

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\  
 Method File : 82D061223S.M  
 Title : SW846 8260  
 Last Update : Tue Jun 13 02:01:34 2023  
 Response Via : Initial Calibration

## Calibration Files

5 =VD076388.D 10 =VD076389.D 20 =VD076390.D 50 =VD076391.D 100 =VD076392.D 150 =VD076393.D

|        | Compound            | 5              | 10    | 20    | 50    | 100   | 150   | Avg   | %RSD  |
|--------|---------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 1) I   | Pentafluorobenzene  | -----ISTD----- |       |       |       |       |       |       |       |
| 2) T   | Dichlorodifluo...   | 0.462          | 0.475 | 0.423 | 0.435 | 0.450 | 0.436 | 0.447 | 4.32  |
| 3) P   | Chloromethane       | 0.955          | 0.890 | 0.852 | 0.815 | 0.797 | 0.765 | 0.846 | 8.14  |
| 4) C   | Vinyl Chloride      | 0.851          | 0.819 | 0.763 | 0.807 | 0.821 | 0.794 | 0.809 | 3.63# |
| 5) T   | Bromomethane        | 0.502          | 0.428 | 0.388 | 0.406 | 0.424 | 0.397 | 0.424 | 9.72  |
| 6) T   | Chloroethane        | 0.520          | 0.506 | 0.477 | 0.483 | 0.483 | 0.455 | 0.487 | 4.69  |
| 7) T   | Trichlorofluor...   | 0.847          | 0.831 | 0.746 | 0.809 | 0.842 | 0.810 | 0.814 | 4.55  |
| 8) T   | Diethyl Ether       | 0.322          | 0.309 | 0.293 | 0.283 | 0.278 | 0.270 | 0.293 | 6.76  |
| 9) T   | 1,1,2-Trichlor...   | 0.489          | 0.510 | 0.454 | 0.496 | 0.503 | 0.485 | 0.490 | 3.99  |
| 10) T  | Methyl Iodide       | 0.601          | 0.606 | 0.610 | 0.645 | 0.683 | 0.632 | 0.630 | 4.97  |
| 11) T  | Tert butyl alc...   | 0.052          | 0.052 | 0.050 | 0.046 | 0.043 | 0.047 | 0.048 | 7.52  |
| 12) CM | 1,1-Dichloroet...   | 0.547          | 0.507 | 0.469 | 0.489 | 0.501 | 0.482 | 0.499 | 5.41# |
| 13) T  | Acrolein            | 0.059          | 0.065 | 0.062 | 0.050 | 0.048 | 0.049 | 0.055 | 13.36 |
| 14) T  | Allyl chloride      | 1.055          | 1.025 | 0.962 | 0.949 | 0.953 | 0.915 | 0.976 | 5.37  |
| 15) T  | Acrylonitrile       | 0.152          | 0.157 | 0.147 | 0.146 | 0.142 | 0.149 | 0.149 | 3.56  |
| 16) T  | Acetone             | 0.137          | 0.133 | 0.119 | 0.134 | 0.120 | 0.119 | 0.127 | 6.64  |
| 17) T  | Carbon Disulfide    | 1.586          | 1.354 | 1.325 | 1.442 | 1.474 | 1.425 | 1.435 | 6.47  |
| 18) T  | Methyl Acetate      | 0.622          | 0.582 | 0.588 | 0.550 | 0.550 | 0.581 | 0.579 | 4.63  |
| 19) T  | Methyl tert-bu...   | 1.419          | 1.454 | 1.427 | 1.355 | 1.342 | 1.315 | 1.385 | 4.00  |
| 20) T  | Methylene Chlo...   | 1.268          | 1.045 | 0.828 | 0.639 | 0.609 | 0.565 | 0.826 | 33.98 |
| 21) T  | trans-1,2-Dich...   | 0.598          | 0.620 | 0.572 | 0.565 | 0.574 | 0.553 | 0.580 | 4.18  |
| 22) T  | Diisopropyl ether   | 2.048          | 2.116 | 2.002 | 1.943 | 1.962 | 1.855 | 1.988 | 4.55  |
| 23) T  | Vinyl Acetate       | 0.787          | 0.909 | 0.846 | 0.845 | 0.876 | 0.859 | 0.854 | 4.71  |
| 24) P  | 1,1-Dichloroet...   | 1.143          | 1.158 | 1.108 | 1.092 | 1.091 | 1.037 | 1.105 | 3.89  |
| 25) T  | 2-Butanone          | 0.214          | 0.204 | 0.193 | 0.196 | 0.187 | 0.197 | 0.199 | 4.68  |
| 26) T  | 2,2-Dichloropr...   | 1.117          | 1.046 | 0.947 | 0.966 | 0.974 | 0.919 | 0.995 | 7.35  |
