

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:	<u>CHEMTECH</u>	Contract:	<u>CHEM02</u>
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q2378</u>
Instrument ID:	<u>MSVOA_X</u>	SAS No.:	<u>Q2378</u>
Heated Purge: (Y/N)	<u>N</u>	SDG No.:	<u>Q2378</u>
GC Column:	<u>DB-624UI</u>	Calibration Date(s):	<u>06/17/2025</u>
ID:	<u>0.18 (mm)</u>	Calibration Time(s):	<u>11:19</u>
			<u>17:18</u>

LAB FILE ID:		RRF005 = VX046718.D		RRF020 = VX046719.D		RRF050 = VX046720.D		
		RRF100 = VX046721.D		RRF150 = VX046722.D		RRF001 = VX046725.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
Dichlorodifluoromethane	0.464	0.507	0.583	0.627	0.598	0.425	0.534	15.1
Chloromethane	0.541	0.570	0.593	0.641	0.627	0.485	0.576	10
Vinyl Chloride	0.569	0.632	0.634	0.687	0.644	0.521	0.614	9.7
Ethyl Acetate	0.404	0.440	0.431	0.468	0.459	0.443	0.441	5.1
Bromomethane	0.371	0.367	0.369	0.341	0.280		0.346	11.1
Chloroethane	0.350	0.388	0.377	0.405	0.381	0.332	0.372	7.1
Trichlorofluoromethane	0.897	0.974	0.967	1.030	0.972	0.757	0.933	10.3
1,1,2-Trichlorotrifluoroethane	0.563	0.608	0.576	0.623	0.594	0.470	0.572	9.6
Tert butyl alcohol	0.048	0.061	0.062	0.071	0.069		0.062	14.5
1,1-Dichloroethene	0.527	0.574	0.569	0.609	0.583	0.451	0.552	10.2
Acrolein	0.095	0.074	0.087	0.098	0.097		0.090	11
Acrylonitrile	0.270	0.287	0.285	0.312	0.295	0.226	0.279	10.6
Acetone	0.219	0.222	0.220	0.238	0.234	0.251	0.231	5.6
Carbon Disulfide	1.503	1.644	1.599	1.735	1.656	1.869	1.668	7.5
Methyl tert-butyl Ether	1.628	1.803	1.752	1.898	1.808	1.427	1.720	9.8
Methyl Acetate	0.577	0.590	0.581	0.650	0.647	0.470	0.586	11.2
Methylene Chloride	0.655	0.655	0.610	0.666	0.624	0.637	0.641	3.3
trans-1,2-Dichloroethene	0.569	0.627	0.589	0.637	0.595	0.529	0.591	6.7
Vinyl Acetate	1.423	1.608	1.596	1.747	1.664	1.138	1.529	14.3
1,1-Dichloroethane	1.054	1.153	1.088	1.170	1.114	0.972	1.092	6.6
Cyclohexane	0.983	1.086	1.013	1.074	1.021		1.036	4.2
2-Butanone	0.319	0.325	0.338	0.371	0.353	0.251	0.326	12.7
Carbon Tetrachloride	0.509	0.537	0.515	0.548	0.531	0.470	0.518	5.4
2,2-Dichloropropane	0.768	0.798	0.761	0.878	0.886	0.688	0.796	9.5
cis-1,2-Dichloroethene	0.681	0.731	0.686	0.741	0.704	0.623	0.694	6.1
Bromochloromethane	0.527	0.459	0.485	0.519	0.500	0.480	0.495	5.2
Chloroform	1.102	1.190	1.114	1.181	1.109	0.857	1.092	11.1
1,1,1-Trichloroethane	0.931	1.012	0.956	1.046	0.990	0.812	0.958	8.6
Methylcyclohexane	0.631	0.642	0.629	0.672	0.647	0.550	0.628	6.6
1,1-Dichloropropene	0.477	0.486	0.477	0.500	0.480	0.446	0.478	3.7

