



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: LABE01  
 Lab Code: CHEM Case No.: 03645 SAS No.: 03645 SDG No.: 03645  
 Instrument ID: MSVOA\_N Calibration Date(s): 07/10/2023 07/10/2023  
 Heated Purge: (Y/N) N Calibration Time(s): 12:21 14:46  
 GC Column: RXI-624 ID: 0.25 (mm)

| LAB FILE ID:                   | RRF100 = VN078449.D | RRF050 = VN078450.D | RRF040 = VN078451.D |        |        |        |       |       |
|--------------------------------|---------------------|---------------------|---------------------|--------|--------|--------|-------|-------|
|                                | RRF020 = VN078452.D | RRF005 = VN078453.D | RRF001 = VN078454.D |        |        |        |       |       |
| COMPOUND                       | RRF100              | RRF050              | RRF040              | RRF020 | RRF005 | RRF001 | RRF   | % RSD |
| Dichlorodifluoromethane        | 0.565               | 0.586               | 0.609               | 0.576  | 0.691  | 0.650  | 0.613 | 7.9   |
| Chloromethane                  | 0.566               | 0.614               | 0.651               | 0.617  | 0.733  | 0.818  | 0.666 | 13.9  |
| Vinyl Chloride                 | 0.802               | 0.813               | 0.805               | 0.842  | 0.936  | 0.974  | 0.862 | 8.7   |
| Bromomethane                   | 0.509               | 0.569               | 0.586               | 0.620  | 0.795  |        | 0.616 | 17.5  |
| Chloroethane                   | 0.500               | 0.570               | 0.523               | 0.560  | 0.592  | 0.751  | 0.583 | 15.2  |
| Trichlorofluoromethane         | 0.945               | 0.983               | 0.993               | 1.010  | 1.108  | 1.143  | 1.030 | 7.5   |
| 1,1,2-Trichlorotrifluoroethane | 0.513               | 0.537               | 0.542               | 0.533  | 0.577  | 0.569  | 0.545 | 4.4   |
| 1,1-Dichloroethene             | 0.502               | 0.519               | 0.523               | 0.509  | 0.567  | 0.545  | 0.528 | 4.6   |
| Acetone                        | 0.187               | 0.198               | 0.207               | 0.200  | 0.224  | 0.237  | 0.209 | 8.8   |
| Carbon Disulfide               | 1.407               | 1.440               | 1.438               | 1.443  | 1.615  | 1.810  | 1.526 | 10.3  |
| Methyl tert-butyl Ether        | 1.689               | 1.768               | 1.788               | 1.704  | 1.781  | 1.701  | 1.738 | 2.6   |
| Methyl Acetate                 | 0.796               | 0.865               | 0.866               | 0.829  | 0.933  | 1.015  | 0.884 | 8.9   |
| Methylene Chloride             | 0.585               | 0.615               | 0.625               | 0.603  | 0.676  | 0.941  | 0.674 | 20    |
| trans-1,2-Dichloroethene       | 0.562               | 0.592               | 0.591               | 0.581  | 0.631  | 0.610  | 0.595 | 4     |
| 1,1-Dichloroethane             | 1.032               | 1.076               | 1.062               | 1.056  | 1.156  | 1.144  | 1.088 | 4.6   |
| Cyclohexane                    | 0.825               | 0.830               | 0.882               | 0.876  | 1.117  |        | 0.906 | 13.3  |
| 2-Butanone                     | 0.314               | 0.330               | 0.341               | 0.326  | 0.329  | 0.332  | 0.329 | 2.7   |
| Carbon Tetrachloride           | 0.537               | 0.526               | 0.545               | 0.531  | 0.518  | 0.539  | 0.533 | 1.8   |
| cis-1,2-Dichloroethene         | 0.673               | 0.688               | 0.696               | 0.681  | 0.711  | 0.678  | 0.688 | 2     |
| Bromochloromethane             | 0.493               | 0.513               | 0.504               | 0.504  | 0.492  | 0.567  | 0.512 | 5.5   |
| Chloroform                     | 1.098               | 1.146               | 1.155               | 1.118  | 1.157  | 1.122  | 1.132 | 2.1   |
| 1,1,1-Trichloroethane          | 0.993               | 1.033               | 1.043               | 1.017  | 1.058  | 0.948  | 1.015 | 3.9   |
| Methylcyclohexane              | 0.464               | 0.446               | 0.453               | 0.442  | 0.423  | 0.455  | 0.447 | 3.1   |
| Benzene                        | 1.458               | 1.443               | 1.478               | 1.463  | 1.450  | 1.420  | 1.452 | 1.4   |
| 1,2-Dichloroethane             | 0.485               | 0.475               | 0.487               | 0.497  | 0.497  | 0.522  | 0.494 | 3.3   |
| Trichloroethene                | 0.382               | 0.371               | 0.387               | 0.376  | 0.373  | 0.458  | 0.391 | 8.5   |
| 1,2-Dichloropropane            | 0.372               | 0.358               | 0.368               | 0.374  | 0.367  | 0.367  | 0.368 | 1.5   |
| Bromodichloromethane           | 0.526               | 0.518               | 0.522               | 0.526  | 0.503  | 0.518  | 0.519 | 1.7   |
| 4-Methyl-2-Pentanone           | 0.410               | 0.410               | 0.427               | 0.420  | 0.388  | 0.346  | 0.400 | 7.4   |
| Toluene                        | 0.930               | 0.902               | 0.936               | 0.878  | 0.869  | 0.885  | 0.900 | 3.1   |
| t-1,3-Dichloropropene          | 0.570               | 0.543               | 0.557               | 0.531  | 0.513  | 0.476  | 0.532 | 6.3   |
| cis-1,3-Dichloropropene        | 0.611               | 0.591               | 0.601               | 0.578  | 0.551  | 0.467  | 0.567 | 9.3   |
| 1,1,2-Trichloroethane          | 0.356               | 0.351               | 0.360               | 0.359  | 0.348  | 0.353  | 0.355 | 1.3   |