| 27) T  | cis-1,2-Dichlo...   | 0.733          | 0.714 | 0.698 | 0.670 | 0.677 | 0.653 | 0.691 | 4.31  |
| 28) T  | Bromochloromet...   | 0.417          | 0.381 | 0.365 | 0.311 | 0.302 | 0.284 | 0.343 | 15.22 |
| 29) T  | Tetrahydrofuran     | 0.130          | 0.131 | 0.126 | 0.124 | 0.121 | 0.129 | 0.127 | 3.10  |
| 30) C  | Chloroform          | 1.151          | 1.172 | 1.112 | 1.073 | 1.076 | 1.022 | 1.101 | 5.03# |
| 31) T  | Cyclohexane         | 1.080          | 0.961 | 0.828 | 0.896 | 0.904 | 0.875 | 0.924 | 9.47  |
| 32) T  | 1,1,1-Trichlor...   | 0.973          | 0.973 | 0.908 | 0.936 | 0.945 | 0.908 | 0.940 | 3.10  |
| 33) S  | 1,2-Dichloroet...   | 0.630          | 0.622 | 0.604 | 0.547 | 0.539 | 0.524 | 0.578 | 8.01  |
| 34) I  | 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |
| 35) S  | Dibromofluorom...   | 0.330          | 0.333 | 0.321 | 0.326 | 0.324 | 0.305 | 0.323 | 3.11  |
| 36) T  | 1,1-Dichloropr...   | 0.505          | 0.461 | 0.442 | 0.472 | 0.480 | 0.470 | 0.472 | 4.48  |
| 37) T  | Ethyl Acetate       | 0.236          | 0.240 | 0.242 | 0.255 | 0.252 | 0.263 | 0.248 | 4.16  |
| 38) T  | Carbon Tetrach...   | 0.429          | 0.421 | 0.407 | 0.444 | 0.473 | 0.453 | 0.438 | 5.37  |
| 39) T  | Methylcyclohexane   | 0.552          | 0.534 | 0.470 | 0.556 | 0.580 | 0.567 | 0.543 | 7.20  |
| 40) TM | Benzene             | 1.393          | 1.373 | 1.340 | 1.378 | 1.394 | 1.349 | 1.371 | 1.63  |
| 41) T  | Methacrylonitrile   | 0.169          | 0.176 | 0.168 | 0.135 | 0.157 | 0.147 | 0.159 | 9.68  |
| 42) TM | 1,2-Dichloroet...   | 0.435          | 0.413 | 0.400 | 0.405 | 0.405 | 0.393 | 0.408 | 3.51  |
| 43) T  | Isopropyl Acetate   | 0.540          | 0.531 | 0.498 | 0.518 | 0.509 | 0.526 | 0.520 | 2.88  |
| 44) TM | Trichloroethene     | 0.371          | 0.378 | 0.359 | 0.378 | 0.379 | 0.365 | 0.372 | 2.25  |
| 45) C  | 1,2-Dichloropr...   | 0.376          | 0.362 | 0.361 | 0.367 | 0.366 | 0.355 | 0.364 | 2.00# |
| 46) T  | Dibromomethane      | 0.217          | 0.203 | 0.193 | 0.197 | 0.198 | 0.197 | 0.201 | 4.21  |
| 47) T  | Bromodichlorom...   | 0.516          | 0.513 | 0.492 | 0.492 | 0.498 | 0.478 | 0.498 | 2.82  |
| 48) T  | Methyl methacr...   | 0.253          | 0.262 | 0.236 | 0.247 | 0.244 | 0.254 | 0.249 | 3.69  |
| 49) T  | 1,4-Dioxane         | 0.002          | 0.003 | 0.002 | 0.002 | 0.002 | 0.003 | 0.002 | 8.45  |
| 50) S  | Toluene-d8          | 1.284          | 1.267 | 1.221 | 1.206 | 1.213 | 1.157 | 1.225 | 3.73  |
| 51) T  | 4-Methyl-2-Pen...   | 0.253          | 0.264 | 0.253 | 0.257 | 0.253 | 0.271 | 0.258 | 2.86  |
| 52) CM | Toluene             | 0.878          | 0.876 | 0.837 | 0.869 | 0.880 | 0.862 | 0.867 | 1.87# |
| 53) T  | t-1,3-Dichloro...   | 0.503          | 0.510 | 0.510 | 0.515 | 0.518 | 0.501 | 0.510 | 1.24  |
| 54) T  | cis-1,3-Dichlo...   | 0.595          | 0.593 | 0.575 | 0.587 | 0.591 | 0.576 | 0.586 | 1.44  |
| 55) T  | 1,1,2-Trichlor...   | 0.278          | 0.281 | 0.261 | 0.267 | 0.262 | 0.263 | 0.269 | 3.23  |
| 56) T  | Ethyl methacry...   | 0.366          | 0.367 | 0.364 | 0.383 | 0.378 | 0.379 | 0.373 | 2.14  |

