

Method Path : Z:\svoasrv\HPCHEM1\BNA\_F\Methods\  
 Method File : 8270-BF062824.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Sat Jun 29 02:44:30 2024  
 Response Via : Initial Calibration

## Calibration Files

2.5 =BF138384.D 5 =BF138385.D 10 =BF138386.D 20 =BF138387.D 40 =BF138388.D 50 =BF138389.D 60 =BF138390.D 80 =BF138391.D

|       | Compound              | 2.5            | 5     | 10    | 20    | 40    | 50    | 60    | 80    | Avg   | %RSD  |
|-------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1) I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |       |       |
| 2)    | 1,4-Dioxane           |                | 0.584 | 0.602 | 0.607 | 0.570 | 0.540 | 0.547 | 0.527 | 0.568 | 5.43  |
| 3)    | Pyridine              |                | 1.341 | 1.327 | 1.393 | 1.390 | 1.329 | 1.371 | 1.338 | 1.356 | 2.09  |
| 4)    | n-Nitrosodimet...     |                | 0.837 | 0.867 | 0.885 | 0.866 | 0.823 | 0.837 | 0.805 | 0.846 | 3.32  |
| 5) S  | 2-Fluorophenol        |                | 1.348 | 1.330 | 1.319 | 1.198 | 1.111 | 1.104 | 1.035 | 1.206 | 10.55 |
| 6)    | Aniline               |                | 1.713 | 1.682 | 1.691 | 1.564 | 1.511 | 1.520 | 1.421 | 1.586 | 7.00  |
| 7) S  | Phenol-d6             |                | 1.841 | 1.792 | 1.736 | 1.600 | 1.506 | 1.497 | 1.402 | 1.625 | 10.29 |
| 8)    | 2-Chlorophenol        |                | 1.464 | 1.409 | 1.406 | 1.280 | 1.205 | 1.202 | 1.099 | 1.295 | 10.44 |
| 9)    | Benzaldehyde          |                |       | 1.192 | 1.128 | 0.958 | 0.876 | 0.860 |       | 1.003 | 14.94 |
| 10) C | Phenol                |                | 1.953 | 1.909 | 1.867 | 1.696 | 1.591 | 1.593 | 1.509 | 1.731 | 10.24 |
| 11)   | bis(2-Chloroet...     |                | 1.505 | 1.430 | 1.456 | 1.352 | 1.285 | 1.290 | 1.200 | 1.360 | 8.02  |
| 12)   | 1,3-Dichlorobe...     |                | 1.688 | 1.631 | 1.587 | 1.478 | 1.371 | 1.357 | 1.269 | 1.483 | 10.62 |
| 13) C | 1,4-Dichlorobe...     |                | 1.711 | 1.639 | 1.604 | 1.460 | 1.372 | 1.365 | 1.258 | 1.487 | 11.28 |
| 14)   | 1,2-Dichlorobe...     |                | 1.623 | 1.538 | 1.528 | 1.347 | 1.252 | 1.220 | 1.100 | 1.373 | 14.18 |
| 15)   | Benzyl Alcohol        |                | 1.306 | 1.239 | 1.266 | 1.175 | 1.094 | 1.077 | 0.991 | 1.164 | 9.83  |
| 16)   | 2,2'-oxybis(1-...     |                | 3.061 | 2.979 | 2.978 | 2.719 | 2.568 | 2.550 | 2.342 | 2.743 | 9.89  |
| 17)   | 2-Methylphenol        |                | 1.176 | 1.156 | 1.134 | 1.062 | 1.005 | 1.021 | 0.958 | 1.073 | 7.80  |
