

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\  
 Method File : 82X112222W.M  
 Title : SW846 8260  
 Last Update : Tue Nov 22 13:58:46 2022  
 Response Via : Continuing Calibration

## Calibration Files

1 =VX032977.D 5 =VX032976.D 20 =VX032970.D 50 =VX032971.D 100 =VX032972.D 150 =VX032973.D

|        | Compound            | 1              | 5     | 20    | 50    | 100   | 150   | Avg   | %RSD   |
|--------|---------------------|----------------|-------|-------|-------|-------|-------|-------|--------|
| 1) I   | Pentafluorobenzene  | -----ISTD----- |       |       |       |       |       |       |        |
| 2) T   | Dichlorodifluo...   | 0.432          | 0.420 | 0.392 | 0.367 | 0.322 | 0.359 | 0.382 | 10.70  |
| 3) P   | Chloromethane       | 0.500          | 0.460 | 0.418 | 0.389 | 0.342 | 0.366 | 0.412 | 14.37  |
| 4) C   | Vinyl Chloride      | 0.529          | 0.498 | 0.467 | 0.445 | 0.392 | 0.424 | 0.459 | 10.83# |
| 5) T   | Bromomethane        |                | 0.405 | 0.350 | 0.317 | 0.287 | 0.343 | 0.340 | 12.86  |
| 6) T   | Chloroethane        | 0.368          | 0.423 | 0.373 | 0.378 | 0.348 | 0.352 | 0.374 | 7.15   |
| 7) T   | Trichlorofluor...   | 0.976          | 0.994 | 0.921 | 0.867 | 0.767 | 0.822 | 0.891 | 9.98   |
| 8) T   | Diethyl Ether       | 0.279          | 0.317 | 0.300 | 0.274 | 0.243 | 0.269 | 0.281 | 9.09   |
| 9) T   | 1,1,2-Trichlor...   | 0.489          | 0.496 | 0.496 | 0.466 | 0.408 | 0.454 | 0.468 | 7.29   |
| 10) T  | Methyl Iodide       |                | 0.433 | 0.569 | 0.574 | 0.525 | 0.580 | 0.536 | 11.52  |
| 11) T  | Tert butyl alc...   |                | 0.085 | 0.081 | 0.077 | 0.071 | 0.073 | 0.077 | 7.34   |
| 12) CM | 1,1-Dichloroet...   | 0.425          | 0.474 | 0.447 | 0.435 | 0.395 | 0.441 | 0.436 | 5.96#  |
| 13) T  | Acrolein            |                | 0.105 | 0.086 | 0.085 | 0.079 | 0.088 | 0.089 | 11.22  |
| 14) T  | Allyl chloride      | 0.711          | 0.722 | 0.713 | 0.709 | 0.649 | 0.722 | 0.704 | 3.93   |
| 15) T  | Acrylonitrile       | 0.223          | 0.227 | 0.223 | 0.214 | 0.200 | 0.223 | 0.218 | 4.59   |
| 16) T  | Acetone             | 0.250          | 0.225 | 0.259 | 0.227 | 0.196 | 0.206 | 0.227 | 10.74  |
| 17) T  | Carbon Disulfide    | 1.464          | 1.265 | 1.175 | 1.151 | 1.031 | 1.146 | 1.205 | 12.19  |
| 18) T  | Methyl Acetate      | 0.681          | 0.656 | 0.637 | 0.610 | 0.562 | 0.630 | 0.629 | 6.46   |
| 19) T  | Methyl tert-bu...   | 1.442          | 1.576 | 1.559 | 1.530 | 1.406 | 1.566 | 1.513 | 4.75   |
| 20) T  | Methylene Chlo...   | 0.771          | 0.576 | 0.540 | 0.487 | 0.439 | 0.475 | 0.548 | 21.84  |
| 21) T  | trans-1,2-Dich...   | 0.551          | 0.526 | 0.495 | 0.489 | 0.441 | 0.492 | 0.499 | 7.45   |
| 22) T  | Diisopropyl ether   | 1.419          | 1.562 | 1.577 | 1.601 | 1.458 | 1.586 | 1.534 | 4.96   |
| 23) T  | Vinyl Acetate       | 1.072          | 1.208 | 1.230 | 1.259 | 1.161 | 1.274 | 1.201 | 6.19   |
| 24) P  | 1,1-Dichloroet...   | 0.865          | 0.965 | 0.908 | 0.870 | 0.791 | 0.868 | 0.878 | 6.53   |
| 25) T  | 2-Butanone          | 0.318          | 0.322 | 0.335 | 0.315 | 0.285 | 0.306 | 0.314 | 5.45   |
