

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: Q1172 SAS No.: Q1172 SDG No.: Q1172
Instrument ID: MSVOA_U Calibration Date(s): 02/10/2025 02/10/2025
Heated Purge: (Y/N) N Calibration Time(s): 12:59 15:33
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF0.5 = VU063219.D		RRF001 = VU063220.D		RRF002 = VU063221.D		RRF005 = VU063222.D		RRF010 = VU063223.D		RRF015 = VU063224.D	
COMPOUND		RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	RRF	% RSD				
Dichlorodifluoromethane		0.326	0.362	0.329	0.325	0.305	0.302	0.325	6.7				
Chloromethane		0.390	0.400	0.389	0.368	0.352	0.344	0.374	6.1				
Vinyl Chloride		0.364	0.390	0.367	0.376	0.366	0.357	0.370	3.1				
Bromomethane		0.198	0.201	0.125	0.189	0.191		0.181	17.6				
Chloroethane		0.245	0.259	0.233	0.223	0.222	0.216	0.233	7.1				
Tetrahydrofuran		0.046	0.046	0.049	0.044	0.051	0.046	0.047	5.9				
Trichlorofluoromethane		0.426	0.473	0.452	0.443	0.423	0.416	0.439	4.8				
1,1,2-Trichloro-1,2,2-trifluoroethane		0.259	0.272	0.253	0.250	0.231	0.230	0.249	6.5				
tert-Butyl Alcohol			0.039	0.027	0.022	0.024	0.021	0.026	27				
Diethyl Ether		0.223	0.231	0.215	0.218	0.216	0.203	0.218	4.2				
1,1-Dichloroethene		0.256	0.274	0.253	0.250	0.248	0.241	0.254	4.3				
Acrylonitrile		0.051	0.056	0.059	0.060	0.065	0.059	0.059	7.6				
Acetone		0.050	0.047	0.044	0.042	0.047	0.040	0.045	8.4				
Carbon Disulfide		0.944	0.945	0.880	0.869	0.861	0.822	0.887	5.5				
Methyl tert-Butyl Ether		0.582	0.652	0.618	0.642	0.673	0.635	0.634	4.9				
Methyl acrylate		0.118	0.146	0.150	0.157	0.165	0.153	0.148	10.9				
Methylene Chloride		0.332	0.333	0.313	0.309	0.304	0.289	0.313	5.4				
trans-1,2-Dichloroethene		0.292	0.305	0.287	0.288	0.287	0.279	0.290	3				
1,1-Dichloroethane		0.523	0.592	0.552	0.549	0.538	0.520	0.546	4.8				
Cyclohexane		0.415	0.423	0.423	0.457	0.453	0.460	0.439	4.6				
2-Butanone		0.071	0.072	0.067	0.071	0.079	0.070	0.072	5.3				
Carbon Tetrachloride		0.371	0.417	0.379	0.383	0.378	0.369	0.383	4.6				
2,2-Dichloropropane		0.434	0.463	0.413	0.421	0.418	0.407	0.426	4.7				
cis-1,2-Dichloroethene		0.297	0.332	0.306	0.316	0.316	0.310	0.313	3.7				
Bromochloromethane		0.133	0.150	0.132	0.139	0.137	0.130	0.137	5.3				
Chloroform		0.546	0.588	0.543	0.556	0.546	0.526	0.551	3.7				
1,1,1-Trichloroethane		0.433	0.466	0.448	0.459	0.442	0.429	0.446	3.3				
Methylcyclohexane		0.377	0.448	0.418	0.461	0.448	0.458	0.435	7.4				
1,1-Dichloropropene		0.368	0.416	0.404	0.404	0.408	0.399	0.400	4.1				
Propionitrile		0.016	0.020	0.023	0.022	0.025	0.024	0.022	14.5				

* Compounds with required minimum RRF and maximum %RSD values.
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RRF of 1,4-Dioxane = Value should be divide by 1000.

