

Method Path : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\  
 Method File : 82Y011020S.M  
 Title : SW846 8260  
 Last Update : Fri Jan 10 16:01:58 2020  
 Response Via : Initial Calibration

## Calibration Files

10 =VY001146.D 5 =VY001145.D 20 =VY001147.D  
 50 =VY001148.D 100 =VY001149.D 150 =VY001150.D

|        | Compound            | 10             | 5     | 20    | 50    | 100   | 150   | Avg   | %RSD  |
|--------|---------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| -----  |                     |                |       |       |       |       |       |       |       |
| 1) I   | Pentafluorobenzene  | -----ISTD----- |       |       |       |       |       |       |       |
| 2) T   | Dichlorodifluorom   | 0.428          | 0.345 | 0.417 | 0.374 | 0.386 | 0.355 | 0.384 | 8.63  |
| 3) P   | Chloromethane       | 0.617          | 0.590 | 0.590 | 0.518 | 0.528 | 0.478 | 0.553 | 9.68  |
| 4) C   | Vinyl Chloride      | 0.586          | 0.539 | 0.610 | 0.554 | 0.560 | 0.497 | 0.558 | 7.01# |
| 5) T   | Bromomethane        | 0.324          | 0.325 | 0.307 | 0.308 | 0.289 | 0.243 | 0.300 | 10.21 |
| 6) T   | Chloroethane        | 0.354          | 0.342 | 0.340 | 0.318 | 0.312 | 0.267 | 0.322 | 9.74  |
| 7) T   | Trichlorofluorome   | 0.797          | 0.819 | 0.818 | 0.742 | 0.772 | 0.708 | 0.776 | 5.71  |
| 8) T   | Diethyl Ether       | 0.317          | 0.289 | 0.321 | 0.296 | 0.305 | 0.282 | 0.302 | 5.24  |
| 9) T   | 1,1,2-Trichlorotr   | 0.519          | 0.494 | 0.531 | 0.488 | 0.504 | 0.462 | 0.500 | 4.85  |
| 10) T  | Methyl Iodide       | 0.701          | 0.676 | 0.717 | 0.675 | 0.695 | 0.639 | 0.684 | 3.96  |
| 11) T  | Tert butyl alcoho   | 0.057          | 0.066 | 0.055 | 0.047 | 0.048 | 0.046 | 0.053 | 14.61 |
| 12) CM | 1,1-Dichloroethen   | 0.529          | 0.514 | 0.544 | 0.495 | 0.516 | 0.470 | 0.511 | 5.08# |
| 13) T  | Acrolein            | 0.051          | 0.050 | 0.053 | 0.045 | 0.044 | 0.044 | 0.048 | 8.30  |
| 14) T  | Allyl chloride      | 0.866          | 0.853 | 0.904 | 0.841 | 0.890 | 0.822 | 0.863 | 3.53  |
| 15) T  | Acrylonitrile       | 0.151          | 0.152 | 0.162 | 0.144 | 0.152 | 0.143 | 0.151 | 4.59  |
| 16) T  | Acetone             | 0.124          | 0.138 | 0.120 | 0.114 | 0.121 | 0.118 | 0.123 | 6.83  |
| 17) T  | Carbon Disulfide    | 1.715          | 1.592 | 1.761 | 1.627 | 1.691 | 1.541 | 1.654 | 4.97  |
| 18) T  | Methyl Acetate      | 0.405          | 0.472 | 0.418 | 0.374 | 0.387 | 0.376 | 0.405 | 9.07  |
| 19) T  | Methyl tert-butyl   | 1.420          | 1.400 | 1.470 | 1.384 | 1.456 | 1.354 | 1.414 | 3.10  |
| 20) T  | Methylene Chlorid   | 0.763          | 0.969 | 0.723 | 0.558 | 0.566 | 0.519 | 0.683 | 25.03 |
| 21) T  | trans-1,2-Dichlor   | 0.583          | 0.584 | 0.614 | 0.569 | 0.591 | 0.535 | 0.580 | 4.50  |