| 26) T  | 2,2-Dichloropr...   | 0.647          | 0.717 | 0.711 | 0.726 | 0.671 | 0.762 | 0.706 | 5.77   |
| 27) T  | cis-1,2-Dichlo...   | 0.554          | 0.585 | 0.584 | 0.581 | 0.524 | 0.575 | 0.567 | 4.21   |
| 28) T  | Bromochloromet...   | 0.368          | 0.386 | 0.397 | 0.394 | 0.400 | 0.370 | 0.386 | 3.55   |
| 29) T  | Tetrahydrofuran     | 0.206          | 0.208 | 0.205 | 0.196 | 0.182 | 0.197 | 0.199 | 4.91   |
| 30) C  | Chloroform          | 0.941          | 1.036 | 1.025 | 1.003 | 0.906 | 0.987 | 0.983 | 5.14#  |
| 31) T  | Cyclohexane         |                | 0.852 | 0.800 | 0.803 | 0.709 | 0.780 | 0.789 | 6.56   |
| 32) T  | 1,1,1-Trichlor...   | 0.848          | 0.906 | 0.901 | 0.908 | 0.817 | 0.902 | 0.880 | 4.38   |
| 33) S  | 1,2-Dichloroet...   |                | 0.758 | 0.492 | 0.487 | 0.498 | 0.458 | 0.539 | 22.92  |
| 34) I  | 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |        |
| 35) S  | Dibromofluorom...   |                | 0.354 | 0.263 | 0.269 | 0.271 | 0.253 | 0.282 | 14.45  |
| 36) T  | 1,1-Dichloropr...   | 0.482          | 0.451 | 0.454 | 0.462 | 0.406 | 0.449 | 0.451 | 5.50   |
| 37) T  | Ethyl Acetate       | 0.396          | 0.383 | 0.405 | 0.405 | 0.366 | 0.405 | 0.393 | 4.00   |
| 38) T  | Carbon Tetrach...   | 0.507          | 0.504 | 0.510 | 0.515 | 0.460 | 0.505 | 0.500 | 4.04   |
| 39) T  | Methylcyclohexane   | 0.509          | 0.526 | 0.531 | 0.531 | 0.469 | 0.519 | 0.514 | 4.60   |
| 40) TM | Benzene             | 1.235          | 1.317 | 1.317 | 1.301 | 1.154 | 1.259 | 1.264 | 5.00   |
| 41) T  | Methacrylonitrile   | 0.217          | 0.221 | 0.221 | 0.228 | 0.208 | 0.232 | 0.221 | 3.91   |
| 42) TM | 1,2-Dichloroet...   | 0.494          | 0.545 | 0.529 | 0.528 | 0.461 | 0.495 | 0.509 | 6.05   |
| 43) T  | Isopropyl Acetate   | 0.612          | 0.645 | 0.658 | 0.675 | 0.621 | 0.691 | 0.650 | 4.71   |
| 44) TM | Trichloroethene     | 0.346          | 0.373 | 0.371 | 0.370 | 0.318 | 0.350 | 0.355 | 5.95   |
| 45) C  | 1,2-Dichloropr...   | 0.288          | 0.329 | 0.328 | 0.328 | 0.288 | 0.313 | 0.312 | 6.33#  |
| 46) T  | Dibromomethane      | 0.253          | 0.246 | 0.253 | 0.249 | 0.220 | 0.240 | 0.244 | 5.14   |
| 47) T  | Bromodichlorom...   | 0.432          | 0.465 | 0.497 | 0.497 | 0.447 | 0.487 | 0.471 | 5.83   |
| 48) T  | Methyl methacr...   | 0.316          | 0.334 | 0.345 | 0.347 | 0.318 | 0.348 | 0.335 | 4.29   |
| 49) T  | 1,4-Dioxane         | 0.006          | 0.006 | 0.007 | 0.006 | 0.006 | 0.005 | 0.006 | 8.61   |
| 50) S  | Toluene-d8          |                | 1.233 | 0.824 | 0.840 | 0.871 | 0.808 | 0.915 | 19.56  |
| 51) T  | 4-Methyl-2-Pen...   | 0.375          | 0.413 | 0.433 | 0.420 | 0.375 | 0.392 | 0.401 | 5.99   |
| 52) CM | Toluene             | 0.775          | 0.857 | 0.867 | 0.870 | 0.775 | 0.845 | 0.831 | 5.38#  |
| 53) T  | t-1,3-Dichloro...   | 0.344          | 0.423 | 0.479 | 0.520 | 0.475 | 0.532 | 0.462 | 15.04  |
| 54) T  | cis-1,3-Dichlo...   | 0.431          | 0.483 | 0.528 | 0.549 | 0.499 | 0.555 | 0.508 | 9.24   |
| 55) T  | 1,1,2-Trichlor...   | 0.332          | 0.344 | 0.353 | 0.346 | 0.315 | 0.342 | 0.338 | 4.04   |
| 56) T  | Ethyl methacry...   | 0.378          | 0.443 | 0.481 | 0.514 | 0.469 | 0.513 | 0.466 | 10.96  |

