

Method Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\  
 Method File : 82N101118W.M  
 Title : SW846 8260  
 Last Update : Fri Oct 12 09:51:20 2018  
 Response Via : Initial Calibration

## Calibration Files

1 =VN051802.D 5 =VN051803.D 20 =VN051809.D  
 50 =VN051810.D 100 =VN051811.D 150 =VN051812.D

| Compound                  | 1              | 5     | 20    | 50    | 100   | 150   | Avg   | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 1) I Pentafluorobenzene   | -----ISTD----- |       |       |       |       |       |       |       |
| 2) T Dichlorodifluorom    | 0.272          | 0.303 | 0.261 | 0.255 | 0.276 | 0.298 | 0.278 | 7.03  |
| 3) P Chloromethane        | 0.367          | 0.385 | 0.334 | 0.308 | 0.314 | 0.309 | 0.336 | 9.76  |
| 4) C Vinyl Chloride       | 0.496          | 0.568 | 0.518 | 0.479 | 0.490 | 0.475 | 0.504 | 6.85# |
| 5) T Bromomethane         | 0.514          | 0.485 | 0.458 | 0.424 | 0.428 | 0.420 | 0.455 | 8.40  |
| 6) T Chloroethane         | 0.391          | 0.411 | 0.378 | 0.353 | 0.351 | 0.337 | 0.370 | 7.57  |
| 7) T Trichlorofluorome    | 0.730          | 0.804 | 0.761 | 0.713 | 0.802 | 0.682 | 0.749 | 6.59  |
| 8) T Diethyl Ether        | 0.195          | 0.230 | 0.210 | 0.193 | 0.204 | 0.207 | 0.206 | 6.34  |
| 9) T 1,1,2-Trichlorotr    | 0.450          | 0.424 | 0.389 | 0.376 | 0.378 | 0.380 | 0.399 | 7.64  |
| 10) T Methyl Iodide       |                | 0.453 | 0.492 | 0.517 | 0.582 | 0.588 | 0.526 | 11.09 |
| 11) T Tert butyl alcoho   |                | 0.037 | 0.034 | 0.033 | 0.036 | 0.036 | 0.035 | 4.18  |
| 12) CM 1,1-Dichloroethen  | 0.362          | 0.384 | 0.358 | 0.340 | 0.351 | 0.358 | 0.359 | 4.06# |
| 13) T Acrolein            |                | 0.019 | 0.037 | 0.034 | 0.038 | 0.037 | 0.033 | 23.80 |
| 14) T Allyl chloride      | 0.412          | 0.515 | 0.454 | 0.437 | 0.444 | 0.441 | 0.451 | 7.60  |
| 15) T Acrylonitrile       | 0.095          | 0.119 | 0.118 | 0.114 | 0.121 | 0.120 | 0.114 | 8.49  |
| 16) T Acetone             | 0.115          | 0.117 | 0.108 | 0.095 | 0.095 | 0.090 | 0.103 | 11.22 |
| 17) T Carbon Disulfide    | 0.986          | 1.024 | 0.930 | 0.928 | 0.968 | 0.995 | 0.972 | 3.89  |
| 18) T Methyl Acetate      | 0.608          | 0.358 | 0.279 | 0.261 | 0.270 | 0.266 | 0.340 | 39.90 |
| 19) T Methyl tert-butyl   | 1.065          | 1.208 | 1.150 | 1.091 | 1.130 | 1.135 | 1.130 | 4.38  |
| 20) T Methylene Chlorid   | 0.462          | 0.469 | 0.417 | 0.393 | 0.409 | 0.411 | 0.427 | 7.30  |
| 21) T trans-1,2-Dichlor   | 0.430          | 0.441 | 0.417 | 0.399 | 0.415 | 0.427 | 0.421 | 3.44  |
| 22) T Diisopropyl ether   | 0.984          | 1.077 | 1.014 | 0.957 | 0.976 | 0.966 | 0.996 | 4.48  |
