

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

Method File : VL021021AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Feb 10 16:04:02 2021

Last Update : Wed Feb 10 16:04:02 2021

Response Via : Initial Calibration

## Calibration Files

0.03=VL036319.D 0.1 =VL036318.D 0.5 =VL036317.D 1 =VL036316.D 2 =VL036315.D 10 =VL036314.D 15 =VL036320.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg   | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----                     |                |       |       |       |       |       |       |       |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2) T Dichlorodifluo...    |                |       | 1.909 | 1.736 | 1.408 | 1.267 | 1.142 | 1.492 | 21.56 |
| 3) Chlorodifluoro...      |                |       | 1.404 | 1.378 | 1.332 | 1.033 | 1.065 | 1.243 | 14.39 |
| 4) Chloromethane          |                |       | 0.655 | 0.685 | 0.639 | 0.495 | 0.527 | 0.600 | 13.93 |
| 5) T Vinyl Chloride       | 0.638          | 0.474 | 0.605 | 0.591 | 0.579 | 0.495 | 0.531 | 0.559 | 10.76 |
| 6) T Bromomethane         |                |       | 0.374 | 0.354 | 0.353 | 0.285 | 0.295 | 0.332 | 11.92 |
| 7) Chloroethane           |                |       | 0.190 | 0.244 | 0.203 | 0.173 | 0.182 | 0.198 | 13.98 |
| 8) T Dichlorotetra...     |                |       | 1.450 | 1.552 | 1.478 | 1.150 | 1.158 | 1.357 | 13.95 |
| 9) T Propene              |                |       | 0.201 | 0.560 | 0.599 | 0.465 | 0.492 | 0.463 | 33.70 |
| 10) T Heptane             |                |       | 1.334 | 1.477 | 1.578 | 1.194 | 1.242 | 1.365 | 11.77 |
| 11) T Trichlorofluor...   |                |       | 1.600 | 1.658 | 1.572 | 1.225 | 1.253 | 1.461 | 14.08 |
| 12) T 1,1,2-Trichlor...   |                |       | 1.024 | 1.045 | 0.919 | 0.747 | 0.790 | 0.905 | 14.84 |
| 13) Ethanol               |                |       | 0.094 | 0.105 | 0.096 | 0.070 | 0.071 | 0.087 | 18.40 |
| 14) T Bromoethene         |                |       | 0.410 | 0.405 | 0.404 | 0.325 | 0.350 | 0.379 | 10.30 |
| 15) T Acetone             |                |       | 1.373 | 1.464 | 1.359 | 0.927 | 0.989 | 1.222 | 20.10 |
| 16) T 1,3-Butadiene       |                |       | 0.584 | 0.623 | 0.709 | 0.484 | 0.524 | 0.585 | 15.01 |
| 17) tert-Butyl alc...     |                |       | 1.120 | 1.092 | 1.000 | 0.816 | 0.717 | 0.949 | 18.56 |
| 18) T 1,1-Dichloroet...   |                |       | 0.444 | 0.463 | 0.448 | 0.346 | 0.356 | 0.411 | 13.56 |
| 19) T Isopropyl Alcohol   |                |       | 0.863 | 0.765 | 0.735 | 0.538 | 0.486 | 0.677 | 23.51 |
| 20) T Methylene Chlo...   |                |       | 0.477 | 0.452 | 0.428 | 0.304 | 0.310 | 0.394 | 20.70 |
| 21) T Allyl Chloride      |                |       | 0.714 | 0.748 | 0.743 | 0.572 | 0.627 | 0.681 | 11.44 |
| 22) T trans-1,2-Dich...   |                |       | 0.422 | 0.423 | 0.362 | 0.321 | 0.341 | 0.374 | 12.47 |
| 23) T Vinyl Acetate       |                |       | 1.512 | 1.567 | 1.478 | 1.262 | 1.367 | 1.437 | 8.51  |
| 24) T 1,1-Dichloroet...   |                |       | 1.213 | 1.160 | 1.095 | 0.914 | 0.932 | 1.063 | 12.65 |
| 25) T Ethyl Acetate       |                |       | 2.566 | 2.550 | 2.633 | 2.003 | 2.047 | 2.360 | 13.04 |
| 26) T Hexane              |                |       | 1.056 | 1.037 | 1.101 | 0.816 | 0.838 | 0.970 | 13.67 |
| 27) T Carbon Disulfide    |                |       | 0.820 | 0.951 | 0.927 | 0.840 | 0.918 | 0.891 | 6.46  |
| 28) T Methyl tert-Bu...   |                |       | 1.320 | 1.379 | 1.369 | 1.106 | 1.159 | 1.267 | 9.95  |
| 29) T Chloroform          |                |       | 1.714 | 1.754 | 1.683 | 1.301 | 1.358 | 1.562 | 13.73 |
| 30) T Cyclohexane         |                |       | 0.853 | 0.877 | 0.909 | 0.678 | 0.714 | 0.806 | 12.84 |
| 31) T cis-1,2-Dichlo...   |                |       | 1.017 | 1.019 | 1.042 | 0.829 | 0.890 | 0.959 | 9.81  |
| 32) T 1,1,1-Trichlor...   | 1.433          | 1.363 | 1.585 | 1.619 | 1.634 | 1.265 | 1.325 | 1.460 | 10.37 |
| -----                     |                |       |       |       |       |       |       |       |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |       |
| 34) T 2-Butanone          |                |       | 0.718 | 0.732 | 0.749 | 0.556 | 0.568 | 0.664 | 14.23 |
| 35) T Carbon Tetrach...   | 0.810          | 0.659 | 0.664 | 0.706 | 0.690 | 0.582 | 0.581 | 0.670 | 11.72 |
| 36) T Benzene             |                |       | 0.856 | 0.941 | 0.948 | 0.752 | 0.751 | 0.849 | 11.32 |
| 37) T 1,2-Dichloroet...   |                |       | 0.554 | 0.557 | 0.583 | 0.466 | 0.465 | 0.525 | 10.53 |
| 38) T Trichloroethene     | 0.319          | 0.316 | 0.318 | 0.323 | 0.340 | 0.259 | 0.255 | 0.304 | 10.92 |
| 39) T 1,2-Dichloropr...   |                |       | 0.348 | 0.379 | 0.386 | 0.305 | 0.307 | 0.345 | 11.11 |

