

Method Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\

Method File : VL061621AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Jun 16 14:06:32 2021

Last Update : Wed Jun 16 14:06:32 2021

Response Via : Initial Calibration

## Calibration Files

0.03=VL037169.D 0.1 =VL037168.D 0.5 =VL037167.D 1 =VL037166.D 2 =VL037165.D 10 =VL037164.D 15 =VL037170.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg   | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----                     |                |       |       |       |       |       |       |       |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2) T Dichlorodifluo...    |                |       | 2.208 | 2.021 | 1.635 | 1.498 | 1.333 | 1.739 | 20.98 |
| 3) Chlorodifluoro...      |                |       | 2.129 | 2.124 | 2.039 | 1.731 | 1.699 | 1.944 | 10.95 |
| 4) Chloromethane          |                |       | 0.705 | 0.659 | 0.677 | 0.601 | 0.599 | 0.648 | 7.20  |
| 5) T Vinyl Chloride       | 0.827          | 0.694 | 0.706 | 0.702 | 0.746 | 0.653 | 0.656 | 0.712 | 8.40  |
| 6) T Bromomethane         |                |       | 0.481 | 0.419 | 0.420 | 0.399 | 0.406 | 0.425 | 7.68  |
| 7) Chloroethane           |                |       | 0.283 | 0.253 | 0.271 | 0.229 | 0.237 | 0.255 | 8.88  |
| 8) T Dichlorotetra...     |                |       | 2.017 | 1.936 | 1.822 | 1.601 | 1.544 | 1.784 | 11.55 |
| 9) T Propene              |                |       | 0.639 | 0.688 | 0.665 | 0.563 | 0.552 | 0.622 | 9.79  |
| 10) T Heptane             |                |       | 1.510 | 1.537 | 1.641 | 1.423 | 1.417 | 1.506 | 6.13  |
| 11) T Trichlorofluor...   |                |       | 2.024 | 1.933 | 1.926 | 1.690 | 1.706 | 1.856 | 8.03  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.422 | 1.350 | 1.367 | 1.197 | 1.206 | 1.308 | 7.72  |
| 13) Ethanol               |                |       | 0.130 | 0.097 | 0.107 | 0.080 | 0.068 | 0.096 | 25.22 |
| 14) T Bromoethene         |                |       | 0.549 | 0.572 | 0.563 | 0.517 | 0.528 | 0.546 | 4.20  |
| 15) T Acetone             |                |       | 1.344 | 1.225 | 1.377 | 0.829 | 0.864 | 1.128 | 23.33 |
| 16) T 1,3-Butadiene       |                |       | 0.666 | 0.690 | 0.722 | 0.634 | 0.622 | 0.667 | 6.16  |
| 17) tert-Butyl alc...     |                |       | 1.034 | 0.978 | 1.166 | 1.061 | 0.971 | 1.042 | 7.58  |
| 18) T 1,1-Dichloroet...   |                |       | 0.659 | 0.565 | 0.591 | 0.537 | 0.547 | 0.580 | 8.40  |
| 19) T Isopropyl Alcohol   |                |       | 0.701 | 0.753 | 0.746 | 0.636 | 0.579 | 0.683 | 10.93 |
| 20) T Methylene Chlo...   |                |       | 0.820 | 0.799 | 0.843 | 0.455 | 0.459 | 0.675 | 29.58 |
| 21) T Allyl Chloride      |                |       | 0.887 | 0.875 | 0.917 | 0.792 | 0.780 | 0.850 | 7.14  |
| 22) T trans-1,2-Dich...   |                |       | 0.591 | 0.580 | 0.613 | 0.532 | 0.552 | 0.574 | 5.58  |
| 23) T Vinyl Acetate       |                |       | 1.495 | 1.681 | 1.787 | 1.517 | 1.604 | 1.617 | 7.45  |
| 24) T 1,1-Dichloroet...   |                |       | 1.381 | 1.303 | 1.393 | 1.228 | 1.204 | 1.302 | 6.62  |
| 25) T Ethyl Acetate       |                |       | 2.446 | 2.632 | 2.666 | 2.230 | 2.232 | 2.441 | 8.58  |
| 26) T Hexane              |                |       | 1.367 | 1.335 | 1.339 | 1.071 | 1.058 | 1.234 | 12.60 |
| 27) T Carbon Disulfide    |                |       | 1.072 | 1.131 | 1.285 | 1.262 | 1.294 | 1.209 | 8.33  |
| 28) T Methyl tert-Bu...   |                |       | 1.528 | 1.560 | 1.558 | 1.413 | 1.357 | 1.483 | 6.25  |
| 29) T Chloroform          |                |       | 2.051 | 1.968 | 2.002 | 1.736 | 1.773 | 1.906 | 7.46  |
| 30) T Cyclohexane         |                |       | 1.089 | 1.085 | 1.088 | 0.940 | 0.940 | 1.028 | 7.86  |
| 31) T cis-1,2-Dichlo...   |                |       | 1.195 | 1.146 | 1.170 | 1.063 | 1.095 | 1.134 | 4.76  |
| 32) T 1,1,1-Trichlor...   | 2.752          | 1.970 | 1.936 | 1.904 | 2.067 | 1.820 | 1.828 | 2.040 | 15.95 |
| -----                     |                |       |       |       |       |       |       |       |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |       |
| 34) T 2-Butanone          |                |       | 0.348 | 0.448 | 0.445 | 0.346 | 0.357 | 0.389 | 13.56 |
| 35) T Carbon Tetrach...   | 0.732          | 0.590 | 0.648 | 0.676 | 0.726 | 0.660 | 0.663 | 0.671 | 7.22  |
| 36) T Benzene             |                |       | 0.852 | 0.824 | 0.859 | 0.763 | 0.744 | 0.809 | 6.48  |
| 37) T 1,2-Dichloroet...   |                |       | 0.469 | 0.472 | 0.513 | 0.446 | 0.450 | 0.470 | 5.66  |
| 38) T Trichloroethene     | 0.518          | 0.417 | 0.372 | 0.352 | 0.384 | 0.322 | 0.326 | 0.384 | 17.60 |
| 39) T 1,2-Dichloropr...   |                |       | 0.273 | 0.328 | 0.321 | 0.294 | 0.287 | 0.300 | 7.71  |

