

Method Path : Z:\V0ASRV\HPCHEM1\MSVOA U\METHOD\  
 Method File : 524U082018DW.M  
 Title : METHOD 524.2 VOLATILES DRINKING WATER  
 Last Update : Mon Aug 20 13:35:41 2018  
 Response Via : Initial Calibration

## Calibration Files

0.5 =VU026199.D 1 =VU026200.D 2 =VU026201.D  
 5 =VU026202.D 20 =VU026204.D 10 =VU026203.D

| Compound |                   | 0.5            | 1     | 2     | 5     | 20    | 10    | Avg   | %RSD  |
|----------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| -----    |                   |                |       |       |       |       |       |       |       |
| 1) i     | Fluorobenzene     | -----ISTD----- |       |       |       |       |       |       |       |
| 2) T     | Dichlorodifluorom | 0.385          | 0.417 | 0.406 | 0.392 | 0.359 | 0.375 | 0.389 | 5.39  |
| 3) t     | Chloromethane     | 0.356          | 0.366 | 0.335 | 0.319 | 0.302 | 0.314 | 0.332 | 7.56  |
| 4) Rt    | Vinyl Chloride    | 0.341          | 0.347 | 0.340 | 0.333 | 0.311 | 0.321 | 0.332 | 4.04  |
| 5) T     | Bromomethane      | 0.172          | 0.198 | 0.185 | 0.181 | 0.179 | 0.180 | 0.183 | 4.64  |
| 6) T     | Chloroethane      | 0.233          | 0.211 | 0.196 | 0.189 | 0.177 | 0.187 | 0.199 | 10.23 |
| 7) T     | Trichlorofluorome | 0.510          | 0.517 | 0.516 | 0.482 | 0.451 | 0.468 | 0.491 | 5.66  |
| 8)       | 1,1,2-Trichloro-1 | 0.272          | 0.301 | 0.284 | 0.264 | 0.247 | 0.264 | 0.272 | 6.94  |
| 9) Rt    | 1,1-Dichloroethen | 0.241          | 0.247 | 0.245 | 0.227 | 0.213 | 0.221 | 0.232 | 5.96  |
| 10) t    | Iodomethane       | 0.240          | 0.297 | 0.341 | 0.345 | 0.370 | 0.362 | 0.326 | 15.00 |
| 11) t    | Allyl Chloride    | 0.389          | 0.403 | 0.408 | 0.392 | 0.372 | 0.380 | 0.391 | 3.46  |
| 12) t    | Acrylonitrile     | 0.056          | 0.057 | 0.056 | 0.051 | 0.047 | 0.049 | 0.053 | 8.19  |
| 13) T    | Acetone           | 0.073          | 0.054 | 0.045 | 0.042 | 0.039 | 0.042 | 0.049 | 25.94 |
| 14) T    | Carbon Disulfide  | 0.851          | 0.860 | 0.824 | 0.773 | 0.742 | 0.766 | 0.803 | 6.08  |
| 15) RT   | Methylene Chlorid | 0.499          | 0.309 | 0.288 | 0.250 | 0.237 | 0.246 | 0.305 | 32.48 |
| 16) RT   | trans-1,2-Dichlor | 0.300          | 0.286 | 0.269 | 0.265 | 0.244 | 0.248 | 0.269 | 8.08  |
| 17) t    | 1,1-Dichloroethan | 0.502          | 0.528 | 0.521 | 0.482 | 0.450 | 0.466 | 0.492 | 6.23  |
| 18) T    | 2-Butanone        | 0.077          | 0.077 | 0.076 | 0.075 | 0.072 | 0.075 | 0.075 | 2.35  |