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|     |   |                   |       |       |                |       |       |       |       |       |       |
|-----|---|-------------------|-------|-------|----------------|-------|-------|-------|-------|-------|-------|
| 40) | T | 1,4-Dioxane       |       |       | 0.146          | 0.132 | 0.130 | 0.101 | 0.089 | 0.120 | 19.88 |
| 41) | T | Tetrahydrofuran   |       |       | 0.350          | 0.394 | 0.431 | 0.331 | 0.349 | 0.371 | 11.03 |
| 42) | T | Bromodichlorom... |       |       | 0.729          | 0.761 | 0.779 | 0.628 | 0.621 | 0.703 | 10.57 |
| 43) |   | Methyl Methacr... |       |       | 0.341          | 0.370 | 0.397 | 0.338 | 0.345 | 0.358 | 6.96  |
| 44) | T | 2,2,4-Trimethy... |       |       | 1.651          | 1.773 | 1.757 | 1.298 | 1.243 | 1.545 | 16.51 |
| 45) | T | t-1,3-Dichloro... |       |       | 0.272          | 0.335 | 0.368 | 0.365 | 0.388 | 0.346 | 13.08 |
| 46) | T | cis-1,3-Dichlo... |       |       | 0.397          | 0.429 | 0.478 | 0.440 | 0.450 | 0.439 | 6.72  |
| 47) | T | 1,1,2-Trichlor... |       |       | 0.385          | 0.398 | 0.381 | 0.299 | 0.303 | 0.353 | 13.55 |
| 48) | T | Dibromochlorom... |       |       | 0.500          | 0.556 | 0.578 | 0.500 | 0.500 | 0.527 | 7.12  |
| 49) | T | Bromoform         |       |       | 0.382          | 0.441 | 0.471 | 0.411 | 0.425 | 0.426 | 7.77  |
| 50) | T | 4-Methyl-2-Pen... |       |       | 0.979          | 1.076 | 1.115 | 0.883 | 0.879 | 0.986 | 10.97 |
| 51) | T | 2-Hexanone        |       |       | 0.655          | 0.796 | 0.847 | 0.704 | 0.745 | 0.749 | 10.06 |
| 52) | T | Tetrachloroethene | 0.403 | 0.329 | 0.305          | 0.326 | 0.325 | 0.244 | 0.244 | 0.311 | 17.71 |
| 53) | T | Toluene           |       |       | 0.884          | 0.994 | 1.046 | 0.843 | 0.835 | 0.920 | 10.28 |
| 54) | T | 1,2-Dibromoethane |       |       | 0.534          | 0.553 | 0.562 | 0.449 | 0.454 | 0.510 | 10.69 |
| 55) | I | Chlorobenzene-d5  |       |       | -----ISTD----- |       |       |       |       |       |       |
| 56) |   | 1,1,1,2-Tetrac... |       |       | 0.501          | 0.501 | 0.500 | 0.403 | 0.395 | 0.460 | 12.16 |
| 57) | T | Chlorobenzene     |       |       | 0.885          | 0.865 | 0.820 | 0.651 | 0.641 | 0.773 | 15.27 |
| 58) | T | Ethyl Benzene     |       |       | 1.343          | 1.512 | 1.522 | 1.251 | 1.219 | 1.369 | 10.41 |
| 59) | T | m/p-Xylene        |       |       | 1.252          | 1.354 | 1.336 | 1.059 | 1.013 | 1.203 | 13.10 |