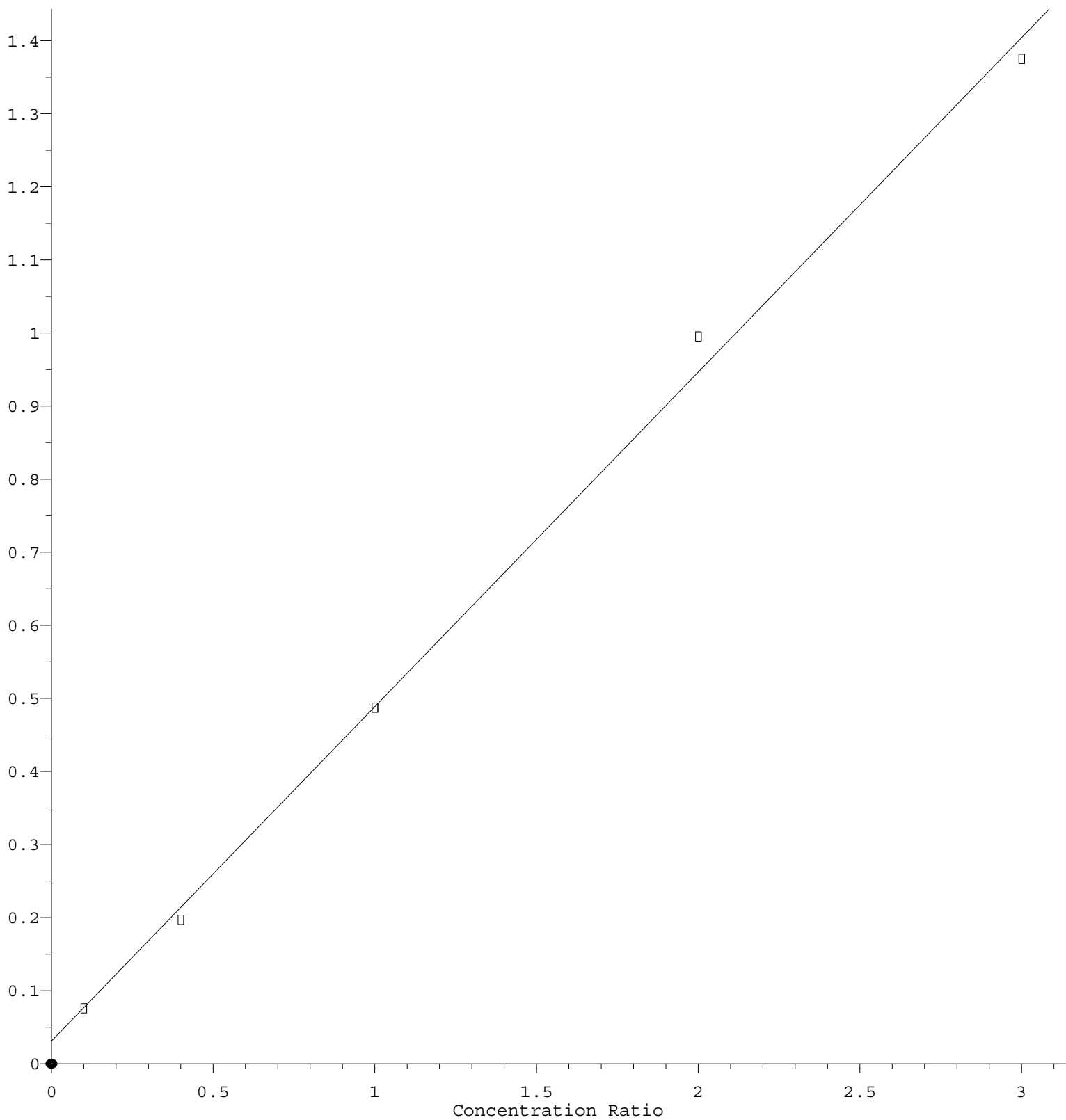
Method Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\  
 Method File : 82X112222W.M