| 18)   | Hexachloroethane      |                | 0.580 | 0.574 | 0.568 | 0.543 | 0.508 | 0.511 | 0.470 | 0.536 | 7.71  |
| 19) P | n-Nitroso-di-n...     | 1.103          | 1.139 | 1.109 | 1.073 | 0.998 | 0.933 | 0.937 | 0.903 | 1.024 | 9.04  |
| 20)   | 3+4-Methylphenols     |                |       | 1.484 | 1.416 | 1.255 | 1.153 | 1.137 | 1.037 | 1.247 | 13.89 |
| 21) I | Naphthalene-d8        | -----ISTD----- |       |       |       |       |       |       |       |       |       |
| 22)   | Acetophenone          |                | 0.535 | 0.502 | 0.484 | 0.437 | 0.411 | 0.416 | 0.392 | 0.454 | 11.79 |
| 23) S | Nitrobenzene-d5       |                | 0.410 | 0.403 | 0.405 | 0.383 | 0.367 | 0.373 | 0.355 | 0.385 | 5.53  |
| 24)   | Nitrobenzene          |                | 0.421 | 0.412 | 0.414 | 0.389 | 0.377 | 0.375 | 0.353 | 0.392 | 6.36  |
| 25)   | Isophorone            |                | 0.772 | 0.752 | 0.739 | 0.693 | 0.666 | 0.684 | 0.662 | 0.710 | 6.22  |
| 26) C | 2-Nitrophenol         |                | 0.147 | 0.165 | 0.178 | 0.176 | 0.171 | 0.176 | 0.168 | 0.169 | 6.32  |
| 27)   | 2,4-Dimethylph...     |                | 0.228 | 0.226 | 0.229 | 0.215 | 0.205 | 0.212 | 0.199 | 0.216 | 5.46  |
| 28)   | bis(2-Chloroet...     |                | 0.478 | 0.456 | 0.453 | 0.420 | 0.398 | 0.406 | 0.381 | 0.427 | 8.30  |
| 29) C | 2,4-Dichloroph...     |                | 0.297 | 0.299 | 0.298 | 0.278 | 0.262 | 0.263 | 0.247 | 0.278 | 7.51  |
| 30)   | 1,2,4-Trichlor...     |                | 0.366 | 0.352 | 0.345 | 0.318 | 0.298 | 0.301 | 0.280 | 0.323 | 9.93  |
| 31)   | Naphthalene           |                | 1.168 | 1.123 | 1.095 | 0.991 | 0.921 | 0.924 | 0.854 | 1.011 | 11.76 |
| 32)   | Benzoic acid          |                |       | 0.128 | 0.169 | 0.189 | 0.199 | 0.210 | 0.201 | 0.183 | 16.52 |
| 33)   | 4-Chloroaniline       |                | 0.396 | 0.370 | 0.377 | 0.345 | 0.332 | 0.340 | 0.312 | 0.353 | 8.27  |
| 34) C | Hexachlorobuta...     |                | 0.221 | 0.213 | 0.207 | 0.191 | 0.182 | 0.178 | 0.165 | 0.194 | 10.55 |
| 35)   | Caprolactam           |                | 0.091 | 0.091 | 0.093 | 0.087 | 0.082 | 0.087 | 0.083 | 0.088 | 4.63  |
| 36) C | 4-Chloro-3-met...     |                | 0.324 | 0.317 | 0.318 | 0.288 | 0.277 | 0.277 | 0.268 | 0.296 | 7.89  |
| 37)   | 2-Methylnaphth...     |                | 0.771 | 0.735 | 0.716 | 0.632 | 0.591 | 0.588 | 0.542 | 0.653 | 13.30 |
| 38)   | 1-Methylnaphth...     |                | 0.749 | 0.722 | 0.684 | 0.617 | 0.573 | 0.567 | 0.525 | 0.634 | 13.49 |