| 19)      | Cyclohexane       | 0.309          | 0.361 | 0.361 | 0.364 | 0.390 | 0.384 | 0.361 | 7.95  |
| 20)      | Methylcyclohexane | 0.342          | 0.408 | 0.410 | 0.432 | 0.482 | 0.464 | 0.423 | 11.66 |
| 21) T    | 2,2-Dichloropropa | 0.509          | 0.547 | 0.527 | 0.497 | 0.463 | 0.489 | 0.505 | 5.87  |
| 22) RT   | cis-1,2-Dichloroe | 0.337          | 0.346 | 0.326 | 0.316 | 0.311 | 0.322 | 0.326 | 4.02  |
| 23) t    | Diethyl Ether     | 0.186          | 0.190 | 0.179 | 0.175 | 0.167 | 0.170 | 0.178 | 4.98  |
| 24) t    | tert-Butyl Alcoho | 0.020          | 0.021 | 0.019 | 0.017 | 0.016 | 0.016 | 0.018 | 10.59 |
| 25) t    | Methyl tert-Butyl | 0.620          | 0.625 | 0.641 | 0.592 | 0.574 | 0.582 | 0.605 | 4.42  |
| 26) t    | Bromochloromethan | 0.146          | 0.149 | 0.148 | 0.147 | 0.140 | 0.146 | 0.146 | 2.04  |
| 27) t    | Chloroform        | 0.575          | 0.606 | 0.596 | 0.564 | 0.525 | 0.546 | 0.569 | 5.32  |
| 28) RT   | 1,1,1-Trichloroet | 0.492          | 0.537 | 0.522 | 0.512 | 0.473 | 0.496 | 0.505 | 4.49  |
| 29) T    | 1,1-Dichloroprope | 0.362          | 0.408 | 0.407 | 0.396 | 0.404 | 0.416 | 0.399 | 4.75  |
| 30) RT   | Carbon Tetrachlor | 0.469          | 0.508 | 0.487 | 0.475 | 0.451 | 0.471 | 0.477 | 4.01  |
| 31) t    | Isopropyl Ether   | 0.819          | 0.822 | 0.843 | 0.789 | 0.794 | 0.793 | 0.810 | 2.65  |
| 32)      | Ethyl-t-butyl eth | 0.706          | 0.698 | 0.706 | 0.703 | 0.727 | 0.716 | 0.710 | 1.50  |
| 33)      | Tert-Amyl methyl  | 0.540          | 0.576 | 0.602 | 0.607 | 0.660 | 0.650 | 0.606 | 7.40  |
| 34) t    | Propionitrile     | 0.021          | 0.023 | 0.022 | 0.021 | 0.021 | 0.021 | 0.021 | 4.06  |
| 35) RT   | Benzene           | 1.124          | 1.168 | 1.195 | 1.163 | 1.122 | 1.143 | 1.152 | 2.46  |
| 36) RT   | 1,2-Dichloroethan | 0.362          | 0.377 | 0.370 | 0.351 | 0.335 | 0.347 | 0.357 | 4.30  |
| 37) RT   | Trichloroethene   | 0.339          | 0.329 | 0.336 | 0.315 | 0.313 | 0.314 | 0.324 | 3.57  |
| 38) Rt   | 1,2-Dichloropropa | 0.269          | 0.324 | 0.311 | 0.299 | 0.289 | 0.299 | 0.298 | 6.35  |
| 39) t    | Methacrylonitrile | 0.081          | 0.094 | 0.092 | 0.093 | 0.091 | 0.093 | 0.091 | 5.38  |
| 40) t    | Methyl acrylate   | 0.117          | 0.142 | 0.144 | 0.141 | 0.140 | 0.140 | 0.137 | 7.19  |
| 41) t    | Tetrahydrofuran   | 0.058          | 0.055 | 0.051 | 0.047 | 0.046 | 0.045 | 0.050 | 10.78 |