* 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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Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: Q2378 SAS No.: Q2378 SDG No.: Q2378
Instrument ID: MSVOA_X Calibration Date(s): 06/17/2025 06/17/2025
Heated Purge: (Y/N) N Calibration Time(s): 11:19 17:18
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX046718.D		RRF020 = VX046719.D		RRF050 = VX046720.D		RRF100 = VX046721.D		RRF150 = VX046722.D		RRF001 = VX046725.D	
COMPOUND		RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD				
Benzene		1.431	1.477	1.417	1.509	1.427	1.218	1.413	7.2				
1,2-Dichloroethane		0.508	0.523	0.495	0.528	0.497	0.429	0.497	7.2				
Trichloroethene		0.355	0.374	0.356	0.389	0.366	0.320	0.360	6.5				
1,2-Dichloropropane		0.347	0.372	0.346	0.374	0.357	0.305	0.350	7.2				
Dibromomethane		0.243	0.260	0.251	0.270	0.259	0.228	0.252	5.9				
Bromodichloromethane		0.510	0.545	0.522	0.562	0.540	0.404	0.514	11.1				
4-Methyl-2-Pentanone		0.408	0.414	0.426	0.460	0.439	0.322	0.411	11.6				
Toluene		0.884	0.927	0.888	0.927	0.881	0.750	0.876	7.4				
t-1,3-Dichloropropene		0.438	0.484	0.488	0.555	0.540	0.355	0.477	15.3				
cis-1,3-Dichloropropene		0.516	0.555	0.548	0.603	0.589	0.436	0.541	11.1				
1,1,2-Trichloroethane		0.330	0.341	0.326	0.347	0.329	0.287	0.327	6.4				
1,3-Dichloropropane		0.575	0.576	0.562	0.600	0.563	0.497	0.562	6.2				
2-Chloroethyl Vinyl ether		0.241	0.235	0.281	0.296	0.282	0.167	0.250	19				
2-Hexanone		0.285	0.285	0.297	0.320	0.305	0.214	0.284	13				
Dibromochloromethane		0.380	0.402	0.388	0.419	0.402	0.318	0.385	9.3				
1,2-Dibromoethane		0.333	0.348	0.335	0.363	0.346	0.267	0.332	10.1				
Tetrachloroethene		0.345	0.353	0.340	0.360	0.339	0.341	0.346	2.4				
Chlorobenzene		1.114	1.148	1.091	1.165	1.100	1.005	1.104	5.1				
1,1,1,2-Tetrachloroethane		0.358	0.398	0.373	0.408	0.386	0.302	0.371	10.2				
Hexachloroethane		0.523	0.601	0.584	0.647	0.627	0.522	0.584	9				
Ethyl Benzene		1.905	2.030	1.933	2.062	1.945	1.696	1.929	6.7				
m/p-Xylenes		0.705	0.764	0.724	0.765	0.718	0.635	0.719	6.7				
o-Xylene		0.686	0.729	0.692	0.739	0.698	0.498	0.673	13.1				
Styrene		1.144	1.256	1.208	1.267	1.203	0.993	1.179	8.6				
Bromoform		0.268	0.295	0.287	0.315	0.304	0.226	0.282	11.3				
Isopropylbenzene		3.593	3.914	3.723	4.004	3.814	3.048	3.682	9.3				
1,1,2,2-Tetrachloroethane		1.037	1.075	1.044	1.124	1.074	0.816	1.028	10.6				
1,2,3-Trichloropropane		0.959	1.066	0.990	0.938	0.892	0.650	0.916	15.6				
Bromobenzene		0.861	0.953	0.892	0.956	0.911	0.744	0.886	8.9				
n-propylbenzene		4.243	4.682	4.430	4.737	4.509	3.642	4.374	9.2				

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COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
2-Chlorotoluene	2.596	2.736	2.586	2.770	2.618	2.363	2.611	5.5
1,3,5-Trimethylbenzene	2.888	3.297	3.072	3.294	3.108	2.497	3.026	9.9
4-Chlorotoluene	2.980	3.255	3.024	3.227	3.066	2.734	3.048	6.2
tert-Butylbenzene	3.043	3.316	3.122	3.395	3.234	2.658	3.128	8.4
1,2,4-Trimethylbenzene	2.992	3.270	3.061	3.302	3.162	2.455	3.040	10.2
sec-Butylbenzene	3.920	4.198	3.999	4.272	4.030	3.301	3.953	8.7
p-Isopropyltoluene	3.275	3.526	3.340	3.574	3.394	2.905	3.336	7.2
1,3-Dichlorobenzene	1.703	1.787	1.678	1.786	1.719	1.694	1.728	2.7
1,4-Dichlorobenzene	1.743	1.830	1.653	1.789	1.702	1.932	1.775	5.6
n-Butylbenzene	2.970	3.284	3.154	3.415	3.194	2.986	3.167	5.4
1,2-Dichlorobenzene	1.604	1.701	1.592	1.703	1.628	1.460	1.615	5.5
1,2-Dibromo-3-Chloropropane	0.196	0.205	0.211	0.235	0.237	0.134	0.203	18.6
1,2,4-Trichlorobenzene	1.040	1.138	1.127	1.253	1.160	1.170	1.148	6
Hexachlorobutadiene	0.490	0.501	0.479	0.512	0.420	0.495	0.483	6.8
Naphthalene	2.887	3.301	3.335	3.744	3.720	2.636	3.270	13.5
1,2,3-Trichlorobenzene	1.062	1.129	1.082	1.207	1.153	0.957	1.098	7.9
1,2-Dichloroethane-d4	0.801	0.567	0.649	0.726	0.714		0.692	12.7
Dibromofluoromethane	0.362	0.267	0.320	0.354	0.351		0.331	11.9
Toluene-d8	1.342	0.973	1.144	1.250	1.234		1.189	11.7
4-Bromofluorobenzene	0.513	0.354	0.426	0.466	0.456		0.443	13.3

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