

Method Path : Z:\VOASRV\HPCHEM1\MSVOA U\METHOD\  
 Method File : 524U020519DW.M  
 Title : METHOD 524.2 VOLATILES DRINKING WATER  
 Last Update : Fri Feb 08 10:52:46 2019  
 Response Via : Initial Calibration

## Calibration Files

0.5 =VU029346.D 1 =VU029340.D 2 =VU029341.D  
 5 =VU029342.D 10 =VU029343.D 15 =VU029344.D

| Compound |                   | 0.5            | 1     | 2     | 5     | 10    | 15    | Avg   | %RSD  |
|----------|-------------------|----------------|-------|-------|-------|-------|-------|-------|-------|
| -----    |                   |                |       |       |       |       |       |       |       |
| 1) i     | Fluorobenzene     | -----ISTD----- |       |       |       |       |       |       |       |
| 2) T     | Dichlorodifluorom | 0.403          | 0.373 | 0.354 | 0.368 | 0.370 | 0.371 | 0.373 | 4.27  |
| 3) t     | Chloromethane     | 0.354          | 0.374 | 0.330 | 0.325 | 0.326 | 0.336 | 0.341 | 5.70  |
| 4) Rt    | Vinyl Chloride    | 0.405          | 0.420 | 0.380 | 0.393 | 0.403 | 0.397 | 0.400 | 3.37  |
| 5) T     | Bromomethane      | 0.293          | 0.225 | 0.198 | 0.198 | 0.202 | 0.218 | 0.222 | 16.34 |
| 6) T     | Chloroethane      | 0.251          | 0.230 | 0.228 | 0.230 | 0.231 | 0.231 | 0.234 | 3.68  |
| 7) T     | Trichlorofluorome | 0.557          | 0.584 | 0.530 | 0.555 | 0.564 | 0.560 | 0.558 | 3.11  |
| 8)       | 1,1,2-Trichloro-1 | 0.303          | 0.304 | 0.283 | 0.285 | 0.298 | 0.295 | 0.295 | 3.08  |
| 9) Rt    | 1,1-Dichloroethen | 0.296          | 0.293 | 0.280 | 0.282 | 0.289 | 0.290 | 0.288 | 2.19  |
| 10) t    | Iodomethane       | 0.211          | 0.374 | 0.363 | 0.401 | 0.434 | 0.437 | 0.370 | 22.61 |
| 11) t    | Allyl Chloride    | 0.498          | 0.487 | 0.469 | 0.479 | 0.491 | 0.479 | 0.484 | 2.09  |
| 12) t    | Acrylonitrile     | 0.069          | 0.071 | 0.059 | 0.062 | 0.064 | 0.062 | 0.065 | 7.44  |
| 13) T    | Acetone           | 0.069          | 0.068 | 0.057 | 0.061 | 0.060 | 0.059 | 0.062 | 7.60  |
| 14) T    | Carbon Disulfide  | 1.068          | 1.044 | 0.961 | 1.004 | 1.021 | 1.013 | 1.019 | 3.56  |
| 15) RT   | Methylene Chlorid | 0.448          | 0.367 | 0.330 | 0.316 | 0.320 | 0.318 | 0.350 | 14.81 |
| 16) RT   | trans-1,2-Dichlor | 0.335          | 0.336 | 0.315 | 0.307 | 0.322 | 0.321 | 0.323 | 3.49  |
| 17) t    | 1,1-Dichloroethan | 0.465          | 0.565 | 0.477 | 0.561 | 0.503 | 0.497 | 0.511 | 8.27  |
| 18) T    | 2-Butanone        | 0.059          | 0.070 | 0.066 | 0.073 | 0.076 | 0.074 | 0.070 | 9.27  |