| 42) t    | 1-Chlorobutane    | 0.494          | 0.542 | 0.531 | 0.550 | 0.553 | 0.566 | 0.539 | 4.62  |
| 43) T    | Dibromomethane    | 0.153          | 0.170 | 0.163 | 0.159 | 0.151 | 0.156 | 0.159 | 4.39  |
| 44) T    | Bromodichlorometh | 0.396          | 0.427 | 0.429 | 0.411 | 0.393 | 0.400 | 0.409 | 3.86  |
| 45) T    | 4-Methyl-2-Pentan | 0.140          | 0.152 | 0.165 | 0.166 | 0.171 | 0.171 | 0.161 | 7.70  |
| 46) t    | t-1,4-Dichloro-2- | 0.066          | 0.068 | 0.074 | 0.075 | 0.083 | 0.080 | 0.074 | 8.90  |
| 47) t    | Methyl methacryla | 0.101          | 0.108 | 0.123 | 0.127 | 0.134 | 0.134 | 0.121 | 11.30 |
| 48) t    | Ethyl methacrylat | 0.174          | 0.190 | 0.217 | 0.230 | 0.268 | 0.252 | 0.222 | 16.14 |
| 49) Rt   | Toluene           | 0.554          | 0.608 | 0.675 | 0.691 | 0.710 | 0.710 | 0.658 | 9.60  |
| 50) T    | t-1,3-Dichloropro | 0.317          | 0.340 | 0.356 | 0.359 | 0.363 | 0.361 | 0.349 | 5.12  |
| 51) T    | cis-1,3-Dichlorop | 0.362          | 0.411 | 0.397 | 0.415 | 0.428 | 0.418 | 0.405 | 5.80  |
| 52) RT   | 1,1,2-Trichloroet | 0.209          | 0.226 | 0.220 | 0.217 | 0.207 | 0.211 | 0.215 | 3.44  |
| 53) t    | 1,3-Dichloropropa | 0.350          | 0.351 | 0.373 | 0.355 | 0.355 | 0.359 | 0.357 | 2.32  |

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|        | Compound          | 0.5   | 1     | 2     | 5     | 20    | 10    | Avg   | %RSD  |
|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 54) t  | 2-Hexanone        | 0.100 | 0.110 | 0.115 | 0.118 | 0.122 | 0.122 | 0.114 | 7.46  |
| 55) t  | Dibromochlorometh | 0.255 | 0.308 | 0.308 | 0.284 | 0.285 | 0.286 | 0.287 | 6.87  |
| 56) T  | 1,2-Dibromoethane | 0.204 | 0.218 | 0.215 | 0.205 | 0.206 | 0.207 | 0.209 | 2.66  |
| 57) S  | 4-Bromofluorobenz | 0.353 | 0.327 | 0.352 | 0.377 | 0.365 | 0.380 | 0.359 | 5.47  |
| 58) RT | Tetrachloroethene | 0.296 | 0.315 | 0.325 | 0.306 | 0.294 | 0.304 | 0.307 | 3.75  |
| 59) Rt | Chlorobenzene     | 0.672 | 0.763 | 0.782 | 0.774 | 0.794 | 0.788 | 0.762 | 6.00  |
| 60) T  | 1,1,1,2-Tetrachlo | 0.287 | 0.315 | 0.311 | 0.304 | 0.303 | 0.303 | 0.304 | 3.20  |
| 61) t  | Pentachloroethane | 0.239 | 0.275 | 0.275 | 0.265 | 0.247 | 0.254 | 0.259 | 5.80  |
| 62) t  | Hexachloroethane  | 0.233 | 0.252 | 0.272 | 0.259 | 0.267 | 0.269 | 0.259 | 5.54  |
| 63) Rt | Ethyl Benzene     | 0.979 | 1.101 | 1.157 | 1.277 | 1.394 | 1.348 | 1.209 | 13.09 |
| 64) RT | m/p-Xylenes       | 0.363 | 0.421 | 0.475 | 0.531 | 0.553 | 0.554 | 0.483 | 16.24 |