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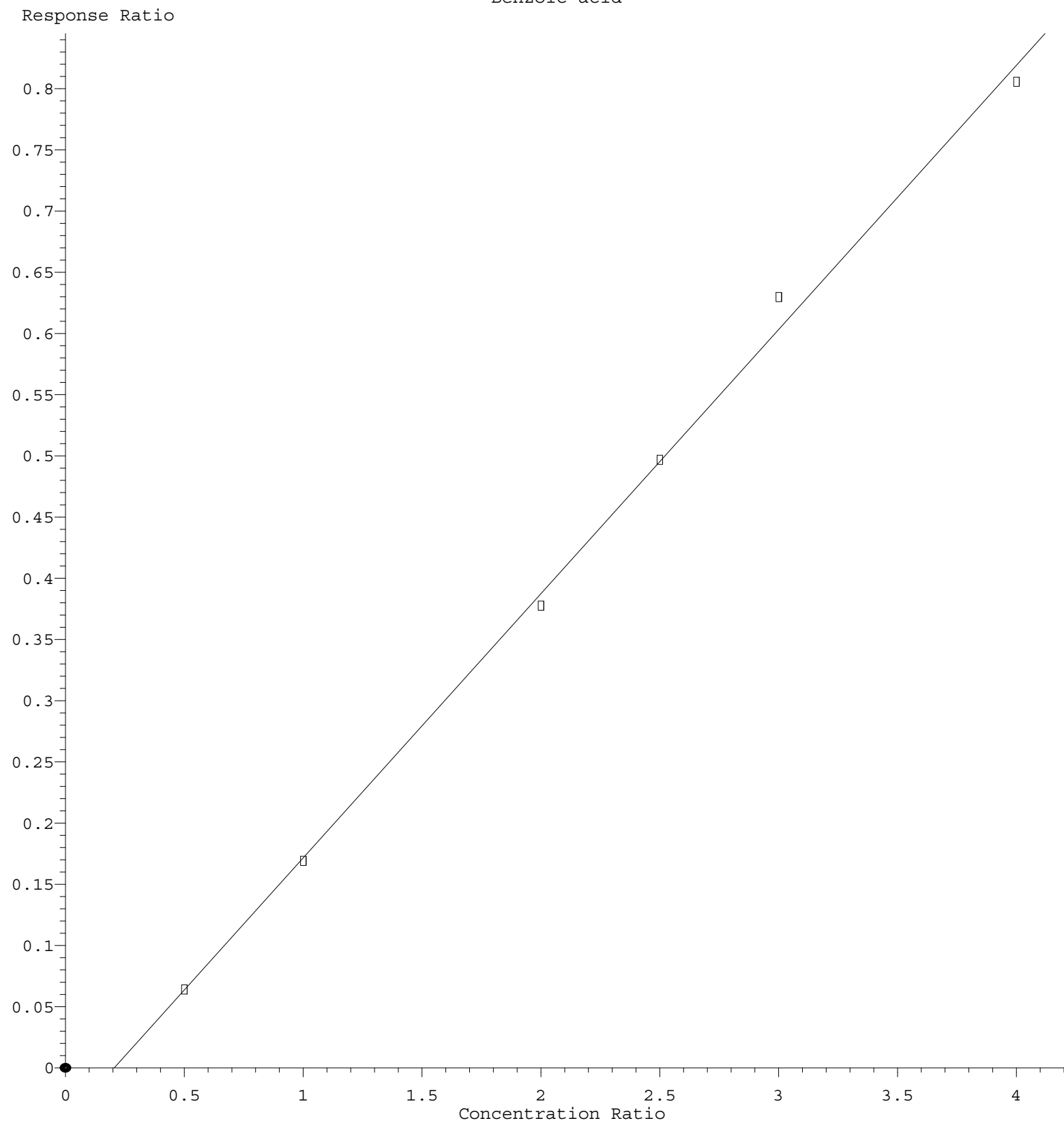
|       |                   |                |       |       |       |       |       |       |       |       |  |
|-------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 39) I | Acenaphthene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 40)   | 1,2,4,5-Tetrac... | 0.633          | 0.608 | 0.597 | 0.541 | 0.513 | 0.511 | 0.469 | 0.553 | 10.97 |  |
| 41) P | Hexachlorocycl... |                | 0.118 | 0.161 | 0.173 | 0.176 | 0.179 | 0.171 | 0.163 | 14.17 |  |
| 42) S | 2,4,6-Tribromo... | 0.172          | 0.176 | 0.181 | 0.163 | 0.153 | 0.155 | 0.144 | 0.163 | 8.29  |  |
| 43) C | 2,4,6-Trichlor... | 0.364          | 0.360 | 0.382 | 0.356 | 0.340 | 0.342 | 0.319 | 0.352 | 5.76  |  |
| 44)   | 2,4,5-Trichlor... | 0.404          | 0.405 | 0.410 | 0.385 | 0.367 | 0.366 | 0.343 | 0.383 | 6.57  |  |
| 45) S | 2-Fluorobiphenyl  |                | 1.490 | 1.411 | 1.203 | 1.108 | 1.072 |       | 1.257 | 14.73 |  |
| 46)   | 1,1'-Biphenyl     | 1.747          | 1.657 | 1.642 | 1.465 | 1.358 | 1.346 | 1.239 | 1.493 | 12.79 |  |
| 47)   | 2-Chloronaphth... | 1.297          | 1.231 | 1.240 | 1.114 | 1.056 | 1.060 | 0.973 | 1.139 | 10.44 |  |
| 48)   | 2-Nitroaniline    | 0.349          | 0.370 | 0.392 | 0.369 | 0.363 | 0.379 | 0.349 | 0.367 | 4.25  |  |
| 49)   | Acenaphthylene    | 1.863          | 1.765 | 1.759 | 1.556 | 1.474 | 1.474 | 1.318 | 1.601 | 12.36 |  |
| 50)   | Dimethylphthalate | 1.445          | 1.364 | 1.396 | 1.241 | 1.184 | 1.214 | 1.153 | 1.285 | 8.92  |  |
| 51)   | 2,6-Dinitrotol... | 0.289          | 0.305 | 0.316 | 0.287 | 0.279 | 0.278 | 0.263 | 0.288 | 6.11  |  |
| 52) C | Acenaphthene      | 1.224          | 1.187 | 1.192 | 1.077 | 1.014 | 1.032 | 0.950 | 1.096 | 9.59  |  |
