

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\

Method File : VL110724AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

Last Update : Fri Nov 08 01:01:00 2024

Response Via : Initial Calibration

## Calibration Files

0.03=VL041679.D 0.1 =VL041678.D 0.5 =VL041677.D 1 =VL041676.D 2 =VL041675.D 10 =VL041674.D 15 =VL041680.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg    | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|--------|-------|
| -----                     |                |       |       |       |       |       |       |        |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |        |       |
| 2) T Dichlorodifluo...    |                |       | 1.665 | 1.533 | 2.128 | 1.887 | 1.824 | 1.807  | 12.52 |
| 3) Chlorodifluoro...      |                |       | 1.407 | 1.386 | 1.360 | 1.190 | 1.172 | 1.303  | 8.66  |
| 4) Chloromethane          |                |       | 0.714 | 0.732 | 0.721 | 0.649 | 0.635 | 0.690  | 6.46  |
| 5) T Vinyl Chloride       | 0.643          | 0.490 | 0.627 | 0.660 | 0.680 | 0.626 | 0.621 | 0.621  | 9.91  |
| 6) T Bromomethane         |                |       | 0.337 | 0.328 | 0.347 | 0.317 | 0.318 | 0.329  | 3.87  |
| 7) Chloroethane           |                |       | 0.227 | 0.232 | 0.233 | 0.223 | 0.219 | 0.227  | 2.65  |
| 8) T Dichlorotetra...     |                |       | 1.783 | 1.677 | 1.685 | 1.476 | 1.446 | 1.613  | 9.02  |
| 9) T Propene              |                |       | 0.566 | 0.610 | 0.603 | 0.530 | 0.530 | 0.568  | 6.76  |
| 10) T Heptane             |                |       | 1.093 | 1.257 | 1.364 | 1.311 | 1.336 | 1.272  | 8.48  |
| 11) T Trichlorofluor...   |                |       | 1.609 | 1.644 | 1.673 | 1.480 | 1.465 | 1.574  | 6.09  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.165 | 1.195 | 1.214 | 1.074 | 1.073 | 1.144  | 5.83  |
| 13) Ethanol               |                |       | 0.036 | 0.033 | 0.046 | 0.029 | 0.030 | 0.035# | 19.45 |
| 14) T Bromoethene         |                |       | 0.486 | 0.465 | 0.476 | 0.431 | 0.442 | 0.460  | 5.06  |
| 15) T Acetone             |                |       | 1.201 | 1.403 | 1.348 | 1.098 | 1.103 | 1.231  | 11.36 |
| 16) T 1,3-Butadiene       |                |       | 0.585 | 0.572 | 0.689 | 0.627 | 0.632 | 0.621  | 7.40  |
| 17) tert-Butyl alc...     |                |       | 1.059 | 1.294 | 1.036 | 1.038 | 0.973 | 1.080  | 11.46 |
| 18) T 1,1-Dichloroet...   |                |       | 0.533 | 0.491 | 0.521 | 0.476 | 0.488 | 0.502  | 4.79  |
| 19) T Isopropyl Alcohol   |                |       | 0.561 | 0.696 | 0.600 | 0.552 | 0.532 | 0.588  | 11.03 |
| 20) T Methylene Chlo...   |                |       | 0.514 | 0.501 | 0.447 | 0.400 | 0.402 | 0.453  | 11.86 |
| 21) T Allyl Chloride      |                |       | 0.688 | 0.807 | 0.778 | 0.759 | 0.770 | 0.761  | 5.78  |
| 22) T trans-1,2-Dich...   |                |       | 0.475 | 0.515 | 0.529 | 0.484 | 0.493 | 0.499  | 4.51  |
| 23) T Vinyl Acetate       |                |       | 0.492 | 0.558 | 0.606 | 0.514 | 0.542 | 0.543  | 8.07  |
| 24) T 1,1-Dichloroet...   |                |       | 1.074 | 1.116 | 1.287 | 1.045 | 1.047 | 1.114  | 9.06  |
| 25) T Ethyl Acetate       |                |       | 2.443 | 2.674 | 2.681 | 2.463 | 2.477 | 2.548  | 4.69  |
| 26) T Hexane              |                |       | 0.881 | 1.031 | 1.025 | 0.966 | 0.991 | 0.979  | 6.19  |
| 27) T Carbon Disulfide    |                |       | 0.915 | 1.056 | 1.141 | 1.174 | 1.212 | 1.100  | 10.74 |
| 28) T Methyl tert-Bu...   |                |       | 0.591 | 0.669 | 0.739 | 0.573 | 0.578 | 0.630  | 11.45 |
| 29) T Chloroform          |                |       | 1.712 | 1.670 | 1.646 | 1.520 | 1.530 | 1.616  | 5.34  |
| 30) T Cyclohexane         |                |       | 0.901 | 0.744 | 0.852 | 0.825 | 0.846 | 0.833  | 6.87  |
| 31) T cis-1,2-Dichlo...   |                |       | 0.873 | 0.972 | 0.959 | 0.936 | 0.968 | 0.942  | 4.32  |
| 32) T 1,1,1-Trichlor...   | 1.373          | 1.289 | 1.468 | 1.574 | 1.619 | 1.488 | 1.507 | 1.474  | 7.66  |
| -----                     |                |       |       |       |       |       |       |        |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |        |       |
| 34) T 2-Butanone          |                |       | 0.488 | 0.500 | 0.524 | 0.478 | 0.499 | 0.498  | 3.43  |
| 35) T Carbon Tetrach...   | 0.420          | 0.425 | 0.553 | 0.563 | 0.597 | 0.564 | 0.572 | 0.528  | 13.81 |
| 36) T Benzene             |                |       | 0.663 | 0.751 | 0.803 | 0.738 | 0.750 | 0.741  | 6.83  |
| 37) T 1,2-Dichloroet...   |                |       | 0.396 | 0.433 | 0.435 | 0.408 | 0.417 | 0.418  | 3.95  |
| 38) T Trichloroethene     | 0.273          | 0.232 | 0.264 | 0.289 | 0.320 | 0.303 | 0.313 | 0.285  | 10.81 |
| 39) T 1,2-Dichloropr...   |                |       | 0.278 | 0.299 | 0.308 | 0.284 | 0.294 | 0.293  | 4.03  |