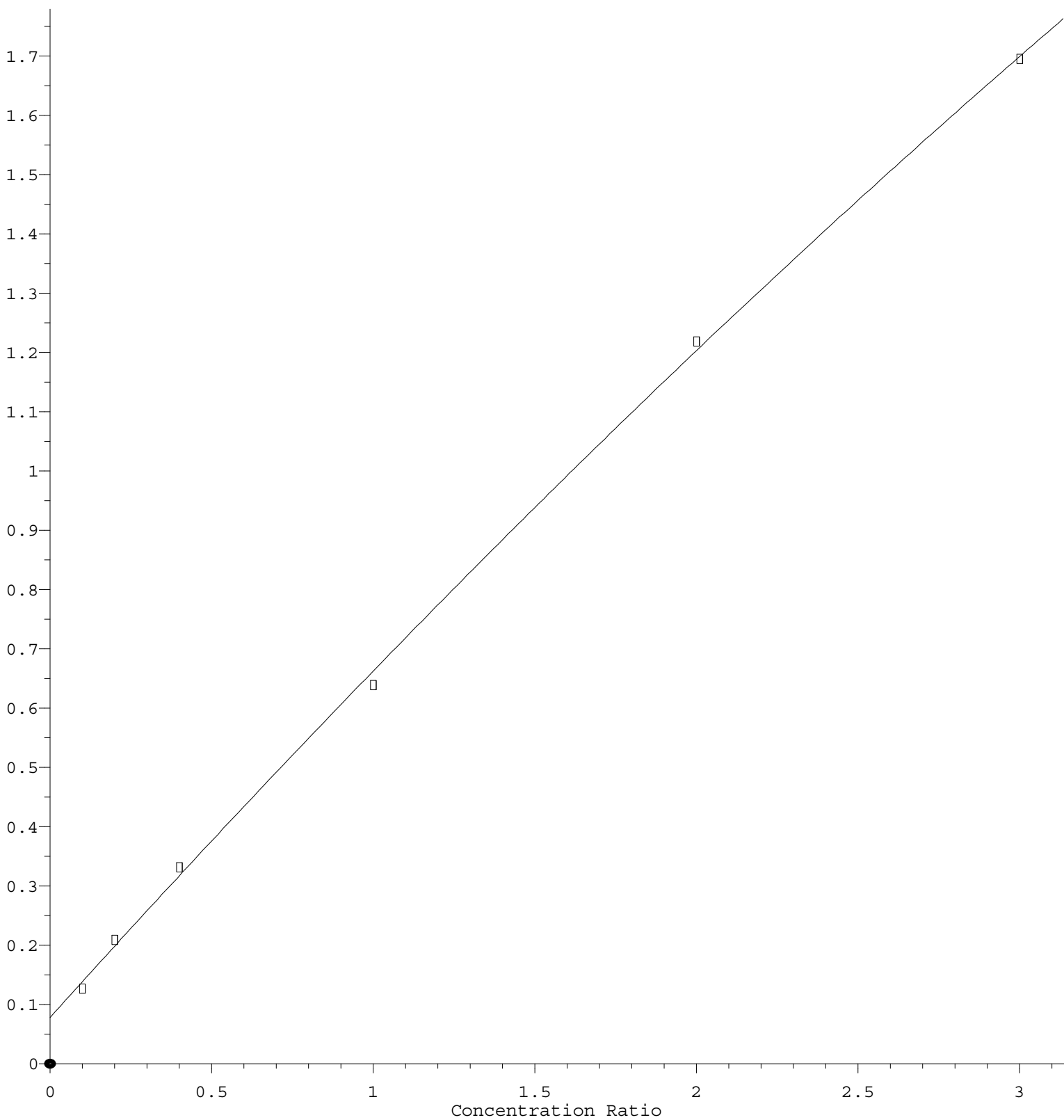
Method Path : Z:\voasrv\HPCHEM1\MSVOA\_D\Method\  
 Method File : 82D061223S.M