| 19)      | Cyclohexane       | 0.531          | 0.522 | 0.452 | 0.444 | 0.448 | 0.447 | 0.474 | 8.61  |
| 20)      | Methylcyclohexane | 0.477          | 0.529 | 0.475 | 0.491 | 0.510 | 0.505 | 0.498 | 4.14  |
| 21) T    | 2,2-Dichloropropa | 0.482          | 0.495 | 0.465 | 0.461 | 0.471 | 0.465 | 0.473 | 2.71  |
| 22) RT   | cis-1,2-Dichloroe | 0.291          | 0.326 | 0.287 | 0.303 | 0.309 | 0.308 | 0.304 | 4.58  |
| 23) t    | Diethyl Ether     | 0.244          | 0.234 | 0.224 | 0.226 | 0.232 | 0.230 | 0.232 | 3.19  |
| 24) t    | tert-Butyl Alcoho | 0.029          | 0.024 | 0.022 | 0.023 | 0.024 | 0.023 | 0.024 | 10.15 |
| 25) t    | Methyl tert-Butyl | 0.806          | 0.856 | 0.780 | 0.808 | 0.822 | 0.802 | 0.812 | 3.10  |
| 26) t    | Bromochloromethan | 0.134          | 0.137 | 0.130 | 0.135 | 0.135 | 0.135 | 0.134 | 1.59  |
| 27) t    | Chloroform        | 0.489          | 0.517 | 0.471 | 0.497 | 0.507 | 0.502 | 0.497 | 3.23  |
| 28) RT   | 1,1,1-Trichloroet | 0.443          | 0.482 | 0.446 | 0.452 | 0.471 | 0.470 | 0.461 | 3.42  |
| 29) T    | 1,1-Dichloroprope | 0.407          | 0.422 | 0.371 | 0.390 | 0.408 | 0.402 | 0.400 | 4.42  |
| 30) RT   | Carbon Tetrachlor | 0.398          | 0.425 | 0.400 | 0.421 | 0.429 | 0.429 | 0.417 | 3.40  |
| 31) t    | Isopropyl Ether   | 0.728          | 0.802 | 0.748 | 0.775 | 0.792 | 0.784 | 0.771 | 3.63  |
| 32)      | Ethyl-t-butyl eth | 0.766          | 0.798 | 0.749 | 0.773 | 0.782 | 0.770 | 0.773 | 2.10  |
| 33)      | Tert-Amyl methyl  | 0.664          | 0.724 | 0.667 | 0.705 | 0.720 | 0.715 | 0.699 | 3.84  |
| 34) t    | Propionitrile     |                | 0.015 | 0.018 | 0.018 | 0.021 | 0.020 | 0.018 | 11.70 |
| 35) RT   | Benzene           | 1.091          | 1.143 | 1.041 | 1.100 | 1.133 | 1.129 | 1.106 | 3.41  |
| 36) RT   | 1,2-Dichloroethan | 0.324          | 0.340 | 0.320 | 0.334 | 0.348 | 0.342 | 0.335 | 3.21  |
| 37) RT   | Trichloroethene   | 0.309          | 0.328 | 0.306 | 0.312 | 0.323 | 0.327 | 0.317 | 2.99  |
| 38) Rt   | 1,2-Dichloropropa | 0.287          | 0.302 | 0.268 | 0.283 | 0.295 | 0.292 | 0.288 | 4.14  |
| 39) t    | Methacrylonitrile |                | 0.090 | 0.099 | 0.088 | 0.097 | 0.094 | 0.094 | 4.95  |
| 40) t    | Methyl acrylate   |                | 0.149 | 0.123 | 0.138 | 0.147 | 0.151 | 0.142 | 8.00  |
| 41) t    | Tetrahydrofuran   | 0.044          | 0.049 | 0.048 | 0.047 | 0.048 | 0.047 | 0.047 | 4.11  |