| 22) T  | Diisopropyl ether   | 1.725          | 1.763 | 1.790 | 1.729 | 1.862 | 1.704 | 1.762 | 3.26  |
| 23) T  | Vinyl Acetate       | 1.127          | 1.080 | 1.194 | 1.118 | 1.191 | 1.051 | 1.127 | 5.12  |
| 24) P  | 1,1-Dichloroethan   | 0.966          | 0.970 | 1.007 | 0.941 | 0.993 | 0.911 | 0.965 | 3.57  |
| 25) T  | 2-Butanone          | 0.189          | 0.203 | 0.199 | 0.184 | 0.191 | 0.179 | 0.191 | 4.72  |
| 26) T  | 2,2-Dichloropropa   | 0.916          | 0.990 | 0.897 | 0.844 | 0.875 | 0.800 | 0.887 | 7.31  |
| 27) T  | cis-1,2-Dichloroe   | 0.636          | 0.649 | 0.676 | 0.627 | 0.639 | 0.583 | 0.635 | 4.77  |
| 28) T  | Bromochloromethan   | 0.365          | 0.356 | 0.350 | 0.425 | 0.441 | 0.439 | 0.396 | 10.97 |
| 29) T  | Tetrahydrofuran     | 0.131          | 0.132 | 0.137 | 0.127 | 0.134 | 0.125 | 0.131 | 3.50  |
| 30) C  | Chloroform          | 0.949          | 0.968 | 0.973 | 0.930 | 0.963 | 0.888 | 0.945 | 3.40# |
| 31) T  | Cyclohexane         | 1.060          | 1.148 | 1.054 | 0.965 | 0.997 | 0.904 | 1.021 | 8.32  |
| 32) T  | 1,1,1-Trichloroet   | 0.853          | 0.862 | 0.865 | 0.824 | 0.851 | 0.776 | 0.839 | 4.07  |
| 33) S  | 1,2-Dichloroethan   | 0.509          | 0.550 | 0.502 | 0.542 | 0.533 | 0.532 | 0.528 | 3.53  |
| -----  |                     |                |       |       |       |       |       |       |       |
| 34) I  | 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |
| 35) S  | Dibromofluorometh   | 0.316          | 0.295 | 0.304 | 0.287 | 0.278 | 0.276 | 0.293 | 5.31  |
| 36) T  | 1,1-Dichloroprope   | 0.468          | 0.466 | 0.486 | 0.446 | 0.459 | 0.410 | 0.456 | 5.66  |
| 37) T  | Ethyl Acetate       | 0.275          | 0.275 | 0.284 | 0.255 | 0.267 | 0.249 | 0.267 | 4.99  |
| 38) T  | Carbon Tetrachlor   | 0.426          | 0.425 | 0.438 | 0.411 | 0.425 | 0.380 | 0.418 | 4.80  |
| 39) T  | Methylcyclohexane   | 0.643          | 0.634 | 0.651 | 0.605 | 0.621 | 0.553 | 0.618 | 5.76  |
| 40) TM | Benzene             | 1.362          | 1.373 | 1.405 | 1.300 | 1.339 | 1.202 | 1.330 | 5.40  |
| 41) T  | Methacrylonitrile   | 0.154          | 0.132 | 0.106 | 0.123 | 0.125 | 0.113 | 0.126 | 13.32 |
| 42) TM | 1,2-Dichloroethan   | 0.375          | 0.383 | 0.392 | 0.366 | 0.375 | 0.344 | 0.372 | 4.41  |
| 43) T  | Isopropyl Acetate   | 0.513          | 0.530 | 0.542 | 0.497 | 0.514 | 0.473 | 0.511 | 4.76  |
| 44) TM | Trichloroethene     | 0.354          | 0.353 | 0.366 | 0.344 | 0.348 | 0.315 | 0.347 | 4.87  |
| 45) C  | 1,2-Dichloropropa   | 0.342          | 0.332 | 0.349 | 0.320 | 0.330 | 0.300 | 0.329 | 5.22# |
| 46) T  | Dibromomethane      | 0.176          | 0.189 | 0.189 | 0.176 | 0.182 | 0.164 | 0.179 | 5.22  |