| 60) | T | o-Xylene          |       |       | 1.218          | 1.320 | 1.280 | 0.986 | 0.946 | 1.150 | 14.99 |
| 61) | T | Styrene           |       |       | 0.649          | 0.720 | 0.784 | 0.710 | 0.702 | 0.713 | 6.76  |
| 62) |   | Isopropylbenzene  |       |       | 1.856          | 1.974 | 1.904 | 1.471 | 1.415 | 1.724 | 15.12 |
| 63) | T | 1,1,2,2-Tetrac... | 1.302 | 0.866 | 0.910          | 0.952 | 0.929 | 0.712 | 0.681 | 0.907 | 22.47 |
| 64) |   | n-propylbenzene   |       |       | 0.434          | 0.464 | 0.463 | 0.385 | 0.375 | 0.424 | 9.96  |
| 65) |   | tert-Butylbenzene |       |       | 1.524          | 1.739 | 1.662 | 1.249 | 1.200 | 1.475 | 16.39 |
| 66) | T | Benzyl Chloride   |       |       | 0.315          | 0.368 | 0.397 | 0.444 | 0.481 | 0.401 | 16.11 |
| 67) |   | sec-Butylbenzene  |       |       | 2.292          | 2.419 | 2.412 | 1.805 | 1.707 | 2.127 | 16.17 |
| 68) | S | 1-Bromo-4-Fluo... | 0.806 | 0.838 | 0.829          | 0.783 | 0.788 | 0.862 | 0.853 | 0.823 | 3.79  |
| 69) |   | p-Isopropyltol... |       |       | 1.638          | 1.813 | 1.885 | 1.469 | 1.414 | 1.644 | 12.53 |
| 70) |   | n-Butylbenzene    |       |       | 1.757          | 1.990 | 2.021 | 1.560 | 1.486 | 1.763 | 13.77 |
| 71) |   | 2-Chlorotoluene   |       |       | 1.370          | 1.457 | 1.480 | 1.172 | 1.128 | 1.321 | 12.29 |
| 72) | T | 4-Ethyltoluene    |       |       | 1.248          | 1.423 | 1.427 | 1.159 | 1.142 | 1.280 | 10.82 |
| 73) | T | 1,3,5-Trimethy... |       |       | 1.279          | 1.409 | 1.371 | 1.082 | 1.062 | 1.241 | 13.00 |
| 74) | T | 1,2,4-Trimethy... |       |       | 1.300          | 1.444 | 1.437 | 1.101 | 1.050 | 1.267 | 14.57 |
| 75) | T | 1,3-Dichlorobe... |       |       | 0.774          | 0.738 | 0.750 | 0.594 | 0.581 | 0.687 | 13.46 |
| 76) | T | 1,4-Dichlorobe... |       |       | 0.786          | 0.785 | 0.781 | 0.609 | 0.609 | 0.714 | 13.40 |
| 77) | T | 1,2-Dichlorobe... |       |       | 0.716          | 0.778 | 0.763 | 0.579 | 0.573 | 0.682 | 14.54 |
| 78) | T | Hexachloro-1,3... |       |       | 0.667          | 0.671 | 0.635 | 0.401 | 0.412 | 0.557 | 24.80 |
| 79) | T | Naphthalene       |       |       | 0.588          | 0.707 | 0.880 | 0.759 | 0.819 | 0.751 | 14.85 |
| 80) | T | Naphthalene,2-... |       |       | 0.132          | 0.097 | 0.137 | 0.130 | 0.200 | 0.139 | 26.84 |
| 81) | T | 1,2,4-Trichlor... |       |       | 0.450          | 0.496 | 0.514 | 0.398 | 0.433 | 0.458 | 10.24 |

(#) = Out of Range