| 23) T Vinyl Acetate       | 0.653          | 0.767 | 0.744 | 0.722 | 0.743 | 0.740 | 0.728 | 5.41  |
| 24) P 1,1-Dichloroethan   | 0.701          | 0.741 | 0.682 | 0.657 | 0.663 | 0.661 | 0.684 | 4.71  |
| 25) T 2-Butanone          | 0.140          | 0.157 | 0.152 | 0.141 | 0.145 | 0.139 | 0.146 | 4.98  |
| 26) T 2,2-Dichloropropa   | 0.719          | 0.725 | 0.689 | 0.672 | 0.683 | 0.667 | 0.693 | 3.53  |
| 27) T cis-1,2-Dichloroe   | 0.469          | 0.501 | 0.484 | 0.475 | 0.493 | 0.493 | 0.486 | 2.50  |
| 28) T Bromochloromethan   | 0.300          | 0.302 | 0.309 | 0.262 | 0.277 | 0.273 | 0.287 | 6.71  |
| 29) T Tetrahydrofuran     | 0.090          | 0.084 | 0.089 | 0.084 | 0.088 | 0.086 | 0.087 | 2.92  |
| 30) C Chloroform          | 0.834          | 0.869 | 0.815 | 0.778 | 0.807 | 0.805 | 0.818 | 3.78# |
| 31) T Cyclohexane         | 1.430          | 0.793 | 0.610 | 0.583 | 0.565 | 0.548 | 0.755 | 45.36 |
| 32) T 1,1,1-Trichloroet   | 0.752          | 0.795 | 0.761 | 0.746 | 0.779 | 0.774 | 0.768 | 2.39  |
| 33) S 1,2-Dichloroethan   |                | 0.520 | 0.478 | 0.467 | 0.466 | 0.459 | 0.478 | 5.12  |
| 34) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |
| 35) S Dibromofluorometh   |                | 0.314 | 0.299 | 0.309 | 0.315 | 0.317 | 0.311 | 2.29  |
| 36) T 1,1-Dichloroprope   | 0.442          | 0.425 | 0.387 | 0.387 | 0.395 | 0.393 | 0.405 | 5.73  |
| 37) T Ethyl Acetate       | 0.179          | 0.221 | 0.213 | 0.210 | 0.214 | 0.211 | 0.208 | 7.00  |
| 38) T Carbon Tetrachlor   | 0.431          | 0.477 | 0.454 | 0.469 | 0.492 | 0.493 | 0.469 | 5.05  |
| 39) T Methylcyclohexane   | 0.476          | 0.499 | 0.486 | 0.515 | 0.508 | 0.499 | 0.497 | 2.88  |
| 40) TM Benzene            | 1.094          | 1.224 | 1.171 | 1.159 | 1.194 | 1.164 | 1.168 | 3.71  |
| 41) T Methacrylonitrile   | 0.096          | 0.102 | 0.092 | 0.100 | 0.111 | 0.100 | 0.100 | 6.36  |
| 42) TM 1,2-Dichloroethan  | 0.352          | 0.426 | 0.385 | 0.375 | 0.384 | 0.375 | 0.383 | 6.30  |
| 43) T Isopropyl Acetate   | 0.732          | 0.482 | 0.420 | 0.405 | 0.417 | 0.410 | 0.478 | 26.75 |
| 44) TM Trichloroethene    | 0.316          | 0.370 | 0.353 | 0.358 | 0.369 | 0.367 | 0.355 | 5.81  |
| 45) C 1,2-Dichloropropa   | 0.265          | 0.298 | 0.275 | 0.270 | 0.272 | 0.266 | 0.275 | 4.42# |
| 46) T Dibromomethane      | 0.196          | 0.216 | 0.207 | 0.210 | 0.218 | 0.217 | 0.211 | 4.03  |
| 47) T Bromodichlorometh   | 0.370          | 0.431 | 0.417 | 0.420 | 0.444 | 0.444 | 0.421 | 6.50  |
| 48) T Methyl methacryla   | 0.164          | 0.192 | 0.185 | 0.186 | 0.194 | 0.190 | 0.185 | 5.88  |
| 49) T 1,4-Dioxane         | 0.002          | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 | 0.003 | 20.94 |