| 47) T  | Bromodichlorometh   | 0.447          | 0.446 | 0.459 | 0.427 | 0.444 | 0.400 | 0.437 | 4.74  |
| 48) T  | Methyl methacryla   | 0.245          | 0.240 | 0.249 | 0.231 | 0.238 | 0.217 | 0.237 | 4.77  |
| 49) T  | 1,4-Dioxane         | 0.002          | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 5.66  |
| 50) S  | Toluene-d8          | 1.048          | 1.228 | 1.037 | 1.180 | 1.149 | 1.126 | 1.128 | 6.62  |
| 51) T  | 4-Methyl-2-Pentan   | 0.265          | 0.263 | 0.279 | 0.252 | 0.260 | 0.238 | 0.259 | 5.24  |
| 52) CM | Toluene             | 0.862          | 0.871 | 0.884 | 0.838 | 0.861 | 0.775 | 0.848 | 4.59# |

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|        | Compound              | 10             | 5     | 20    | 50    | 100   | 150   | Avg   | %RSD  |
|--------|-----------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| 53) T  | t-1,3-Dichloropro     | 0.488          | 0.499 | 0.510 | 0.484 | 0.499 | 0.456 | 0.489 | 3.83  |
| 54) T  | cis-1,3-Dichlorop     | 0.554          | 0.566 | 0.581 | 0.543 | 0.559 | 0.507 | 0.552 | 4.54  |
| 55) T  | 1,1,2-Trichloroet     | 0.273          | 0.279 | 0.281 | 0.260 | 0.264 | 0.240 | 0.266 | 5.69  |
| 56) T  | Ethyl methacrylat     | 0.410          | 0.405 | 0.432 | 0.400 | 0.414 | 0.381 | 0.407 | 4.15  |
| 57) T  | 1,3-Dichloropropa     | 0.460          | 0.462 | 0.489 | 0.451 | 0.460 | 0.418 | 0.457 | 4.99  |
| 58) T  | 2-Chloroethyl Vin     | 0.148          | 0.178 | 0.147 | 0.127 | 0.133 | 0.126 | 0.143 | 13.61 |
| 59) T  | 2-Hexanone            | 0.178          | 0.184 | 0.197 | 0.179 | 0.185 | 0.170 | 0.182 | 4.93  |
| 60) T  | Dibromochlorometh     | 0.311          | 0.311 | 0.324 | 0.304 | 0.308 | 0.280 | 0.306 | 4.73  |
| 61) T  | 1,2-Dibromoethane     | 0.266          | 0.270 | 0.275 | 0.255 | 0.259 | 0.233 | 0.260 | 5.78  |
| 62) S  | 4-Bromofluorobenz     | 0.480          | 0.474 | 0.487 | 0.457 | 0.439 | 0.429 | 0.461 | 5.08  |
| 63) I  | Chlorobenzene-d5      | -----ISTD----- |       |       |       |       |       |       |       |
| 64) T  | Tetrachloroethene     | 0.325          | 0.330 | 0.329 | 0.321 | 0.313 | 0.316 | 0.322 | 2.13  |
| 65) PM | Chlorobenzene         | 1.037          | 1.056 | 1.033 | 0.987 | 0.990 | 0.892 | 0.999 | 5.95  |
| 66) T  | 1,1,1,2-Tetrachlo     | 0.356          | 0.359 | 0.363 | 0.344 | 0.340 | 0.303 | 0.344 | 6.40  |
| 67) C  | Ethyl Benzene         | 1.900          | 1.906 | 1.924 | 1.817 | 1.809 | 1.610 | 1.828 | 6.40# |
| 68) T  | m/p-Xylenes           | 0.705          | 0.715 | 0.734 | 0.695 | 0.681 | 0.606 | 0.689 | 6.49  |
| 69) T  | o-Xylene              | 0.679          | 0.696 | 0.701 | 0.656 | 0.653 | 0.581 | 0.661 | 6.64  |
| 70) T  | Styrene               | 1.177          | 1.189 | 1.229 | 1.162 | 1.163 | 1.039 | 1.160 | 5.54  |
