

Method Path : Z:\VOASRV\HPCHEM1\MSV0A X\METHOD\  
 Method File : 624X101520W.M  
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 Last Update : Thu Oct 15 15:32:58 2020  
 Response Via : Initial Calibration

## Calibration Files

5 =VX018933.D 20 =VX018934.D 50 =VX018935.D  
 100 =VX018936.D 150 =VX018937.D

|       | Compound            | 5              | 20    | 50    | 100   | 150   | Avg    | %RSD  |
|-------|---------------------|----------------|-------|-------|-------|-------|--------|-------|
| ----- |                     |                |       |       |       |       |        |       |
| 1) I  | Bromochloromethane  | -----ISTD----- |       |       |       |       |        |       |
| 2) M  | Dichlorodifluoromet | 1.435          | 1.287 | 1.379 | 1.492 | 1.518 | 1.422  | 6.52  |
| 3) M  | Chloromethane       | 1.680          | 1.593 | 1.596 | 1.600 | 1.574 | 1.609  | 2.56  |
| 4) M  | Vinyl Chloride      | 2.041          | 1.809 | 1.970 | 2.054 | 1.996 | 1.974  | 4.97  |
| 5) M  | Bromomethane        | 1.412          | 1.203 | 1.324 | 0.959 | 0.948 | 1.169  | 17.99 |
| 6) M  | Chloroethane        | 1.465          | 1.213 | 1.330 | 1.402 | 1.398 | 1.362  | 7.04  |
| 7) M  | Trichlorofluorometh | 3.262          | 2.823 | 3.059 | 3.199 | 3.197 | 3.108  | 5.65  |
| 8) T  | Diethyl Ether       | 1.215          | 1.106 | 1.202 | 1.293 | 1.301 | 1.223  | 6.46  |
| 9)    | 1,1,2-Trichlorotrif | 1.859          | 1.592 | 1.697 | 1.768 | 1.723 | 1.728  | 5.67  |
| 10) M | 1,1-Dichloroethene  | 1.872          | 1.624 | 1.758 | 1.857 | 1.869 | 1.796  | 5.96  |
| 11)   | Methyl Iodide       | 1.737          | 1.798 | 2.180 | 2.443 | 2.504 | 2.132  | 16.66 |
| 12)   | Methyl Acetate      | 1.721          | 1.579 | 1.764 | 1.879 | 1.863 | 1.761  | 6.92  |
| 13) M | Acrolein            | 0.339          | 0.276 | 0.321 | 0.369 | 0.380 | 0.337  | 12.27 |
| 14) M | Acrylonitrile       | 0.809          | 0.742 | 0.825 | 0.865 | 0.855 | 0.819  | 5.96  |
| 15) M | Acetone             | 0.298          | 0.280 | 0.291 | 0.256 | 0.253 | 0.276  | 7.37  |
| 16) M | Carbon Disulfide    | 4.525          | 4.006 | 4.373 | 4.546 | 4.573 | 4.405  | 5.36  |
| 17)   | Allyl chloride      | 2.415          | 2.105 | 2.302 | 2.427 | 2.404 | 2.330  | 5.81  |
| 18) M | Methylene Chloride  | 2.000          | 1.653 | 1.761 | 1.820 | 1.815 | 1.810  | 6.97  |
| 19) M | trans-1,2-Dichloroe | 1.875          | 1.631 | 1.777 | 1.870 | 1.891 | 1.809  | 6.03  |
| 20) T | Diisopropyl ether   | 4.361          | 3.919 | 4.270 | 4.528 | 4.544 | 4.325  | 5.88  |
| 21) M | 1,1-Dichloroethane  | 3.008          | 2.692 | 2.937 | 3.062 | 3.080 | 2.956  | 5.33  |
| 22) M | cis-1,2-Dichloroeth | 2.033          | 1.835 | 2.043 | 2.153 | 2.175 | 2.048  | 6.58  |
| 23) M | tert-Butyl Alcohol  | 0.487          | 0.429 | 0.458 | 0.460 | 0.446 | 0.456  | 4.62  |