|                                                  |                   |       |       |       |       |       |       |       |       |       |
|--------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\ |                   |       |       |       |       |       |       |       |       |       |
| Method File : VL110724AIR.M                      |                   |       |       |       |       |       |       |       |       |       |
| 40) T                                            | 1,4-Dioxane       |       |       | 0.072 | 0.105 | 0.123 | 0.111 | 0.114 | 0.105 | 18.41 |
| 41) T                                            | Tetrahydrofuran   |       |       | 0.234 | 0.281 | 0.309 | 0.295 | 0.304 | 0.284 | 10.65 |
| 42) T                                            | Bromodichlorom... |       |       | 0.533 | 0.566 | 0.615 | 0.590 | 0.601 | 0.581 | 5.52  |
| 43) T                                            | Methyl Methacr... |       |       | 0.196 | 0.237 | 0.278 | 0.288 | 0.302 | 0.260 | 16.62 |
| 44) T                                            | 2,2,4-Trimethy... |       |       | 1.086 | 1.306 | 1.391 | 1.251 | 1.241 | 1.255 | 8.91  |
| 45) T                                            | t-1,3-Dichloro... |       |       | 0.164 | 0.210 | 0.224 | 0.282 | 0.308 | 0.238 | 24.24 |
| 46) T                                            | cis-1,3-Dichlo... |       |       | 0.256 | 0.304 | 0.350 | 0.386 | 0.411 | 0.341 | 18.26 |
| 47) T                                            | 1,1,2-Trichlor... |       |       | 0.323 | 0.315 | 0.325 | 0.308 | 0.313 | 0.317 | 2.30  |
| 48) T                                            | Dibromochlorom... |       |       | 0.396 | 0.458 | 0.511 | 0.515 | 0.528 | 0.482 | 11.34 |
| 49) T                                            | Bromoform         |       |       | 0.317 | 0.383 | 0.427 | 0.459 | 0.474 | 0.412 | 15.45 |
| 50) T                                            | 4-Methyl-2-Pen... |       |       | 0.611 | 0.753 | 0.841 | 0.806 | 0.811 | 0.764 | 11.97 |
| 51) T                                            | 2-Hexanone        |       |       | 0.411 | 0.496 | 0.601 | 0.627 | 0.649 | 0.557 | 18.01 |
| 52) T                                            | Tetrachloroethene | 0.202 | 0.192 | 0.248 | 0.279 | 0.285 | 0.276 | 0.285 | 0.252 | 15.83 |
| 53) T                                            | Toluene           |       |       | 0.560 | 0.761 | 0.842 | 0.855 | 0.878 | 0.779 | 16.73 |
| 54) T                                            | 1,2-Dibromoethane | 0.237 |       | 0.357 | 0.366 | 0.417 | 0.415 | 0.429 | 0.370 | 19.30 |
| -----ISTD-----                                   |                   |       |       |       |       |       |       |       |       |       |
| 55) I                                            | Chlorobenzene-d5  |       |       |       |       |       |       |       |       |       |
| 56) T                                            | 1,1,1,2-Tetrac... |       |       | 0.426 | 0.434 | 0.443 | 0.381 | 0.377 | 0.412 | 7.56  |
| 57) T                                            | Chlorobenzene     |       |       | 0.783 | 0.780 | 0.793 | 0.673 | 0.669 | 0.740 | 8.54  |
| 58) T                                            | Ethyl Benzene     |       |       | 0.868 | 1.092 | 1.232 | 1.141 | 1.148 | 1.096 | 12.52 |