|     |    |                       |                |       |       |       |       |       |       |       |
|-----|----|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 57) | T  | 1,3-Dichloropr...     | 0.555          | 0.547 | 0.568 | 0.568 | 0.499 | 0.541 | 0.546 | 4.71  |
| 58) | T  | 2-Chloroethyl ...     | 0.204          | 0.213 | 0.234 | 0.231 | 0.211 | 0.235 | 0.221 | 6.16  |
| 59) | T  | 2-Hexanone            | 0.269          | 0.295 | 0.333 | 0.318 | 0.277 | 0.287 | 0.296 | 8.27  |
| 60) | T  | Dibromochlorom...     | 0.338          | 0.332 | 0.374 | 0.398 | 0.356 | 0.389 | 0.364 | 7.41  |
| 61) | T  | 1,2-Dibromoethane     | 0.340          | 0.354 | 0.370 | 0.378 | 0.337 | 0.364 | 0.357 | 4.62  |
| 62) | S  | 4-Bromofluorob...     | 0.423          | 0.343 | 0.368 | 0.377 | 0.341 | 0.370 |       | 9.05  |
| 63) | I  | Chlorobenzene-d5      | -----ISTD----- |       |       |       |       |       |       |       |
| 64) | T  | Tetrachloroethene     | 0.409          | 0.361 | 0.363 | 0.351 | 0.302 | 0.339 | 0.354 | 9.86  |
| 65) | PM | Chlorobenzene         | 1.001          | 1.045 | 1.048 | 1.013 | 0.889 | 0.984 | 0.997 | 5.85  |
| 66) | T  | 1,1,1,2-Tetrac...     | 0.334          | 0.370 | 0.379 | 0.384 | 0.346 | 0.380 | 0.365 | 5.64  |
| 67) | C  | Ethyl Benzene         | 1.648          | 1.815 | 1.868 | 1.874 | 1.633 | 1.772 | 1.768 | 5.98# |
| 68) | T  | m/p-Xylenes           | 0.667          | 0.685 | 0.732 | 0.728 | 0.643 | 0.700 | 0.692 | 5.01  |
| 69) | T  | o-Xylene              | 0.615          | 0.669 | 0.714 | 0.711 | 0.625 | 0.687 | 0.670 | 6.33  |
| 70) | T  | Styrene               | 0.936          | 1.059 | 1.162 | 1.202 | 1.061 | 1.157 | 1.096 | 8.91  |
| 71) | P  | Bromoform             | 0.241          | 0.261 | 0.293 | 0.303 | 0.277 | 0.305 | 0.280 | 9.09  |
| 72) | I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |
| 73) | T  | Isopropylbenzene      | 3.632          | 3.749 | 3.653 | 3.557 | 3.214 | 3.632 | 3.573 | 5.22  |
| 74) | T  | N-amyl acetate        | 1.076          | 1.225 | 1.252 | 1.276 | 1.162 | 1.301 | 1.215 | 6.85  |
| 75) | P  | 1,1,2,2-Tetrac...     | 1.160          | 1.181 | 1.104 | 1.049 | 0.937 | 1.038 | 1.078 | 8.32  |