|     |    |                       |                |       |       |       |       |       |       |       |
|-----|----|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 57) | T  | 1,3-Dichloropr...     | 0.464          | 0.483 | 0.466 | 0.467 | 0.467 | 0.458 | 0.467 | 1.78  |
| 58) | T  | 2-Chloroethyl ...     | 0.161          | 0.154 | 0.157 | 0.142 | 0.145 | 0.152 | 0.152 | 4.79  |
| 59) | T  | 2-Hexanone            | 0.181          | 0.184 | 0.176 | 0.182 | 0.177 | 0.187 | 0.181 | 2.35  |
| 60) | T  | Dibromochlorom...     | 0.331          | 0.345 | 0.326 | 0.330 | 0.334 | 0.329 | 0.332 | 2.02  |
| 61) | T  | 1,2-Dibromoethane     | 0.268          | 0.261 | 0.252 | 0.261 | 0.263 | 0.260 | 0.261 | 1.97  |
| 62) | S  | 4-Bromofluorob...     | 0.458          | 0.438 | 0.422 | 0.405 | 0.409 | 0.389 | 0.420 | 5.92  |
| 63) | I  | Chlorobenzene-d5      | -----ISTD----- |       |       |       |       |       |       |       |
| 64) | T  | Tetrachloroethene     | 0.353          | 0.354 | 0.323 | 0.348 | 0.351 | 0.330 | 0.343 | 3.82  |
| 65) | PM | Chlorobenzene         | 1.060          | 1.047 | 1.010 | 1.045 | 1.057 | 0.999 | 1.036 | 2.45  |
| 66) | T  | 1,1,1,2-Tetrac...     | 0.408          | 0.386 | 0.370 | 0.391 | 0.394 | 0.377 | 0.388 | 3.47  |
| 67) | C  | Ethyl Benzene         | 1.957          | 1.907 | 1.828 | 1.912 | 1.966 | 1.882 | 1.909 | 2.65# |
| 68) | T  | m/p-Xylenes           | 0.732          | 0.723 | 0.679 | 0.728 | 0.755 | 0.717 | 0.722 | 3.44  |
| 69) | T  | o-Xylene              | 0.712          | 0.683 | 0.663 | 0.700 | 0.720 | 0.684 | 0.694 | 3.02  |
| 70) | T  | Styrene               | 1.189          | 1.193 | 1.132 | 1.196 | 1.220 | 1.174 | 1.184 | 2.50  |
| 71) | P  | Bromoform             | 0.225          | 0.227 | 0.222 | 0.226 | 0.226 | 0.230 | 0.226 | 1.16  |
| 72) | I  | 1,4-Dichlorobenzen... | -----ISTD----- |       |       |       |       |       |       |       |
| 73) | T  | Isopropylbenzene      | 3.861          | 3.804 | 3.537 | 3.812 | 3.879 | 3.794 | 3.781 | 3.29  |
| 74) | T  | N-amyl acetate        | 1.140          | 1.163 | 1.145 | 1.148 | 1.145 | 1.177 | 1.153 | 1.24  |
| 75) | P  | 1,1,2,2-Tetrac...     | 0.772          | 0.780 | 0.711 | 0.738 | 0.734 | 0.746 | 0.747 | 3.45  |