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.  
 RRF of 1,4-Dioxane = Value should be divide by 1000.

### VOLATILE ORGANICS INITIAL CALIBRATION DATA

|                                                |                                                          |
|------------------------------------------------|----------------------------------------------------------|
| Lab Name: <u>CHEMTECH</u>                      | Contract: <u>LABE01</u>                                  |
| Lab Code: <u>CHEM</u> Case No.: <u>03645</u>   | SAS No.: <u>03645</u> SDG No.: <u>03645</u>              |
| Instrument ID: <u>MSVOA_N</u>                  | Calibration Date(s): <u>07/10/2023</u> <u>07/10/2023</u> |
| Heated Purge: (Y/N) <u>N</u>                   | Calibration Time(s): <u>12:21</u> <u>14:46</u>           |
| GC Column: <u>RXI-624</u> ID: <u>0.25</u> (mm) |                                                          |

|                             |        |                     |        |                     |        |                     |       |       |
|-----------------------------|--------|---------------------|--------|---------------------|--------|---------------------|-------|-------|
| LAB FILE ID:                |        | RRF100 = VN078449.D |        | RRF050 = VN078450.D |        | RRF040 = VN078451.D |       |       |
|                             |        | RRF020 = VN078452.D |        | RRF005 = VN078453.D |        | RRF001 = VN078454.D |       |       |
| COMPOUND                    | RRF100 | RRF050              | RRF040 | RRF020              | RRF005 | RRF001              | RRF   | % RSD |
| 2-Hexanone                  | 0.293  | 0.298               | 0.306  | 0.291               | 0.282  | 0.237               | 0.284 | 8.7   |
| Dibromochloromethane        | 0.412  | 0.401               | 0.406  | 0.393               | 0.377  | 0.360               | 0.391 | 5     |
| 1,2-Dibromoethane           | 0.373  | 0.368               | 0.381  | 0.366               | 0.368  | 0.335               | 0.365 | 4.3   |
| Tetrachloroethene           | 0.366  | 0.373               | 0.389  | 0.396               | 0.391  | 0.340               | 0.376 | 5.5   |
| Chlorobenzene               | 1.094  | 1.095               | 1.124  | 1.112               | 1.139  | 1.142               | 1.118 | 1.9   |
| Ethyl Benzene               | 1.974  | 1.945               | 1.965  | 1.929               | 1.860  | 1.662               | 1.889 | 6.3   |
| m/p-Xylenes                 | 0.747  | 0.737               | 0.745  | 0.721               | 0.704  | 0.536               | 0.698 | 11.7  |
| o-Xylene                    | 0.736  | 0.718               | 0.725  | 0.713               | 0.686  | 0.654               | 0.705 | 4.3   |
| Styrene                     | 1.222  | 1.170               | 1.190  | 1.117               | 1.056  | 0.867               | 1.104 | 11.8  |