| 71) P  | Bromoform             | 0.218          | 0.212 | 0.223 | 0.214 | 0.212 | 0.195 | 0.212 | 4.57  |
| 72) I  | 1,4-Dichlorobenzene-d | -----ISTD----- |       |       |       |       |       |       |       |
| 73) T  | Isopropylbenzene      | 3.920          | 3.827 | 3.773 | 3.717 | 3.867 | 3.448 | 3.759 | 4.47  |
| 74) T  | N-amyl acetate        | 1.179          | 1.162 | 1.191 | 1.172 | 1.225 | 1.111 | 1.173 | 3.20  |
| 75) P  | 1,1,2,2-Tetrachlo     | 0.813          | 0.807 | 0.807 | 0.772 | 0.812 | 0.734 | 0.791 | 4.02  |
| 76) T  | 1,2,3-Trichloropr     | 0.532          | 0.628 | 0.544 | 0.498 | 0.522 | 0.488 | 0.535 | 9.37  |
| 77) T  | Bromobenzene          | 0.867          | 0.861 | 0.853 | 0.821 | 0.836 | 0.745 | 0.831 | 5.44  |
| 78) T  | n-propylbenzene       | 4.709          | 4.590 | 4.603 | 4.498 | 4.622 | 4.107 | 4.521 | 4.73  |
| 79) T  | 2-Chlorotoluene       | 2.685          | 2.623 | 2.609 | 2.567 | 2.679 | 2.417 | 2.597 | 3.80  |
| 80) T  | 1,3,5-Trimethylbe     | 3.259          | 3.163 | 3.208 | 3.158 | 3.197 | 2.833 | 3.136 | 4.89  |
| 81) T  | trans-1,4-Dichlor     | 0.319          | 0.307 | 0.319 | 0.310 | 0.332 | 0.307 | 0.316 | 3.16  |
| 82) T  | 4-Chlorotoluene       | 2.863          | 2.826 | 2.757 | 2.760 | 2.862 | 2.564 | 2.772 | 4.05  |
| 83) T  | tert-Butylbenzene     | 2.778          | 2.730 | 2.684 | 2.625 | 2.649 | 2.347 | 2.635 | 5.76  |
| 84) T  | 1,2,4-Trimethylbe     | 3.267          | 3.213 | 3.214 | 3.108 | 3.123 | 2.764 | 3.115 | 5.85  |
| 85) T  | sec-Butylbenzene      | 3.971          | 3.888 | 3.914 | 3.786 | 3.813 | 3.376 | 3.791 | 5.65  |
| 86) T  | p-Isopropyltoluen     | 3.488          | 3.447 | 3.465 | 3.304 | 3.231 | 2.815 | 3.292 | 7.73  |
| 87) T  | 1,3-Dichlorobenze     | 1.684          | 1.688 | 1.631 | 1.552 | 1.529 | 1.341 | 1.571 | 8.31  |
| 88) T  | 1,4-Dichlorobenze     | 1.691          | 1.720 | 1.681 | 1.587 | 1.593 | 1.428 | 1.617 | 6.63  |
| 89) T  | n-Butylbenzene        | 3.434          | 3.474 | 3.438 | 3.343 | 3.267 | 2.936 | 3.315 | 6.05  |
| 90) T  | Hexachloroethane      | 0.657          | 0.667 | 0.665 | 0.647 | 0.645 | 0.578 | 0.643 | 5.16  |
| 91) T  | 1,2-Dichlorobenze     | 1.533          | 1.490 | 1.520 | 1.445 | 1.450 | 1.321 | 1.460 | 5.25  |
| 92) T  | 1,2-Dibromo-3-Chl     | 0.147          | 0.155 | 0.146 | 0.139 | 0.139 | 0.130 | 0.143 | 5.93  |
| 93) T  | 1,2,4-Trichlorobe     | 1.003          | 1.084 | 1.007 | 0.947 | 0.895 | 0.835 | 0.962 | 9.25  |
| 94) T  | Hexachlorobutadie     | 0.515          | 0.549 | 0.508 | 0.483 | 0.447 | 0.406 | 0.485 | 10.57 |
| 95) T  | Naphthalene           | 2.250          | 2.437 | 2.353 | 2.206 | 2.138 | 2.051 | 2.239 | 6.30  |
| 96) T  | 1,2,3-Trichlorobe     | 0.863          | 0.943 | 0.898 | 0.826 | 0.802 | 0.755 | 0.848 | 8.00  |

(#) = Out of Range