| 76) | T  | 1,2,3-Trichlor...     | 0.441          | 0.448 | 0.425 | 0.430 | 0.514 | 0.546 | 0.467 | 10.73 |
| 77) | T  | Bromobenzene          | 0.928          | 0.913 | 0.853 | 0.895 | 0.895 | 0.869 | 0.892 | 3.08  |
| 78) | T  | n-propylbenzene       | 4.721          | 4.643 | 4.305 | 4.648 | 4.748 | 4.590 | 4.609 | 3.46  |
| 79) | T  | 2-Chlorotoluene       | 2.673          | 2.652 | 2.500 | 2.626 | 2.625 | 2.573 | 2.608 | 2.40  |
| 80) | T  | 1,3,5-Trimethy...     | 3.312          | 3.166 | 2.971 | 3.171 | 3.197 | 3.119 | 3.156 | 3.53  |
| 81) | T  | trans-1,4-Dich...     | 0.276          | 0.261 | 0.252 | 0.254 | 0.256 | 0.268 | 0.261 | 3.53  |
| 82) | T  | 4-Chlorotoluene       | 2.848          | 2.754 | 2.601 | 2.711 | 2.777 | 2.696 | 2.731 | 3.05  |
| 83) | T  | tert-Butylbenzene     | 2.758          | 2.735 | 2.509 | 2.757 | 2.788 | 2.704 | 2.708 | 3.75  |
| 84) | T  | 1,2,4-Trimethy...     | 3.158          | 3.158 | 2.944 | 3.147 | 3.199 | 3.103 | 3.118 | 2.91  |
| 85) | T  | sec-Butylbenzene      | 4.018          | 4.022 | 3.697 | 4.018 | 4.134 | 4.029 | 3.986 | 3.73  |
| 86) | T  | p-Isopropyltol...     | 3.390          | 3.368 | 3.097 | 3.400 | 3.491 | 3.394 | 3.357 | 3.99  |
| 87) | T  | 1,3-Dichlorobe...     | 1.752          | 1.747 | 1.669 | 1.742 | 1.749 | 1.700 | 1.727 | 1.99  |
| 88) | T  | 1,4-Dichlorobe...     | 1.791          | 1.729 | 1.620 | 1.718 | 1.715 | 1.665 | 1.706 | 3.43  |
| 89) | T  | n-Butylbenzene        | 3.227          | 3.253 | 2.984 | 3.262 | 3.359 | 3.266 | 3.225 | 3.91  |
| 90) | T  | Hexachloroethane      | 0.607          | 0.613 | 0.591 | 0.628 | 0.643 | 0.635 | 0.619 | 3.09  |
| 91) | T  | 1,2-Dichlorobe...     | 1.574          | 1.551 | 1.466 | 1.504 | 1.530 | 1.484 | 1.519 | 2.70  |
| 92) | T  | 1,2-Dibromo-3-...     | 0.131          | 0.124 | 0.119 | 0.119 | 0.119 | 0.123 | 0.123 | 3.61  |
| 93) | T  | 1,2,4-Trichlor...     | 1.063          | 1.031 | 0.972 | 1.019 | 1.022 | 0.993 | 1.016 | 3.09  |
| 94) | T  | Hexachlorobuta...     | 0.518          | 0.528 | 0.470 | 0.518 | 0.528 | 0.506 | 0.511 | 4.23  |
| 95) | T  | Naphthalene           | 2.073          | 2.024 | 1.939 | 2.041 | 2.070 | 2.098 | 2.041 | 2.74  |
| 96) | T  | 1,2,3-Trichlor...     | 0.893          | 0.882 | 0.845 | 0.882 | 0.904 | 0.861 | 0.878 | 2.42  |