| 76) | T  | 1,2,3-Trichlor...     | 0.978          | 1.046 | 0.970 | 0.932 | 0.841 | 0.914 | 0.947 | 7.28  |
| 77) | T  | Bromobenzene          | 0.943          | 0.939 | 0.880 | 0.862 | 0.775 | 0.873 | 0.879 | 7.00  |
| 78) | T  | n-propylbenzene       | 3.972          | 4.248 | 4.189 | 4.152 | 3.753 | 4.197 | 4.085 | 4.61  |
| 79) | T  | 2-Chlorotoluene       | 2.659          | 2.607 | 2.538 | 2.448 | 2.192 | 2.443 | 2.481 | 6.67  |
| 80) | T  | 1,3,5-Trimethy...     | 2.840          | 3.139 | 3.142 | 3.069 | 2.751 | 3.068 | 3.002 | 5.50  |
| 81) | T  | trans-1,4-Dich...     | 0.243          | 0.278 | 0.299 | 0.293 | 0.344 | 0.291 |       | 12.56 |
| 82) | T  | 4-Chlorotoluene       | 3.075          | 2.992 | 2.993 | 2.908 | 2.597 | 2.879 | 2.908 | 5.75  |
| 83) | T  | tert-Butylbenzene     | 3.175          | 3.021 | 3.007 | 3.025 | 2.685 | 3.013 | 2.988 | 5.40  |
| 84) | T  | 1,2,4-Trimethy...     | 2.878          | 3.151 | 3.177 | 3.064 | 2.703 | 2.984 | 2.993 | 6.01  |
| 85) | T  | sec-Butylbenzene      | 3.436          | 3.751 | 3.700 | 3.669 | 3.271 | 3.619 | 3.574 | 5.15  |
| 86) | T  | p-Isopropyltol...     | 2.882          | 3.101 | 3.190 | 3.134 | 2.795 | 3.067 | 3.028 | 5.12  |
| 87) | T  | 1,3-Dichlorobe...     | 1.788          | 1.728 | 1.697 | 1.616 | 1.454 | 1.606 | 1.648 | 7.11  |
| 88) | T  | 1,4-Dichlorobe...     | 1.974          | 1.699 | 1.707 | 1.665 | 1.469 | 1.613 | 1.688 | 9.79  |
| 89) | T  | n-Butylbenzene        | 2.490          | 2.574 | 2.691 | 2.705 | 2.451 | 2.744 | 2.609 | 4.68  |
| 90) | T  | Hexachloroethane      | 0.482          | 0.503 | 0.500 | 0.501 | 0.466 | 0.533 | 0.498 | 4.49  |
| 91) | T  | 1,2-Dichlorobe...     | 1.731          | 1.663 | 1.655 | 1.600 | 1.405 | 1.566 | 1.603 | 7.02  |
| 92) | T  | 1,2-Dibromo-3-...     | 0.200          | 0.217 | 0.219 | 0.223 | 0.202 | 0.230 | 0.215 | 5.62  |
| 93) | T  | 1,2,4-Trichlor...     | 1.023          | 1.016 | 0.997 | 0.985 | 0.886 | 1.023 | 0.988 | 5.30  |
| 94) | T  | Hexachlorobuta...     | 0.538          | 0.453 | 0.432 | 0.411 | 0.365 | 0.417 | 0.436 | 13.25 |
| 95) | T  | Naphthalene           | 3.158          | 3.254 | 3.269 | 3.231 | 2.935 | 3.336 | 3.197 | 4.40  |
| 96) | T  | 1,2,3-Trichlor...     | 1.028          | 1.019 | 1.005 | 0.991 | 0.880 | 1.025 | 0.991 | 5.69  |