| Bromoform                   | 0.304  | 0.306               | 0.311  | 0.294               | 0.297  | 0.236               | 0.291 | 9.5   |
| Isopropylbenzene            | 4.223  | 4.339               | 4.344  | 4.665               | 5.480  | 5.138               | 4.698 | 10.8  |
| 1,1,2,2-Tetrachloroethane   | 1.245  | 1.370               | 1.396  | 1.498               | 1.856  | 2.152               | 1.586 | 21.8  |
| n-propylbenzene             | 4.818  | 4.824               | 4.885  | 5.017               | 5.527  | 5.076               | 5.024 | 5.3   |
| 1,3,5-Trimethylbenzene      | 3.386  | 3.486               | 3.562  | 3.773               | 4.124  | 3.941               | 3.712 | 7.7   |
| tert-Butylbenzene           | 2.856  | 2.928               | 2.931  | 3.159               | 3.620  | 3.415               | 3.152 | 9.8   |
| 1,2,4-Trimethylbenzene      | 3.353  | 3.440               | 3.566  | 3.649               | 4.067  | 3.560               | 3.606 | 6.9   |
| sec-Butylbenzene            | 3.700  | 3.733               | 3.741  | 3.923               | 4.614  | 4.191               | 3.984 | 9     |
| p-Isopropyltoluene          | 3.051  | 3.079               | 3.135  | 3.204               | 3.565  | 3.159               | 3.199 | 5.9   |
| 1,3-Dichlorobenzene         | 1.729  | 1.746               | 1.758  | 1.767               | 1.968  | 1.855               | 1.804 | 5.1   |
| 1,4-Dichlorobenzene         | 1.688  | 1.723               | 1.710  | 1.775               | 1.939  | 2.064               | 1.817 | 8.3   |
| n-Butylbenzene              | 2.310  | 2.322               | 2.343  | 2.296               | 2.555  | 1.906               | 2.289 | 9.2   |
| 1,2-Dichlorobenzene         | 1.673  | 1.724               | 1.730  | 1.808               | 1.985  | 1.849               | 1.795 | 6.3   |
| 1,2-Dibromo-3-Chloropropane | 0.218  | 0.227               | 0.236  | 0.246               | 0.277  | 0.365               | 0.262 | 20.8  |
| 1,2,4-Trichlorobenzene      | 0.630  | 0.609               | 0.586  | 0.555               | 0.512  | 0.545               | 0.573 | 7.6   |
| 1,2,3-Trichlorobenzene      | 0.668  | 0.660               | 0.658  | 0.646               | 0.627  | 0.694               | 0.659 | 3.4   |
| 1,2-Dichloroethane-d4       | 0.652  | 0.662               | 0.657  | 0.675               | 0.706  |                     | 0.670 | 3.2   |
| Dibromofluoromethane        | 0.338  | 0.331               | 0.330  | 0.347               | 0.351  |                     | 0.339 | 2.8   |
| Toluene-d8                  | 1.319  | 1.251               | 1.247  | 1.281               | 1.313  |                     | 1.282 | 2.6   |
| 4-Bromofluorobenzene        | 0.430  | 0.397               | 0.392  | 0.388               | 0.368  |                     | 0.395 | 5.7   |

\* Compounds with required minimum RRF and maximum %RSD values.  
All other compounds must meet a minimum RRF of 0.010.  
RRF of 1,4-Dioxane = Value should be divide by 1000.