| 53)   | 3-Nitroaniline    | 0.288          | 0.295 | 0.308 | 0.283 | 0.276 | 0.281 | 0.260 | 0.284 | 5.26  |  |
| 54) P | 2,4-Dinitrophenol |                | 0.037 | 0.074 | 0.098 | 0.109 | 0.122 | 0.122 | 0.094 | 35.19 |  |
| 55)   | Dibenzofuran      | 1.790          | 1.675 | 1.678 | 1.468 | 1.368 | 1.356 | 1.239 | 1.511 | 13.60 |  |
| 56) P | 4-Nitrophenol     |                | 0.152 | 0.188 | 0.191 | 0.188 | 0.199 | 0.188 | 0.184 | 8.84  |  |
| 57)   | 2,4-Dinitrotol... | 0.334          | 0.360 | 0.394 | 0.366 | 0.349 | 0.355 | 0.324 | 0.354 | 6.40  |  |
| 58)   | Fluorene          | 1.406          | 1.337 | 1.284 | 1.104 | 1.050 | 1.021 |       | 1.200 | 13.53 |  |
| 59)   | 2,3,4,6-Tetrac... | 0.276          | 0.295 | 0.315 | 0.290 | 0.276 | 0.277 | 0.262 | 0.284 | 6.00  |  |
| 60)   | Diethylphthalate  | 1.372          | 1.306 | 1.318 | 1.168 | 1.110 | 1.115 | 1.023 | 1.202 | 10.87 |  |
| 61)   | 4-Chlorophenyl... | 0.695          | 0.675 | 0.663 | 0.565 | 0.530 | 0.526 |       | 0.609 | 12.68 |  |
| 62)   | 4-Nitroaniline    | 0.243          | 0.259 | 0.287 | 0.265 | 0.260 | 0.267 | 0.246 | 0.261 | 5.57  |  |
| 63)   | Azobenzene        | 1.404          | 1.383 | 1.373 | 1.248 | 1.187 | 1.181 | 1.107 | 1.269 | 9.27  |  |
| 64) I | Phenanthrene-d10  | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 65)   | 4,6-Dinitro-2-... |                | 0.057 | 0.083 | 0.100 | 0.108 | 0.115 | 0.111 | 0.096 | 23.06 |  |
| 66) c | n-Nitrosodiphe... | 0.711          | 0.694 | 0.661 | 0.599 | 0.570 | 0.579 | 0.532 | 0.621 | 10.95 |  |
| 67)   | 4-Bromophenyl-... | 0.241          | 0.239 | 0.229 | 0.209 | 0.202 | 0.200 | 0.186 | 0.215 | 9.96  |  |
| 68)   | Hexachlorobenzene | 0.281          | 0.258 | 0.250 | 0.228 | 0.219 | 0.220 | 0.203 | 0.237 | 11.44 |  |
| 69)   | Atrazine          | 0.202          | 0.196 | 0.191 | 0.182 | 0.156 | 0.153 | 0.138 | 0.174 | 14.22 |  |