| 24) M | Methyl tert-Butyl E | 4.950          | 4.562 | 4.922 | 5.190 | 5.173 | 4.959  | 5.13  |
| 25) M | Chloroform          | 3.185          | 2.857 | 3.126 | 3.253 | 3.267 | 3.138  | 5.32  |
| 26)   | Cyclohexane         | 2.495          | 2.173 | 2.336 | 2.447 | 2.446 | 2.380  | 5.44  |
| 27) s | 1,2-Dichloroethane- | 1.964          | 1.938 | 1.890 | 1.892 | 1.884 | 1.914  | 1.86  |
| ----- |                     |                |       |       |       |       |        |       |
| 28) I | 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |        |       |
| 29)   | 1,1-Dichloropropene | 0.441          | 0.394 | 0.436 | 0.456 | 0.448 | 0.435  | 5.55  |
| 30) M | 2-Butanone          | 0.217          | 0.195 | 0.220 | 0.230 | 0.222 | 0.217  | 6.07  |
| 31)   | 2,2-Dichloropropane | 0.528          | 0.465 | 0.513 | 0.533 | 0.523 | 0.512  | 5.38  |
| 32) M | 1,1,1-Trichloroetha | 0.535          | 0.475 | 0.533 | 0.554 | 0.543 | 0.528  | 5.81  |
| 33) M | Carbon Tetrachlorid | 0.490          | 0.434 | 0.485 | 0.507 | 0.503 | 0.484  | 6.12  |
| 34) M | Benzene             | 1.294          | 1.164 | 1.302 | 1.355 | 1.331 | 1.289  | 5.75  |
| 35)   | Methacrylonitrile   | 0.217          | 0.203 | 0.225 | 0.238 | 0.238 | 0.224  | 6.61  |
| 36) M | 1,2-Dichloroethane  | 0.415          | 0.385 | 0.431 | 0.447 | 0.440 | 0.424  | 5.82  |
| 37) M | Trichloroethene     | 0.372          | 0.342 | 0.385 | 0.401 | 0.392 | 0.378  | 6.04  |
| 38)   | Methylcyclohexane   | 0.505          | 0.447 | 0.499 | 0.519 | 0.509 | 0.496  | 5.69  |
| 39) M | 1,2-Dichloropropane | 0.316          | 0.283 | 0.320 | 0.332 | 0.325 | 0.315  | 6.04  |
| 40)   | Dibromomethane      | 0.230          | 0.210 | 0.236 | 0.243 | 0.240 | 0.232  | 5.63  |
| 41) M | Bromodichloromethan | 0.480          | 0.426 | 0.472 | 0.493 | 0.486 | 0.471  | 5.65  |
| 42) M | Vinyl Acetate       | 0.767          | 0.696 | 0.780 | 0.824 | 0.815 | 0.776  | 6.52  |
| 43)   | Ethyl Acetate       | 0.504          | 0.391 | 0.436 | 0.464 | 0.448 | 0.449  | 9.26  |
| 44)   | Isopropyl Acetate   | 0.742          | 0.641 | 0.729 | 0.756 | 0.734 | 0.720  | 6.35  |
| 45) T | 1,4-Dioxane         | 0.008          | 0.007 | 0.008 | 0.008 | 0.008 | 0.008# | 4.34  |
| 46)   | Methyl methacrylate | 0.329          | 0.304 | 0.342 | 0.355 | 0.344 | 0.335  | 5.86  |
| 47)   | n-amyl Acetate      | 0.586          | 0.567 | 0.595 | 0.632 | 0.629 | 0.602  | 4.66  |
| 48) M | t-1,3-Dichloroprope | 0.535          | 0.492 | 0.548 | 0.561 | 0.554 | 0.538  | 5.14  |
| 49) T | cis-1,3-Dichloropro | 0.573          | 0.526 | 0.576 | 0.600 | 0.586 | 0.572  | 4.92  |
| 50) M | 1,1,2-Trichloroetha | 0.332          | 0.311 | 0.335 | 0.346 | 0.337 | 0.332  | 3.90  |
| 51)   | Ethyl methacrylate  | 0.523          | 0.479 | 0.533 | 0.546 | 0.534 | 0.523  | 4.95  |
| 52)   | 1,3-Dichloropropane | 0.553          | 0.508 | 0.558 | 0.567 | 0.556 | 0.548  | 4.19  |