| 50) S Toluene-d8          |                | 1.145 | 1.121 | 1.152 | 1.188 | 1.187 | 1.159 | 2.48  |
| 51) T 4-Methyl-2-Pentan   | 0.190          | 0.216 | 0.224 | 0.218 | 0.224 | 0.222 | 0.216 | 6.10  |
| 52) CM Toluene            | 0.681          | 0.785 | 0.777 | 0.798 | 0.834 | 0.830 | 0.784 | 7.09# |

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| Compound |                         | 1              | 5     | 20    | 50    | 100   | 150   | Avg   | %RSD  |
|----------|-------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 53)      | T t-1,3-Dichloropro     | 0.348          | 0.412 | 0.413 | 0.432 | 0.464 | 0.462 | 0.422 | 10.13 |
| 54)      | T cis-1,3-Dichlorop     | 0.401          | 0.472 | 0.462 | 0.468 | 0.491 | 0.485 | 0.463 | 6.98  |
| 55)      | T 1,1,2-Trichloroet     | 0.280          | 0.288 | 0.292 | 0.297 | 0.308 | 0.305 | 0.295 | 3.51  |
| 56)      | T Ethyl methacrylat     | 0.284          | 0.330 | 0.353 | 0.358 | 0.380 | 0.379 | 0.347 | 10.36 |
| 57)      | T 1,3-Dichloropropa     | 0.442          | 0.471 | 0.457 | 0.451 | 0.468 | 0.461 | 0.458 | 2.35  |
| 58)      | T 2-Chloroethyl Vin     | 0.130          | 0.147 | 0.148 | 0.156 | 0.162 | 0.164 | 0.151 | 8.44  |
| 59)      | T 2-Hexanone            | 0.128          | 0.157 | 0.154 | 0.155 | 0.160 | 0.156 | 0.152 | 7.82  |
| 60)      | T Dibromochlorometh     | 0.272          | 0.325 | 0.341 | 0.363 | 0.396 | 0.404 | 0.350 | 13.94 |
| 61)      | T 1,2-Dibromoethane     | 0.242          | 0.292 | 0.305 | 0.311 | 0.338 | 0.335 | 0.304 | 11.52 |
| 62)      | S 4-Bromofluorobenz     |                | 0.361 | 0.371 | 0.407 | 0.430 | 0.430 | 0.400 | 8.07  |
| 63)      | I Chlorobenzene-d5      | -----ISTD----- |       |       |       |       |       |       |       |
| 64)      | T Tetrachloroethene     | 0.390          | 0.416 | 0.379 | 0.373 | 0.374 | 0.370 | 0.383 | 4.52  |
| 65)      | PM Chlorobenzene        | 1.008          | 1.012 | 0.986 | 0.998 | 1.031 | 1.032 | 1.011 | 1.79  |
| 66)      | T 1,1,1,2-Tetrachlo     | 0.381          | 0.369 | 0.378 | 0.380 | 0.402 | 0.402 | 0.385 | 3.50  |
| 67)      | C Ethyl Benzene         | 1.596          | 1.673 | 1.677 | 1.680 | 1.716 | 1.702 | 1.674 | 2.49# |
| 68)      | T m/p-Xylenes           | 0.611          | 0.666 | 0.670 | 0.688 | 0.717 | 0.705 | 0.676 | 5.54  |
| 69)      | T o-Xylene              | 0.586          | 0.644 | 0.659 | 0.667 | 0.696 | 0.690 | 0.657 | 6.07  |
| 70)      | T Styrene               | 0.817          | 0.939 | 0.995 | 1.056 | 1.135 | 1.137 | 1.013 | 12.20 |
| 71)      | P Bromoform             | 0.219          | 0.237 | 0.247 | 0.266 | 0.312 | 0.325 | 0.268 | 15.80 |
| 72)      | I 1,4-Dichlorobenzene-d | -----ISTD----- |       |       |       |       |       |       |       |