(#) = Out of Range

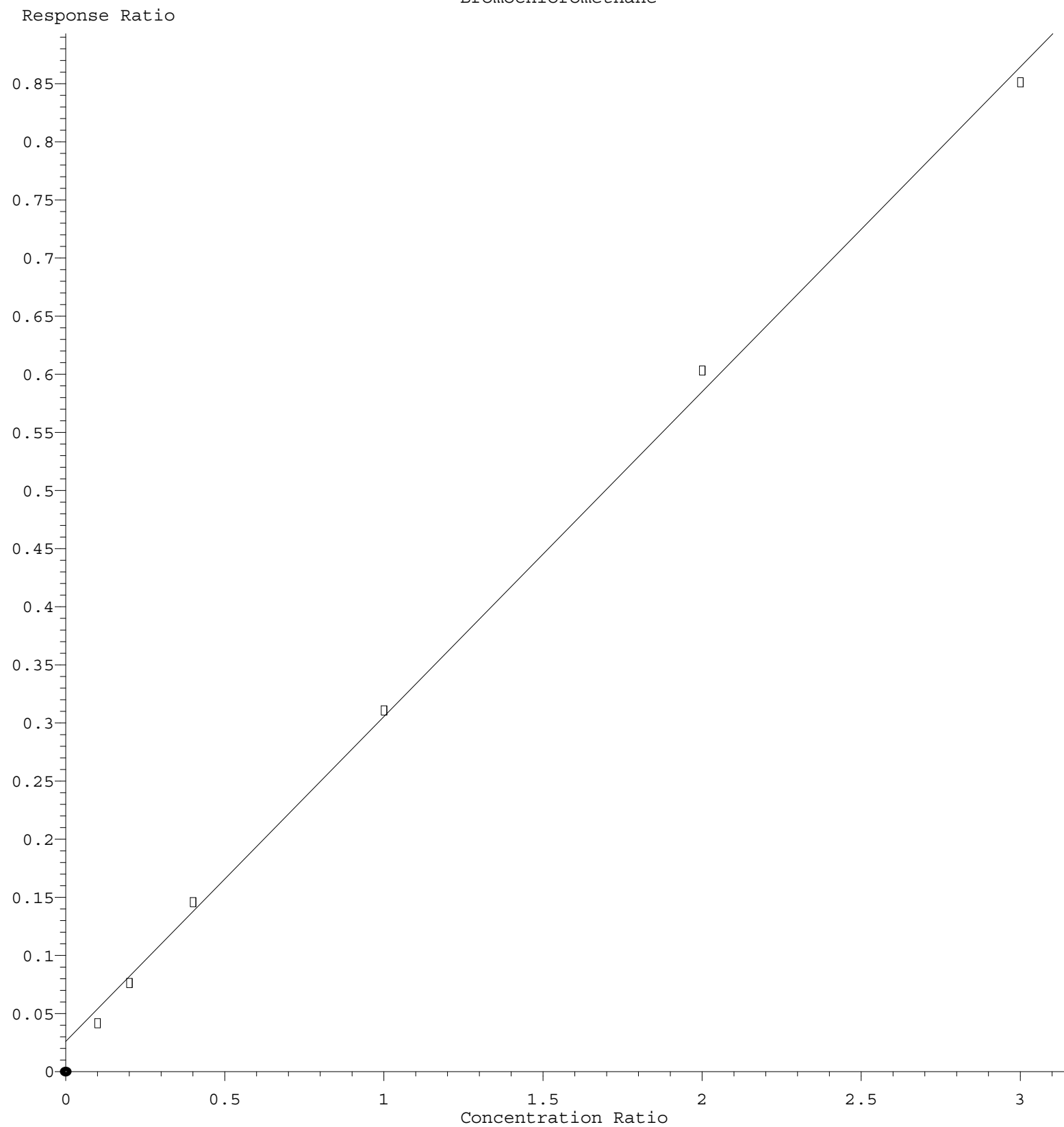
# Methylene Chloride

Response Ratio



$R = -2.208e-002 A^2 + 6.067e-001 A + 7.802e-002$   
 Coef of Det ( $r^2$ ) = 0.999358    Curve Fit: Quadratic  
 Method Name:    Z:\voasrv\HPCHEM1\MSVOA D\Method\82D061223S.M  
 Calibration Table Last Updated: Tue Jun 13 02:01:34 2023

# Bromochloromethane



$\text{Response} = 2.798\text{e-}001 * \text{Amt} + 2.567\text{e-}002$   
 Coef of Det ( $r^2$ ) = 0.998516    Curve Fit: Linear  
 Method Name: Z:\voasrv\HPCHEM1\MSVOA D\Method\82D061223S.M  
 Calibration Table Last Updated: Tue Jun 13 02:01:34 2023