(#) = Out of Range

## 1,2-Dichloroethane-d4

Response Ratio



$$\text{Response} = 4.580\text{e-}001 * \text{Amt} + 3.062\text{e-}002$$

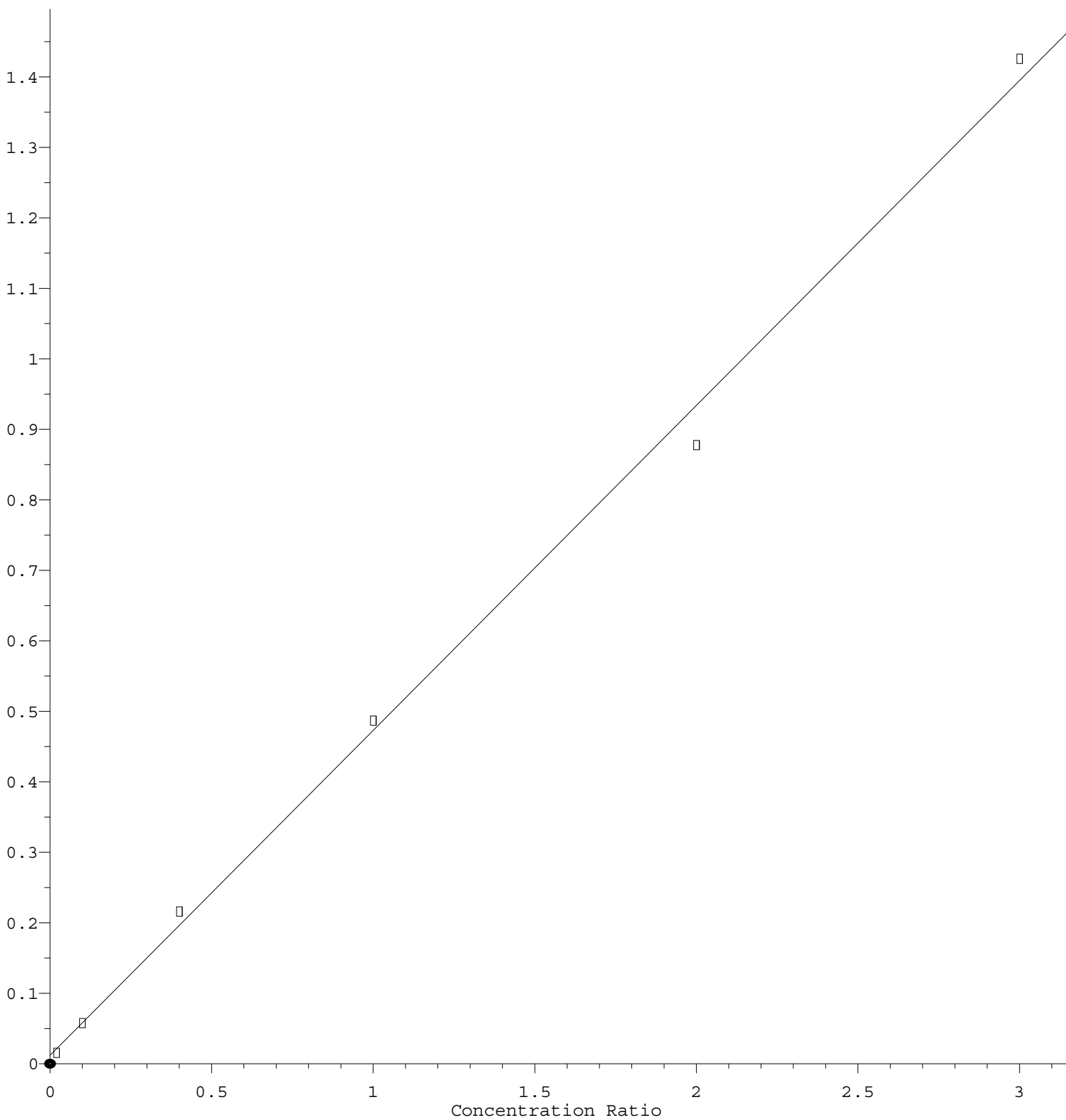
Coef of Det ( $r^2$ ) = 0.997078 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X112222W.M