| 70) C | Pentachlorophenol |                | 0.091 | 0.119 | 0.128 | 0.127 | 0.133 | 0.123 | 0.120 | 12.36 |  |
| 71)   | Phenanthrene      | 1.118          | 1.068 | 1.063 | 0.954 | 0.911 | 0.906 | 0.816 | 0.976 | 11.16 |  |
| 72)   | Anthracene        | 1.105          | 1.075 | 1.057 | 0.954 | 0.906 | 0.897 | 0.822 | 0.974 | 10.96 |  |
| 73)   | Carbazole         | 0.884          | 0.861 | 0.896 | 0.804 | 0.765 | 0.770 | 0.680 | 0.808 | 9.57  |  |
| 74)   | Di-n-butylphth... | 1.084          | 1.101 | 1.123 | 1.023 | 0.979 | 0.980 | 0.883 | 1.025 | 8.27  |  |
| 75) C | Fluoranthene      | 0.957          | 0.947 | 0.975 | 0.880 | 0.820 | 0.827 | 0.724 | 0.875 | 10.42 |  |
| 76) I | Chrysene-d12      | -----ISTD----- |       |       |       |       |       |       |       |       |  |
| 77)   | Benzidine         | 0.264          | 0.132 | 0.193 | 0.032 | 0.203 | 0.224 | 0.071 | 0.160 | 52.89 |  |
| 78)   | Pyrene            | 2.334          | 2.327 | 2.350 | 2.137 | 1.995 | 2.022 | 1.799 | 2.138 | 9.89  |  |
| 79) S | Terphenyl-d14     |                | 1.716 | 1.680 | 1.492 | 1.339 | 1.340 | 1.189 | 1.459 | 14.28 |  |
| 80)   | Butylbenzylpht... | 0.577          | 0.639 | 0.732 | 0.685 | 0.656 | 0.667 | 0.597 | 0.650 | 8.07  |  |
| 81)   | Benzo(a)anthra... | 1.388          | 1.347 | 1.347 | 1.271 | 1.239 | 1.253 | 1.166 | 1.287 | 6.00  |  |
| 82)   | 3,3'-Dichlorob... | 0.399          | 0.394 | 0.400 | 0.355 | 0.374 | 0.390 | 0.350 | 0.380 | 5.53  |  |
| 83)   | Chrysene          | 1.377          | 1.289 | 1.324 | 1.218 | 1.200 | 1.206 | 1.155 | 1.253 | 6.32  |  |
| 84)   | Bis(2-ethylhex... | 0.797          | 0.817 | 0.882 | 0.835 | 0.804 | 0.821 | 0.754 | 0.816 | 4.77  |  |
| 85) c | Di-n-octyl pht... | 1.425          | 1.426 | 1.477 | 1.412 | 1.420 | 1.443 | 1.391 | 1.428 | 1.89  |  |