| 59) T                                            | m/p-Xylene        |       |       | 0.832 | 1.019 | 1.112 | 0.975 | 0.971 | 0.982 | 10.29 |
| 60) T                                            | o-Xylene          |       |       | 0.771 | 0.958 | 1.068 | 0.947 | 0.937 | 0.936 | 11.35 |
| 61) T                                            | Styrene           |       |       | 0.250 | 0.336 | 0.416 | 0.456 | 0.475 | 0.386 | 24.14 |
| 62) T                                            | Isopropylbenzene  |       |       | 1.293 | 1.527 | 1.633 | 1.397 | 1.380 | 1.446 | 9.27  |
| 63) T                                            | 1,1,2,2-Tetrac... | 0.731 | 0.568 | 0.693 | 0.740 | 0.773 | 0.660 | 0.656 | 0.689 | 9.95  |
| 64) T                                            | n-propylbenzene   |       |       | 0.325 | 0.377 | 0.430 | 0.378 | 0.382 | 0.378 | 9.76  |
| 65) T                                            | tert-Butylbenzene |       |       | 1.123 | 1.382 | 1.503 | 1.251 | 1.238 | 1.299 | 11.25 |
| 66) T                                            | Benzyl Chloride   |       |       | 0.083 | 0.088 | 0.098 | 0.108 | 0.123 | 0.100 | 15.94 |
| 67) T                                            | sec-Butylbenzene  |       |       | 1.586 | 1.944 | 2.139 | 1.761 | 1.728 | 1.831 | 11.68 |
| 68) S                                            | 1-Bromo-4-Fluo... | 0.741 | 0.750 | 0.763 | 0.745 | 0.722 | 0.716 | 0.721 | 0.737 | 2.40  |
| 69) T                                            | p-Isopropyltol... |       |       | 1.165 | 1.568 | 1.739 | 1.479 | 1.453 | 1.481 | 14.10 |
| 70) T                                            | n-Butylbenzene    |       |       | 1.233 | 1.579 | 1.758 | 1.510 | 1.495 | 1.515 | 12.49 |
| 71) T                                            | 2-Chlorotoluene   |       |       | 0.848 | 1.082 | 1.182 | 1.055 | 1.059 | 1.045 | 11.64 |
| 72) T                                            | 4-Ethyltoluene    |       |       | 0.864 | 1.068 | 1.233 | 1.131 | 1.146 | 1.088 | 12.74 |
| 73) T                                            | 1,3,5-Trimethy... |       |       | 0.794 | 0.946 | 1.096 | 0.967 | 0.973 | 0.955 | 11.27 |
| 74) T                                            | 1,2,4-Trimethy... |       |       | 0.980 | 1.174 | 1.262 | 1.071 | 1.060 | 1.109 | 9.88  |
| 75) T                                            | 1,3-Dichlorobe... |       |       | 0.643 | 0.711 | 0.750 | 0.659 | 0.672 | 0.687 | 6.30  |
| 76) T                                            | 1,4-Dichlorobe... |       |       | 0.644 | 0.662 | 0.711 | 0.645 | 0.653 | 0.663 | 4.22  |
| 77) T                                            | 1,2-Dichlorobe... |       |       | 0.643 | 0.722 | 0.739 | 0.643 | 0.657 | 0.681 | 6.76  |
| 78) T                                            | Hexachloro-1,3... |       |       | 0.620 | 0.620 | 0.583 | 0.428 | 0.441 | 0.538 | 17.89 |
| 79) T                                            | Naphthalene       | 0.269 |       | 0.527 | 0.738 | 0.854 | 0.832 | 0.889 | 0.685 | 35.32 |
| 80) T                                            | Naphthalene,2-... |       |       | 0.121 | 0.128 | 0.161 | 0.140 | 0.197 | 0.149 | 20.61 |
| 81) T                                            | 1,2,4-Trichlor... |       |       | 0.364 | 0.452 | 0.456 | 0.425 | 0.456 | 0.431 | 9.18  |

(#) = Out of Range