| 42) t    | 1-Chlorobutane    | 0.526          | 0.556 | 0.505 | 0.524 | 0.552 | 0.552 | 0.536 | 3.82  |
| 43) T    | Dibromomethane    | 0.169          | 0.151 | 0.145 | 0.148 | 0.153 | 0.154 | 0.153 | 5.50  |
| 44) T    | Bromodichlorometh | 0.374          | 0.407 | 0.376 | 0.392 | 0.398 | 0.397 | 0.391 | 3.36  |
| 45) T    | 4-Methyl-2-Pentan | 0.164          | 0.188 | 0.167 | 0.183 | 0.190 | 0.186 | 0.180 | 6.20  |
| 46) t    | t-1,4-Dichloro-2- | 0.083          | 0.084 | 0.085 | 0.087 | 0.094 | 0.093 | 0.088 | 5.44  |
| 47) t    | Methyl methacryla | 0.121          | 0.136 | 0.126 | 0.141 | 0.143 | 0.143 | 0.135 | 7.07  |
| 48) t    | Ethyl methacrylat | 0.264          | 0.283 | 0.282 | 0.295 | 0.309 | 0.304 | 0.289 | 5.80  |
| 49) Rt   | Toluene           | 0.694          | 0.714 | 0.671 | 0.706 | 0.730 | 0.733 | 0.708 | 3.28  |
| 50) T    | t-1,3-Dichloropro | 0.358          | 0.396 | 0.356 | 0.388 | 0.404 | 0.396 | 0.383 | 5.45  |
| 51) T    | cis-1,3-Dichlorop | 0.442          | 0.459 | 0.433 | 0.457 | 0.471 | 0.469 | 0.455 | 3.29  |
| 52) RT   | 1,1,2-Trichloroet | 0.204          | 0.202 | 0.187 | 0.204 | 0.210 | 0.211 | 0.203 | 4.37  |
| 53) t    | 1,3-Dichloropropa | 0.340          | 0.361 | 0.347 | 0.356 | 0.369 | 0.366 | 0.357 | 3.19  |

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|        | Compound          | 0.5   | 1     | 2     | 5     | 10    | 15    | Avg   | %RSD  |
|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| 54) t  | 2-Hexanone        | 0.111 | 0.127 | 0.117 | 0.129 | 0.137 | 0.135 | 0.126 | 8.20  |
| 55) t  | Dibromochlorometh | 0.276 | 0.311 | 0.268 | 0.283 | 0.299 | 0.294 | 0.289 | 5.50  |
| 56) T  | 1,2-Dibromoethane | 0.215 | 0.218 | 0.196 | 0.204 | 0.211 | 0.206 | 0.208 | 3.79  |
| 57) S  | 4-Bromofluorobenz | 0.381 | 0.400 | 0.366 | 0.400 | 0.390 | 0.405 | 0.390 | 3.77  |
| 58) RT | Tetrachloroethene | 0.289 | 0.301 | 0.278 | 0.296 | 0.306 | 0.304 | 0.295 | 3.60  |
| 59) Rt | Chlorobenzene     | 0.781 | 0.805 | 0.749 | 0.799 | 0.824 | 0.827 | 0.797 | 3.67  |
| 60) T  | 1,1,1,2-Tetrachlo | 0.281 | 0.305 | 0.282 | 0.292 | 0.304 | 0.305 | 0.295 | 3.92  |
| 61) t  | Pentachloroethane | 0.217 | 0.235 | 0.213 | 0.225 | 0.238 | 0.243 | 0.228 | 5.27  |
| 62) t  | Hexachloroethane  | 0.229 | 0.245 | 0.233 | 0.252 | 0.263 | 0.274 | 0.249 | 6.92  |
| 63) Rt | Ethyl Benzene     | 1.341 | 1.395 | 1.313 | 1.380 | 1.435 | 1.444 | 1.385 | 3.72  |
| 64) RT | m/p-Xylenes       | 0.503 | 0.553 | 0.503 | 0.536 | 0.563 | 0.571 | 0.538 | 5.49  |