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|                |   |                   |       |       |       |       |       |       |       |       |       |
|----------------|---|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 40)            | T | 1,4-Dioxane       |       |       | 0.081 | 0.094 | 0.085 | 0.081 | 0.071 | 0.082 | 10.13 |
| 41)            | T | Tetrahydrofuran   |       |       | 0.176 | 0.183 | 0.190 | 0.175 | 0.180 | 0.181 | 3.30  |
| 42)            | T | Bromodichlorom... |       |       | 0.638 | 0.636 | 0.696 | 0.646 | 0.624 | 0.648 | 4.30  |
| 43)            |   | Methyl Methacr... |       |       | 0.256 | 0.281 | 0.298 | 0.281 | 0.281 | 0.279 | 5.44  |
| 44)            | T | 2,2,4-Trimethy... |       |       | 1.412 | 1.455 | 1.499 | 1.250 | 1.192 | 1.362 | 9.83  |
| 45)            | T | t-1,3-Dichloro... |       |       | 0.184 | 0.194 | 0.260 | 0.291 | 0.304 | 0.246 | 22.33 |
| 46)            | T | cis-1,3-Dichlo... |       |       | 0.281 | 0.305 | 0.359 | 0.366 | 0.374 | 0.337 | 12.27 |
| 47)            | T | 1,1,2-Trichlor... |       |       | 0.361 | 0.354 | 0.356 | 0.322 | 0.320 | 0.343 | 5.74  |
| 48)            | T | Dibromochlorom... |       |       | 0.451 | 0.518 | 0.588 | 0.575 | 0.574 | 0.541 | 10.59 |
| 49)            | T | Bromoform         |       |       | 0.297 | 0.356 | 0.449 | 0.457 | 0.456 | 0.403 | 18.07 |
| 50)            | T | 4-Methyl-2-Pen... |       |       | 0.516 | 0.514 | 0.582 | 0.530 | 0.529 | 0.534 | 5.18  |
| 51)            | T | 2-Hexanone        |       |       | 0.221 | 0.255 | 0.292 | 0.264 | 0.267 | 0.260 | 9.97  |
| 52)            | T | Tetrachloroethene | 0.532 | 0.387 | 0.360 | 0.355 | 0.368 | 0.317 | 0.311 | 0.376 | 19.69 |
| 53)            | T | Toluene           |       |       | 0.980 | 0.994 | 1.055 | 0.912 | 0.890 | 0.966 | 6.87  |
| 54)            | T | 1,2-Dibromoethane |       |       | 0.480 | 0.479 | 0.543 | 0.479 | 0.482 | 0.493 | 5.72  |
| -----ISTD----- |   |                   |       |       |       |       |       |       |       |       |       |
| 55)            | I | Chlorobenzene-d5  |       |       |       |       |       |       |       |       |       |
| 56)            |   | 1,1,1,2-Tetrac... |       |       | 0.440 | 0.453 | 0.457 | 0.422 | 0.414 | 0.437 | 4.31  |
| 57)            | T | Chlorobenzene     |       |       | 0.848 | 0.884 | 0.842 | 0.746 | 0.735 | 0.811 | 8.21  |
| 58)            | T | Ethyl Benzene     |       |       | 1.371 | 1.470 | 1.484 | 1.304 | 1.255 | 1.377 | 7.29  |
| 59)            | T | m/p-Xylene        |       |       | 1.201 | 1.245 | 1.244 | 1.093 | 1.050 | 1.167 | 7.69  |