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COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	RRF	% RSD
Benzene	1.163	1.280	1.242	1.256	1.232	1.199	1.229	3.4
1,2-Dichloroethane	0.351	0.371	0.358	0.357	0.355	0.335	0.355	3.3
Trichloroethene	0.287	0.311	0.294	0.290	0.291	0.281	0.292	3.4
1,2-Dichloropropane	0.314	0.333	0.319	0.323	0.326	0.314	0.322	2.3
1-Chlorobutane	0.484	0.555	0.547	0.578	0.565	0.552	0.547	5.9
Dibromomethane	0.161	0.173	0.163	0.164	0.163	0.153	0.163	4
Bromodichloromethane	0.332	0.402	0.386	0.393	0.391	0.371	0.379	6.7
4-Methyl-2-Pentanone	0.147	0.155	0.166	0.176	0.197	0.182	0.171	10.6
Toluene	0.607	0.705	0.706	0.745	0.744	0.732	0.707	7.4
t-1,3-Dichloropropene	0.284	0.343	0.343	0.362	0.383	0.368	0.347	9.9
cis-1,3-Dichloropropene	0.378	0.427	0.430	0.435	0.459	0.444	0.429	6.4
1,1,2-Trichloroethane	0.211	0.225	0.219	0.221	0.228	0.214	0.220	3
1,3-Dichloropropane	0.354	0.408	0.393	0.400	0.405	0.379	0.390	5.2
2-Hexanone	0.094	0.109	0.115	0.118	0.136	0.128	0.117	12.6
Dibromochloromethane	0.238	0.257	0.246	0.256	0.267	0.252	0.253	4
1,2-Dibromoethane	0.194	0.206	0.202	0.209	0.219	0.205	0.206	4
Tetrachloroethene	0.242	0.258	0.236	0.250	0.234	0.225	0.241	4.9
Chlorobenzene	0.676	0.752	0.745	0.775	0.768	0.758	0.746	4.8
1,1,1,2-Tetrachloroethane	0.254	0.279	0.264	0.269	0.274	0.268	0.268	3.2
Hexachloroethane	0.179	0.215	0.214	0.210	0.222	0.232	0.212	8.5
Ethyl Benzene	1.075	1.229	1.246	1.363	1.403	1.399	1.286	10
m/p-Xylenes	0.374	0.444	0.475	0.526	0.536	0.528	0.480	13.2
o-Xylene	0.374	0.449	0.469	0.502	0.514	0.513	0.470	11.5
Styrene	0.562	0.675	0.721	0.815	0.856	0.862	0.748	15.8
Bromoform	0.127	0.139	0.142	0.145	0.156	0.151	0.143	7.1
Isopropylbenzene	0.889	1.035	1.086	1.184	1.212	1.226	1.106	11.7
1,1,2,2-Tetrachloroethane	0.260	0.304	0.306	0.292	0.310	0.303	0.296	6.2
1,2,3-Trichloropropane	0.220	0.222	0.246	0.213	0.204	0.230	0.222	6.5
Bromobenzene	0.253	0.303	0.295	0.308	0.314	0.314	0.298	7.8
n-propylbenzene	0.242	0.286	0.314	0.344	0.354	0.359	0.317	14.5

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COMPOUND	RRF0.5	RRF001	RRF002	RRF005	RRF010	RRF015	RRF	% RSD
2-Chlorotoluene	0.228	0.278	0.292	0.315	0.316	0.321	0.292	12.1
1,3,5-Trimethylbenzene	0.741	0.939	1.024	1.125	1.148	1.169	1.024	16
4-Chlorotoluene	0.237	0.292	0.297	0.320	0.321	0.327	0.299	11.2
tert-Butylbenzene	0.854	0.987	1.030	1.074	1.118	1.153	1.036	10.3
1,2,4-Trimethylbenzene	0.709	0.905	1.009	1.126	1.157	1.192	1.016	18.1
sec-Butylbenzene	1.016	1.226	1.318	1.415	1.442	1.498	1.319	13.4
p-Isopropyltoluene	0.745	0.942	1.033	1.137	1.168	1.222	1.041	17
1,3-Dichlorobenzene	0.531	0.551	0.589	0.589	0.596	0.611	0.578	5.2
1,4-Dichlorobenzene	0.485	0.514	0.581	0.593	0.601	0.617	0.565	9.4
n-Butylbenzene	0.693	0.822	0.907	0.992	1.044	1.142	0.933	17.3
1,2-Dichlorobenzene	0.481	0.538	0.571	0.563	0.574	0.604	0.555	7.6
1,2-Dibromo-3-Chloropropane	0.031	0.041	0.039	0.043	0.049	0.046	0.042	14.6
1,2,4-Trichlorobenzene	0.206	0.246	0.253	0.282	0.308	0.331	0.271	16.7
Hexachlorobutadiene	0.186	0.197	0.203	0.191	0.182	0.202	0.194	4.4
Naphthalene	0.315	0.335	0.379	0.441	0.556	0.592	0.436	26.5
1,2,3-Trichlorobenzene	0.219	0.237	0.239	0.275	0.303	0.318	0.265	15.1
Nitrobenzene		0.004	0.006	0.007	0.009	0.009	0.007	30.3
1,2-Dichlorobenzene-d4	0.314	0.328	0.350	0.336	0.344	0.388	0.343	7.4
4-Bromofluorobenzene	0.302	0.311	0.330	0.321	0.358	0.356	0.330	7
Iodomethane		0.411	0.389	0.411	0.405	0.378	0.399	3.6
Allyl Chloride	0.340	0.390	0.369	0.364	0.365	0.357	0.364	4.5
t-1,4-Dichloro-2-butene	0.071	0.084	0.088	0.072	0.084	0.082	0.080	8.8
Methacrylonitrile	0.062	0.067	0.079	0.087	0.098	0.091	0.080	17.3
Ethyl methacrylate	0.194	0.227	0.244	0.270	0.314	0.296	0.258	17.4
Isopropyl Ether	0.718	0.786	0.766	0.785	0.814	0.808	0.779	4.5
Methyl methacrylate	0.112	0.126	0.128	0.148	0.161	0.147	0.137	13.3

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