Calibration Table Last Updated: Tue Nov 22 13:58:46 2022

# Methylene Chloride

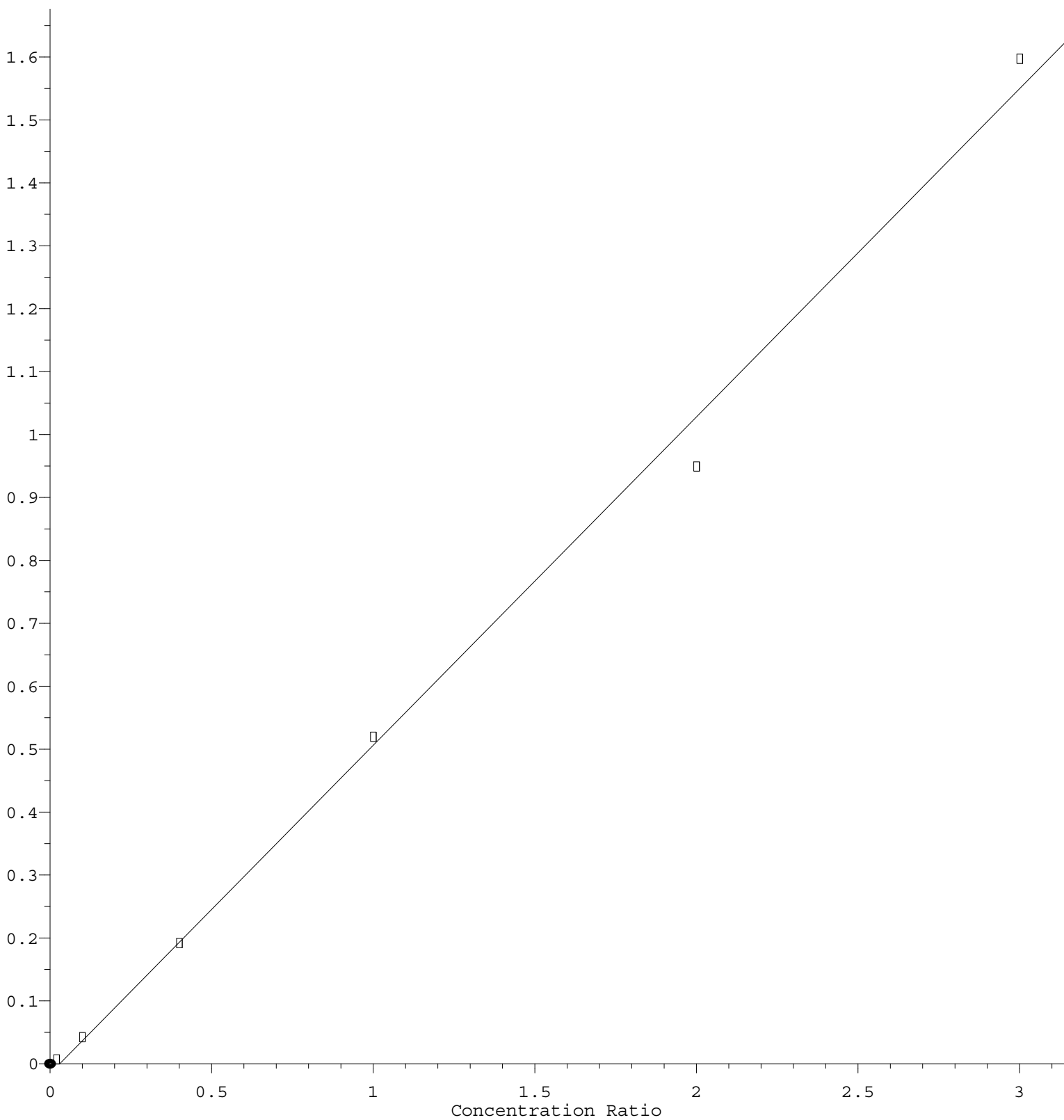
Response Ratio



Response = 4.609e-001 \* Amt + 1.228e-002  
 Coef of Det (r^2) = 0.996867 Curve Fit: Linear  
 Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X112222W.M  
 Calibration Table Last Updated: Tue Nov 22 13:58:46 2022