| 60)            | T | o-Xylene          |       |       | 1.122 | 1.202 | 1.197 | 1.029 | 1.004 | 1.111 | 8.30  |
| 61)            | T | Styrene           |       |       | 0.487 | 0.575 | 0.606 | 0.603 | 0.595 | 0.573 | 8.65  |
| 62)            |   | Isopropylbenzene  |       |       | 1.700 | 1.705 | 1.689 | 1.433 | 1.372 | 1.580 | 10.35 |
| 63)            | T | 1,1,2,2-Tetrac... | 0.841 | 0.775 | 0.730 | 0.746 | 0.762 | 0.668 | 0.657 | 0.740 | 8.55  |
| 64)            |   | n-propylbenzene   |       |       | 0.373 | 0.414 | 0.422 | 0.387 | 0.382 | 0.396 | 5.34  |
| 65)            |   | tert-Butylbenzene |       |       | 1.396 | 1.542 | 1.568 | 1.276 | 1.222 | 1.401 | 11.02 |
| 66)            | T | Benzyl Chloride   |       |       | 0.060 | 0.055 | 0.065 | 0.055 | 0.062 | 0.059 | 7.43  |
| 67)            |   | sec-Butylbenzene  |       |       | 1.964 | 1.988 | 2.081 | 1.696 | 1.612 | 1.868 | 10.84 |
| 68)            | S | 1-Bromo-4-Fluo... | 0.744 | 0.766 | 0.747 | 0.739 | 0.728 | 0.788 | 0.792 | 0.758 | 3.26  |
| 69)            |   | p-Isopropyltol... |       |       | 1.526 | 1.694 | 1.781 | 1.472 | 1.418 | 1.578 | 9.74  |
| 70)            |   | n-Butylbenzene    |       |       | 1.410 | 1.524 | 1.639 | 1.384 | 1.345 | 1.460 | 8.22  |
| 71)            |   | 2-Chlorotoluene   |       |       | 1.122 | 1.180 | 1.183 | 1.033 | 1.004 | 1.104 | 7.49  |
| 72)            | T | 4-Ethyltoluene    |       |       | 1.231 | 1.314 | 1.355 | 1.216 | 1.193 | 1.262 | 5.50  |
| 73)            | T | 1,3,5-Trimethy... |       |       | 1.301 | 1.337 | 1.276 | 1.106 | 1.079 | 1.220 | 9.71  |
| 74)            | T | 1,2,4-Trimethy... |       |       | 1.284 | 1.369 | 1.359 | 1.157 | 1.116 | 1.257 | 9.18  |
| 75)            | T | 1,3-Dichlorobe... |       |       | 0.809 | 0.811 | 0.807 | 0.705 | 0.690 | 0.764 | 8.02  |
| 76)            | T | 1,4-Dichlorobe... |       |       | 0.809 | 0.817 | 0.835 | 0.672 | 0.684 | 0.763 | 10.31 |
| 77)            | T | 1,2-Dichlorobe... |       |       | 0.778 | 0.806 | 0.785 | 0.665 | 0.662 | 0.739 | 9.44  |
| 78)            | T | Hexachloro-1,3... |       |       | 0.769 | 0.710 | 0.690 | 0.505 | 0.505 | 0.636 | 19.35 |
| 79)            | T | Naphthalene       |       |       | 0.881 | 0.954 | 1.198 | 1.074 | 1.133 | 1.048 | 12.37 |
| 80)            | T | Naphthalene,2-... |       |       | 0.213 | 0.192 | 0.268 | 0.328 | 0.374 | 0.275 | 27.88 |
| 81)            | T | 1,2,4-Trichlor... |       |       | 0.554 | 0.618 | 0.673 | 0.583 | 0.596 | 0.605 | 7.35  |

(#) = Out of Range