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|       |                   |                                                 |      |
|-------|-------------------|-------------------------------------------------|------|
| 86) I | Perylene-d12      | -----ISTD-----                                  |      |
| 87)   | Indeno(1,2,3-c... | 0.919 0.922 1.034 1.041 1.024 1.063 1.031 1.005 | 5.85 |
| 88)   | Benzo(b)fluora... | 1.198 1.123 1.211 1.045 1.067 1.015 1.023 1.097 | 7.42 |
| 89)   | Benzo(k)fluora... | 1.095 1.089 1.034 1.013 0.933 0.997 0.915 1.011 | 6.90 |
| 90) C | Benzo(a)pyrene    | 1.007 1.005 1.007 0.943 0.923 0.939 0.910 0.962 | 4.44 |
| 91)   | Dibenzo(a,h)an... | 0.722 0.748 0.839 0.857 0.819 0.864 0.829 0.811 | 6.75 |
| 92)   | Benzo(g,h,i)pe... | 0.728 0.729 0.795 0.831 0.810 0.839 0.822 0.794 | 5.88 |

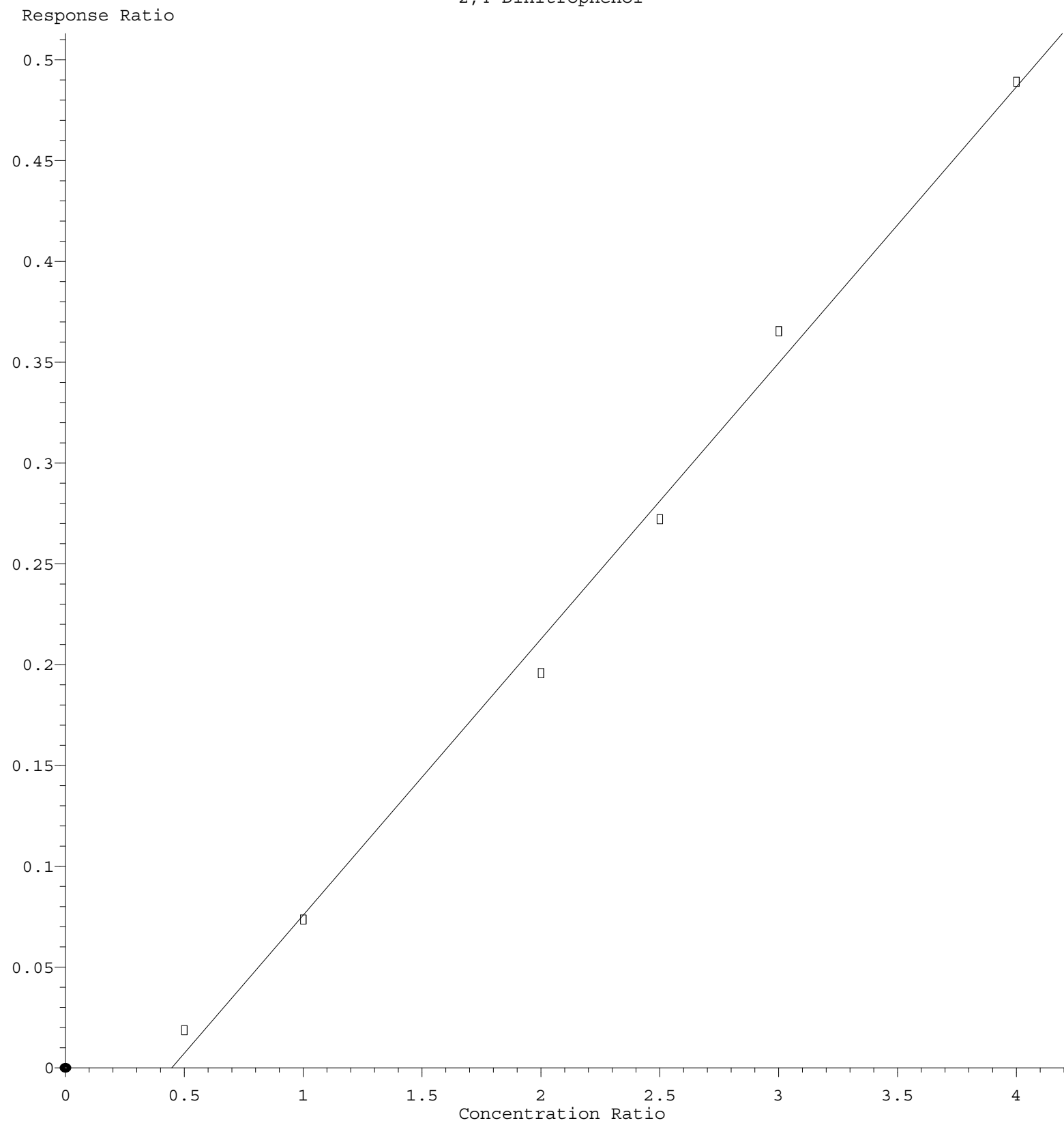
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(#) = Out of Range