| 65) RT | o-Xylene          | 0.512 | 0.528 | 0.487 | 0.521 | 0.557 | 0.564 | 0.528 | 5.42  |
| 66) RT | Styrene           | 0.850 | 0.858 | 0.811 | 0.879 | 0.929 | 0.956 | 0.881 | 6.09  |
| 67) t  | Bromoform         | 0.172 | 0.181 | 0.166 | 0.177 | 0.190 | 0.192 | 0.180 | 5.66  |
| 68) S  | 1,2-Dichlorobenze | 0.389 | 0.389 | 0.386 | 0.398 | 0.419 | 0.421 | 0.400 | 3.98  |
| 69) T  | Isopropylbenzene  | 1.281 | 1.438 | 1.348 | 1.421 | 1.479 | 1.501 | 1.411 | 5.87  |
| 70) T  | 1,1,2,2-Tetrachlo | 0.249 | 0.260 | 0.249 | 0.257 | 0.273 | 0.274 | 0.260 | 4.33  |
| 71) T  | 1,2,3-Trichloropr | 0.164 | 0.168 | 0.158 | 0.185 | 0.195 | 0.202 | 0.179 | 10.12 |
| 72) t  | Bromobenzene      | 0.328 | 0.334 | 0.313 | 0.344 | 0.363 | 0.370 | 0.342 | 6.37  |
| 73) t  | n-propylbenzene   | 0.354 | 0.401 | 0.367 | 0.397 | 0.416 | 0.423 | 0.393 | 6.91  |
| 74) t  | 2-Chlorotoluene   | 0.317 | 0.341 | 0.313 | 0.331 | 0.349 | 0.356 | 0.335 | 5.15  |
| 75) t  | 1,3,5-Trimethylbe | 1.150 | 1.223 | 1.135 | 1.205 | 1.272 | 1.314 | 1.217 | 5.68  |
| 76) t  | 4-Chlorotoluene   | 0.350 | 0.349 | 0.305 | 0.341 | 0.367 | 0.372 | 0.347 | 6.88  |
| 77) t  | tert-Butylbenzene | 1.127 | 1.215 | 1.124 | 1.196 | 1.261 | 1.294 | 1.203 | 5.74  |
| 78) t  | 1,2,4-Trimethylbe | 1.156 | 1.236 | 1.150 | 1.211 | 1.303 | 1.335 | 1.232 | 6.14  |
| 79) t  | sec-Butylbenzene  | 1.443 | 1.590 | 1.471 | 1.577 | 1.668 | 1.692 | 1.574 | 6.41  |
| 80)    | Nitrobenzene      |       | 0.008 | 0.009 | 0.011 | 0.015 | 0.015 | 0.012 | 28.52 |
| 81) t  | p-Isopropyltoluen | 1.251 | 1.325 | 1.229 | 1.316 | 1.424 | 1.459 | 1.334 | 6.89  |
| 82) t  | 1,3-Dichlorobenze | 0.639 | 0.655 | 0.615 | 0.674 | 0.711 | 0.732 | 0.671 | 6.55  |
| 83) Rt | 1,4-Dichlorobenze | 0.655 | 0.649 | 0.607 | 0.660 | 0.712 | 0.727 | 0.668 | 6.63  |
| 84) t  | n-Butylbenzene    | 1.130 | 1.175 | 1.125 | 1.214 | 1.330 | 1.370 | 1.224 | 8.47  |
| 85) Rt | 1,2-Dichlorobenze | 0.620 | 0.628 | 0.580 | 0.629 | 0.675 | 0.676 | 0.635 | 5.75  |
| 86) t  | 1,2-Dibromo-3-Chl | 0.046 | 0.050 | 0.044 | 0.050 | 0.050 | 0.051 | 0.049 | 5.91  |
| 87) Rt | 1,2,4-Trichlorobe | 0.393 | 0.428 | 0.407 | 0.455 | 0.494 | 0.497 | 0.446 | 9.87  |
| 88) t  | Hexachlorobutadie | 0.252 | 0.246 | 0.243 | 0.258 | 0.274 | 0.275 | 0.258 | 5.38  |
| 89) t  | Naphthalene       | 0.601 | 0.705 | 0.693 | 0.802 | 0.864 | 0.870 | 0.756 | 14.17 |
| 90) t  | 1,2,3-Trichlorobe | 0.390 | 0.383 | 0.376 | 0.409 | 0.442 | 0.443 | 0.407 | 7.25  |

(#) = Out of Range