# t-1,3-Dichloropropene

Response Ratio



$$\text{Response} = 5.218\text{e-}001 * \text{Amt} - 1.583\text{e-}002$$

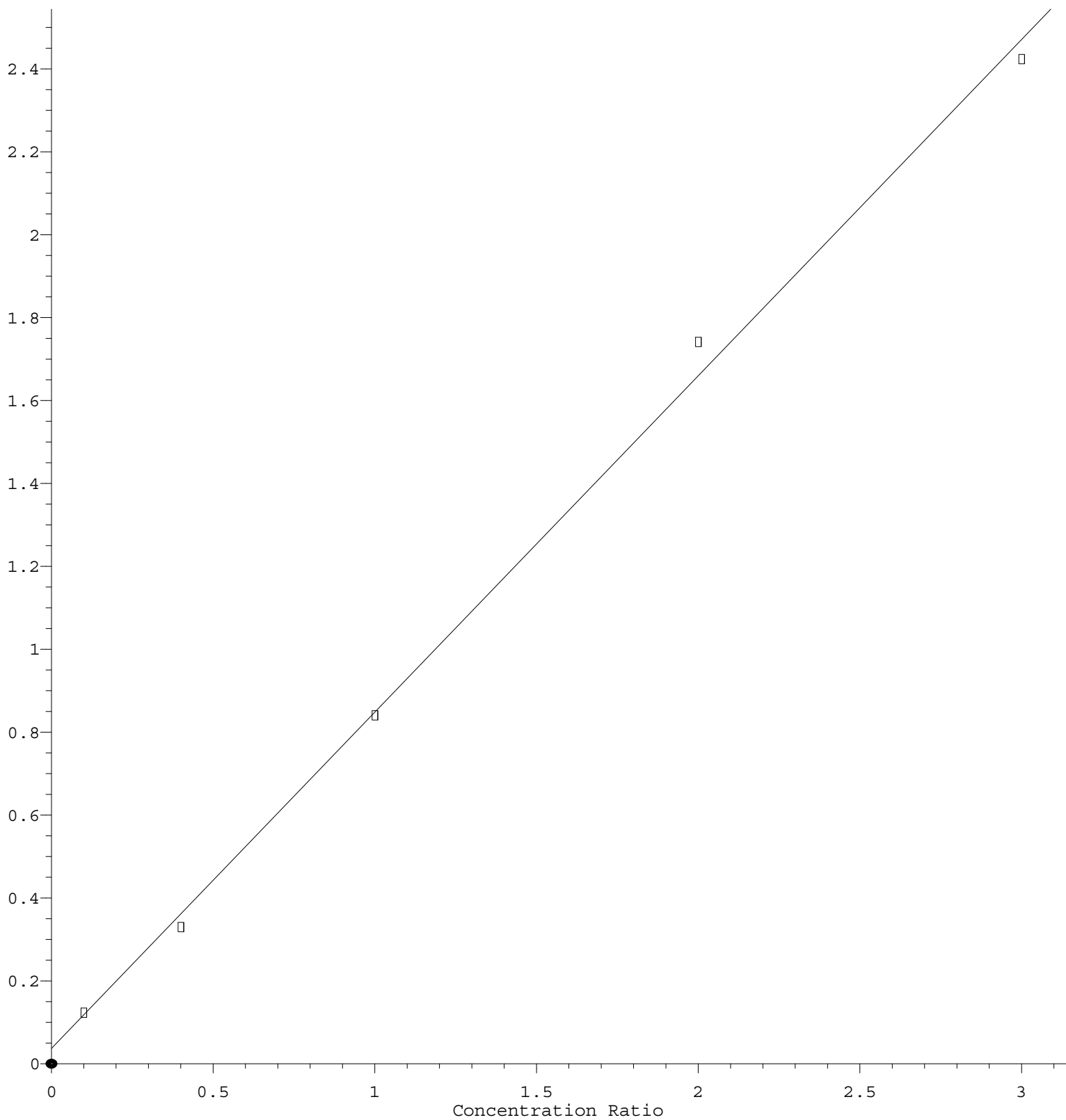
Coef of Det ( $r^2$ ) = 0.995450 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X112222W.M

Calibration Table Last Updated: Tue Nov 22 13:58:46 2022

## Toluene-d8

Response Ratio



$$\text{Response} = 8.115\text{e-}001 * \text{Amt} + 3.660\text{e-}002$$

Coef of Det ( $r^2$ ) = 0.997347 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA X\Method\82X112222W.M

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