.574 | 1.520 | 4.35  |
| 47)    | 2-Chloronaphth...                        | 1.138          | 1.222 | 1.258 | 1.184 | 1.171 | 1.167 | 1.241 | 1.197 | 3.66  |
| 48)    | 2-Nitroaniline                           | 0.248          | 0.299 | 0.354 | 0.379 | 0.372 | 0.387 | 0.418 | 0.351 | 16.51 |
| 49)    | Acenaphthylene                           | 1.603          | 1.778 | 1.920 | 1.846 | 1.815 | 1.826 | 1.961 | 1.821 | 6.32  |
| 50)    | Dimethylphthalate                        | 1.288          | 1.382 | 1.474 | 1.417 | 1.352 | 1.385 | 1.486 | 1.398 | 4.93  |
| 51)    | 2,6-Dinitrotol...                        | 0.228          | 0.280 | 0.319 | 0.317 | 0.309 | 0.317 | 0.345 | 0.302 | 12.44 |
| 52) C  | Acenaphthene                             | 1.096          | 1.158 | 1.224 | 1.160 | 1.121 | 1.135 | 1.206 | 1.157 | 3.93  |
| 53)    | 3-Nitroaniline                           | 0.225          | 0.267 | 0.311 | 0.325 | 0.322 | 0.334 | 0.359 | 0.306 | 14.82 |
| 54) P  | 2,4-Dinitrophenol                        | 0.105          | 0.133 | 0.159 | 0.156 | 0.166 | 0.187 | 0.151 |       | 19.05 |
| 55)    | Dibenzofuran                             | 1.718          | 1.843 | 1.941 | 1.819 | 1.762 | 1.768 | 1.895 | 1.821 | 4.34  |
| 56) P  | 4-Nitrophenol                            | 0.221          | 0.273 | 0.291 | 0.281 | 0.295 | 0.317 | 0.280 |       | 11.54 |
| 57)    | 2,4-Dinitrotol...                        | 0.267          | 0.343 | 0.415 | 0.430 | 0.420 | 0.432 | 0.475 | 0.398 | 17.50 |
| 58)    | Fluorene                                 | 1.344          | 1.429 | 1.546 | 1.497 | 1.442 | 1.471 | 1.604 | 1.476 | 5.70  |
| 59)    | 2,3,4,6-Tetrac...                        | 0.278          | 0.312 | 0.346 | 0.340 | 0.336 | 0.345 | 0.370 | 0.332 | 8.89  |
| 60)    | Diethylphthalate                         | 1.210          | 1.320 | 1.456 | 1.420 | 1.352 | 1.385 | 1.494 | 1.377 | 6.87  |
| 61)    | 4-Chlorophenyl...                        | 0.621          | 0.668 | 0.717 | 0.685 | 0.666 | 0.676 | 0.735 | 0.681 | 5.42  |
| 62)    | 4-Nitroaniline                           | 0.220          | 0.258 | 0.324 | 0.357 | 0.345 | 0.364 | 0.389 | 0.322 | 18.95 |
| 63)    | Azobenzene                               | 1.331          | 1.495 | 1.678 | 1.642 | 1.565 | 1.602 | 1.704 | 1.574 | 8.14  |
| 64) I  | Phenanthrene-d10                         | -----ISTD----- |       |       |       |       |       |       |       |       |
| 65)    | 4,6-Dinitro-2-...                        | 0.082          | 0.105 | 0.117 | 0.114 | 0.118 | 0.133 | 0.111 |       | 15.21 |
| 66) c  | n-Nitrosodiphe...                        | 0.572          | 0.638 | 0.683 | 0.650 | 0.632 | 0.630 | 0.677 | 0.640 | 5.75  |
| 67)    | 4-Bromophenyl-...                        | 0.165          | 0.182 | 0.190 | 0.185 | 0.180 | 0.182 | 0.200 | 0.183 | 5.83  |
| 68)    | Hexachlorobenzene                        | 0.201          | 0.219 | 0.228 | 0.216 | 0.210 | 0.210 | 0.225 | 0.216 | 4.36  |
| 69)    | Atrazine                                 | 0.162          | 0.187 | 0.209 | 0.217 | 0.206 | 0.207 | 0.227 | 0.202 | 10.59 |
| 70) C  | Pentachlorophenol                        | 0.109          | 0.131 | 0.139 | 0.131 | 0.137 | 0.151 | 0.133 |       | 10.49 |
| 71)    | Phenanthrene                             | 1.076          | 1.164 | 1.233 | 1.169 | 1.129 | 1.126 | 1.220 | 1.160 | 4.76  |
| 72)    | Anthracene                               | 1.008          | 1.091 | 1.184 | 1.153 | 1.116 | 1.116 | 1.220 | 1.127 | 6.10  |
| 73)    | Carbazole                                | 0.962          | 1.067 | 1.170 | 1.145 | 1.102 | 1.110 | 1.206 | 1.109 | 7.18  |
| 74)    | Di-n-butylphth...                        | 0.835          | 0.938 | 1.107 | 1.162 | 1.082 | 1.120 | 1.241 | 1.069 | 12.92 |
| 75) C  | Fluoranthene                             | 1.093          | 1.242 | 1.354 | 1.323 | 1.267 | 1.288 | 1.402 | 1.281 | 7.73  |
| 76) I  | Chrysene-d12                             | -----ISTD----- |       |       |       |       |       |       |       |       |
| 77)    | Benzidine                                | 0.476          | 0.600 | 0.585 | 0.697 | 0.596 | 0.513 | 0.578 |       | 13.36 |
| 78)    | Pyrene                                   | 1.242          | 1.375 | 1.424 | 1.350 | 1.326 | 1.341 | 1.420 | 1.354 | 4.59  |
| 79) S  | Terphenyl-d14                            | 0.910          | 0.992 | 1.034 | 1.009 | 0.968 | 0.990 | 1.066 | 0.996 | 4.97  |
| 80)    | Butylbenzylpht...                        | 0.325          | 0.376 | 0.462 | 0.504 | 0.477 | 0.502 | 0.556 | 0.457 | 17.50 |
| 81)    | Benzo(a)anthra...                        | 1.168          | 1.303 | 1.376 | 1.313 | 1.287 | 1.307 | 1.382 | 1.305 | 5.44  |
| 82)    | 3,3'-Dichlorob...                        | 0.305          | 0.358 | 0.409 | 0.412 | 0.400 | 0.408 | 0.438 | 0.390 | 11.38 |
| 83)    | Chrysene                                 | 1.219          | 1.325 | 1.374 | 1.299 | 1.273 | 1.288 | 1.365 | 1.306 | 4.13  |
| 84)    | Bis(2-ethylhex...                        | 0.439          | 0.538 | 0.680 | 0.738 | 0.683 | 0.722 | 0.803 | 0.658 | 19.16 |
| 85) c  | Di-n-octyl pht...                        | 0.736          | 0.824 | 1.059 | 1.205 | 1.121 | 1.185 | 1.329 | 1.066 | 20.04 |

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

Method File : 8270-BM032621.M

[illegible]

(#) = Out of Range