| 73)      | T Isopropylbenzene      | 4.476          | 4.559 | 3.847 | 3.499 | 3.407 | 3.328 | 3.853 | 14.16 |
| 74)      | T N-amyl acetate        | 0.718          | 0.848 | 0.797 | 0.738 | 0.747 | 0.736 | 0.764 | 6.39  |
| 75)      | P 1,1,2,2-Tetrachlo     | 1.002          | 0.977 | 0.859 | 0.756 | 0.754 | 0.729 | 0.846 | 14.18 |
| 76)      | T 1,2,3-Trichloropr     | 0.969          | 0.810 | 0.687 | 0.591 | 0.584 | 0.628 | 0.712 | 21.25 |
| 77)      | T Bromobenzene          | 1.085          | 1.066 | 0.930 | 0.877 | 0.903 | 0.903 | 0.961 | 9.43  |
| 78)      | T n-propylbenzene       | 4.345          | 4.547 | 4.079 | 3.867 | 3.743 | 3.626 | 4.035 | 8.87  |
| 79)      | T 2-Chlorotoluene       | 2.890          | 2.817 | 2.388 | 2.224 | 2.162 | 2.102 | 2.430 | 14.08 |
| 80)      | T 1,3,5-Trimethylbe     | 3.446          | 3.574 | 3.150 | 2.956 | 2.898 | 2.812 | 3.139 | 9.90  |
| 81)      | T trans-1,4-Dichlor     | 0.189          | 0.233 | 0.215 | 0.213 | 0.225 | 0.227 | 0.217 | 7.25  |
| 82)      | T 4-Chlorotoluene       | 2.365          | 2.643 | 2.340 | 2.268 | 2.224 | 2.173 | 2.335 | 7.14  |
| 83)      | T tert-Butylbenzene     | 3.342          | 3.389 | 2.865 | 2.675 | 2.641 | 2.559 | 2.912 | 12.57 |
| 84)      | T 1,2,4-Trimethylbe     | 3.231          | 3.532 | 3.198 | 2.991 | 2.934 | 2.869 | 3.126 | 7.86  |
| 85)      | T sec-Butylbenzene      | 4.122          | 4.318 | 3.747 | 3.602 | 3.459 | 3.384 | 3.772 | 9.91  |
| 86)      | T p-Isopropyltoluen     | 3.362          | 3.640 | 3.275 | 3.255 | 3.219 | 3.153 | 3.317 | 5.19  |
| 87)      | T 1,3-Dichlorobenze     | 1.598          | 1.687 | 1.614 | 1.616 | 1.669 | 1.674 | 1.643 | 2.31  |
| 88)      | T 1,4-Dichlorobenze     | 1.500          | 1.661 | 1.578 | 1.566 | 1.630 | 1.620 | 1.592 | 3.59  |
| 89)      | T n-Butylbenzene        | 2.110          | 2.521 | 2.504 | 2.600 | 2.545 | 2.517 | 2.466 | 7.20  |
| 90)      | T Hexachloroethane      | 0.666          | 0.689 | 0.566 | 0.562 | 0.565 | 0.564 | 0.602 | 9.78  |
| 91)      | T 1,2-Dichlorobenze     | 1.495          | 1.679 | 1.597 | 1.558 | 1.605 | 1.591 | 1.588 | 3.79  |
| 92)      | T 1,2-Dibromo-3-Chl     | 0.119          | 0.137 | 0.127 | 0.122 | 0.122 | 0.121 | 0.125 | 5.34  |
| 93)      | T 1,2,4-Trichlorobe     | 0.419          | 0.511 | 0.669 | 0.776 | 0.848 | 0.901 | 0.687 | 27.81 |
| 94)      | T Hexachlorobutadie     | 0.533          | 0.580 | 0.509 | 0.502 | 0.482 | 0.473 | 0.513 | 7.55  |
| 95)      | T Naphthalene           | 1.074          | 1.084 | 1.407 | 1.632 | 1.871 | 2.012 | 1.513 | 26.10 |
| 96)      | T 1,2,3-Trichlorobe     | 0.474          | 0.566 | 0.709 | 0.762 | 0.816 | 0.863 | 0.698 | 21.50 |

(#) = Out of Range