Method Path : Z:\VOASRV\HPCHEM1\MSV0A X\METHOD\  
 Method File : 624X101520W.M  
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 Last Update : Thu Oct 15 15:32:58 2020  
 Response Via : Initial Calibration

## Calibration Files

5 =VX018933.D 20 =VX018934.D 50 =VX018935.D  
 100 =VX018936.D 150 =VX018937.D

|       | Compound             | 5              | 20    | 50    | 100   | 150   | Avg   | %RSD  |
|-------|----------------------|----------------|-------|-------|-------|-------|-------|-------|
| 53) M | Dibromochloromethan  | 0.377          | 0.372 | 0.404 | 0.413 | 0.410 | 0.395 | 4.89  |
| 54) M | 1,2-Dibromoethane    | 0.364          | 0.340 | 0.374 | 0.378 | 0.371 | 0.365 | 4.10  |
| 55) M | 2-Chloroethyl vinyl  | 0.281          | 0.254 | 0.277 | 0.288 | 0.280 | 0.276 | 4.69  |
| 56) M | Bromoform            | 0.273          | 0.276 | 0.310 | 0.334 | 0.333 | 0.305 | 9.69  |
| 57) I | Chlorobenzene-d5     | -----ISTD----- |       |       |       |       |       |       |
| 58) M | 4-Methyl-2-Pentanone | 0.491          | 0.416 | 0.492 | 0.503 | 0.490 | 0.479 | 7.38  |
| 59) M | 2-Hexanone           | 0.378          | 0.325 | 0.373 | 0.382 | 0.375 | 0.367 | 6.46  |
| 60) S | 4-Bromofluorobenzene | 0.467          | 0.467 | 0.457 | 0.473 | 0.471 | 0.467 | 1.32  |
| 61) M | Tetrachloroethene    | 0.368          | 0.327 | 0.380 | 0.389 | 0.380 | 0.369 | 6.69  |
| 62) M | Toluene              | 1.650          | 1.418 | 1.633 | 1.683 | 1.654 | 1.608 | 6.67  |
| 63) S | Toluene-d8           | 1.353          | 1.270 | 1.321 | 1.312 | 1.298 | 1.311 | 2.33  |
| 64) M | Chlorobenzene        | 1.042          | 0.927 | 1.032 | 1.061 | 1.050 | 1.023 | 5.32  |
| 65)   | 1,1,1,2-Tetrachloro  | 0.401          | 0.356 | 0.402 | 0.416 | 0.410 | 0.397 | 5.95  |
| 66) M | Ethyl Benzene        | 1.805          | 1.619 | 1.793 | 1.861 | 1.830 | 1.782 | 5.32  |
| 67) M | m/p-Xylenes          | 0.708          | 0.627 | 0.695 | 0.736 | 0.725 | 0.698 | 6.14  |
| 68) M | o-Xylene             | 0.664          | 0.594 | 0.659 | 0.691 | 0.692 | 0.660 | 6.01  |
| 69) M | Styrene              | 1.120          | 1.015 | 1.132 | 1.209 | 1.197 | 1.135 | 6.81  |
| 70)   | Isopropylbenzene     | 1.778          | 1.597 | 1.748 | 1.840 | 1.806 | 1.754 | 5.35  |
| 71) M | 1,1,2,2-Tetrachloro  | 0.544          | 0.477 | 0.544 | 0.585 | 0.581 | 0.546 | 7.92  |
| 72)   | 1,2,3-Trichloroprop  | 0.518          | 0.458 | 0.514 | 0.538 | 0.524 | 0.510 | 6.01  |
| 73)   | Bromobenzene         | 0.421          | 0.410 | 0.453 | 0.489 | 0.486 | 0.452 | 8.01  |
| 74)   | n-propylbenzene      | 2.028          | 1.821 | 2.000 | 2.077 | 2.063 | 1.998 | 5.17  |
| 75)   | 2-Chlorotoluene      | 1.157          | 1.050 | 1.146 | 1.221 | 1.200 | 1.155 | 5.71  |
| 76)   | 1,3,5-Trimethylbenz  | 1.429          | 1.331 | 1.451 | 1.576 | 1.557 | 1.469 | 6.83  |
| 77)   | t-1,4-Dichloro-2-bu  | 0.217          | 0.198 | 0.220 | 0.237 | 0.233 | 0.221 | 7.04  |
| 78)   | 4-Chlorotoluene      | 1.340          | 1.226 | 1.335 | 1.440 | 1.458 | 1.360 | 6.87  |
| 79)   | tert-butylbenzene    | 1.485          | 1.345 | 1.478 | 1.569 | 1.562 | 1.488 | 6.08  |
| 80)   | 1,2,4-Trimethylbenz  | 1.453          | 1.318 | 1.452 | 1.545 | 1.550 | 1.463 | 6.44  |
| 81)   | sec-Butylbenzene     | 1.687          | 1.536 | 1.694 | 1.818 | 1.795 | 1.706 | 6.55  |
| 82)   | p-Isopropyltoluene   | 1.585          | 1.437 | 1.576 | 1.679 | 1.674 | 1.590 | 6.18  |
| 83) M | 1,3-Dichlorobenzene  | 0.769          | 0.706 | 0.812 | 0.866 | 0.864 | 0.803 | 8.40  |
| 84) M | 1,4-Dichlorobenzene  | 0.780          | 0.712 | 0.805 | 0.876 | 0.876 | 0.810 | 8.58  |
| 85)   | n-Butylbenzene       | 1.397          | 1.258 | 1.393 | 1.527 | 1.540 | 1.423 | 8.11  |
| 86) T | Hexachloroethane     | 0.261          | 0.242 | 0.263 | 0.288 | 0.294 | 0.270 | 7.89  |
| 87) M | 1,2-Dichlorobenzene  | 0.727          | 0.686 | 0.779 | 0.839 | 0.858 | 0.778 | 9.36  |
| 88)   | 1,2-Dibromo-3-Chlor  | 0.128          | 0.114 | 0.133 | 0.144 | 0.142 | 0.132 | 9.01  |
| 89)   | 1,2,4-Trichlorobenz  | 0.517          | 0.482 | 0.552 | 0.638 | 0.651 | 0.568 | 13.06 |
| 90)   | Hexachlorobutadiene  | 0.231          | 0.203 | 0.224 | 0.262 | 0.265 | 0.237 | 11.13 |
| 91) M | Naphthalene          | 1.696          | 1.606 | 1.868 | 2.059 | 2.031 | 1.852 | 10.80 |
| 92)   | 1,2,3-Trichlorobenz  | 0.490          | 0.477 | 0.563 | 0.620 | 0.620 | 0.554 | 12.36 |

(#) = Out of Range