# Benzoic acid



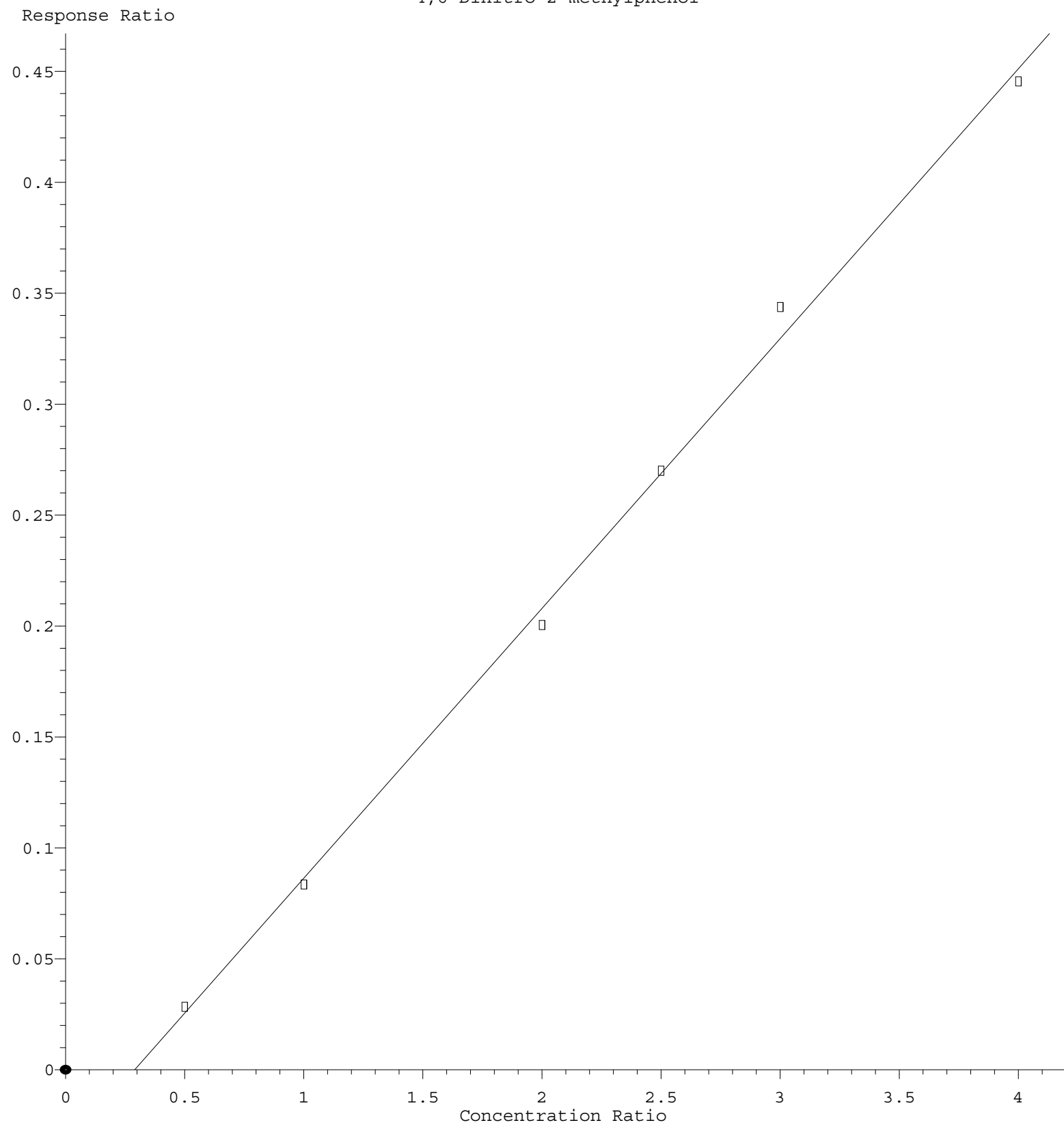
Response = 2.160e-001 \* Amt - 4.428e-002  
 Coef of Det (r^2) = 0.997474 Curve Fit: Linear  
 Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF062824.M  
 Calibration Table Last Updated: Sat Jun 29 02:44:30 2024

# 2,4-Dinitrophenol



Response = 1.371e-001 \* Amt - 6.120e-002  
 Coef of Det (r^2) = 0.995203    Curve Fit: Linear  
 Method Name:    Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF062824.M  
 Calibration Table Last Updated: Sat Jun 29 02:44:30 2024

## 4,6-Dinitro-2-methylphenol



Response =  $1.218 \times 10^{-1} \times \text{Amt} - 3.532 \times 10^{-2}$   
Coef of Det ( $r^2$ ) = 0.997510    Curve Fit: Linear  
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF062824.M  
Calibration Table Last Updated: Sat Jun 29 02:44:30 2024