| 65) RT | o-Xylene          | 0.359 | 0.407 | 0.461 | 0.497 | 0.524 | 0.513 | 0.460 | 14.15 |
| 66) RT | Styrene           | 0.579 | 0.699 | 0.779 | 0.855 | 0.917 | 0.898 | 0.788 | 16.55 |
| 67) t  | Bromoform         | 0.144 | 0.182 | 0.172 | 0.173 | 0.173 | 0.172 | 0.169 | 7.70  |
| 68) S  | 1,2-Dichlorobenze | 0.411 | 0.423 | 0.434 | 0.415 | 0.410 | 0.420 | 0.419 | 2.12  |
| 69) T  | Isopropylbenzene  | 0.975 | 1.090 | 1.180 | 1.279 | 1.410 | 1.368 | 1.217 | 13.77 |
| 70) T  | 1,1,2,2-Tetrachlo | 0.247 | 0.284 | 0.284 | 0.269 | 0.266 | 0.268 | 0.270 | 5.02  |
| 71) T  | 1,2,3-Trichloropr | 0.179 | 0.209 | 0.185 | 0.197 | 0.193 | 0.195 | 0.193 | 5.40  |
| 72) t  | Bromobenzene      | 0.301 | 0.317 | 0.350 | 0.360 | 0.358 | 0.357 | 0.341 | 7.34  |
| 73) t  | n-propylbenzene   | 0.264 | 0.304 | 0.348 | 0.393 | 0.415 | 0.411 | 0.356 | 17.38 |
| 74) t  | 2-Chlorotoluene   | 0.250 | 0.295 | 0.334 | 0.346 | 0.348 | 0.353 | 0.321 | 12.70 |
| 75) t  | 1,3,5-Trimethylbe | 0.781 | 0.941 | 1.067 | 1.202 | 1.250 | 1.248 | 1.081 | 17.56 |
| 76) t  | 4-Chlorotoluene   | 0.246 | 0.305 | 0.340 | 0.361 | 0.364 | 0.364 | 0.330 | 14.31 |
| 77) t  | tert-Butylbenzene | 0.864 | 0.961 | 1.067 | 1.140 | 1.227 | 1.206 | 1.077 | 13.25 |
| 78) t  | 1,2,4-Trimethylbe | 0.820 | 0.932 | 1.114 | 1.249 | 1.302 | 1.298 | 1.119 | 18.19 |
| 79) t  | sec-Butylbenzene  | 1.057 | 1.233 | 1.428 | 1.521 | 1.630 | 1.600 | 1.411 | 15.92 |
| 80)    | Nitrobenzene      | 0.012 | 0.010 | 0.012 | 0.011 | 0.013 | 0.013 | 0.012 | 8.96  |
| 81) t  | p-Isopropyltoluen | 0.828 | 1.020 | 1.190 | 1.322 | 1.413 | 1.390 | 1.194 | 19.36 |
| 82) t  | 1,3-Dichlorobenze | 0.631 | 0.707 | 0.741 | 0.737 | 0.737 | 0.750 | 0.717 | 6.22  |
| 83) Rt | 1,4-Dichlorobenze | 0.618 | 0.707 | 0.730 | 0.753 | 0.738 | 0.751 | 0.716 | 7.12  |
| 84) t  | n-Butylbenzene    | 0.863 | 0.997 | 1.156 | 1.246 | 1.348 | 1.322 | 1.155 | 16.58 |
| 85) Rt | 1,2-Dichlorobenze | 0.599 | 0.642 | 0.678 | 0.673 | 0.679 | 0.682 | 0.659 | 4.99  |
| 86) t  | 1,2-Dibromo-3-Chl | 0.048 | 0.047 | 0.048 | 0.047 | 0.047 | 0.047 | 0.047 | 1.63  |
| 87) Rt | 1,2,4-Trichlorobe | 0.405 | 0.450 | 0.463 | 0.460 | 0.514 | 0.489 | 0.463 | 7.93  |
| 88) t  | Hexachlorobutadie | 0.247 | 0.298 | 0.286 | 0.288 | 0.290 | 0.291 | 0.283 | 6.39  |
| 89) t  | Naphthalene       | 0.605 | 0.639 | 0.677 | 0.731 | 0.894 | 0.833 | 0.730 | 15.50 |
| 90) t  | 1,2,3-Trichlorobe | 0.382 | 0.419 | 0.425 | 0.444 | 0.476 | 0.472 | 0.436 | 8.10  |

(#) = Out of Range