

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: Q1942 SAS No.: Q1942 SDG No.: Q1942
 Instrument ID: MSVOA_N Calibration Date(s): 04/15/2025 04/15/2025
 Heated Purge: (Y/N) N Calibration Time(s): 11:29 14:29
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF001 = VN086277.D		RRF005 = VN086278.D		RRF010 = VN086279.D			
		RRF020 = VN086280.D		RRF050 = VN086281.D		RRF100 = VN086282.D			
COMPOUND	RRF001	RRF005	RRF010	RRF020	RRF050	RRF100	RRF	% RSD	
Dichlorodifluoromethane	0.606	0.561	0.582	0.624	0.591	0.593	0.593	3.6	
Chloromethane	1.113	0.904	0.783	0.819	0.754	0.795	0.861	15.5	
Vinyl Chloride	0.897	0.825	0.785	0.846	0.791	0.788	0.822	5.4	
Ethyl Acetate	0.585	0.509	0.458	0.491	0.446	0.439	0.488	11.1	
Bromomethane		0.383	0.370	0.395	0.356	0.344	0.370	5.5	
Chloroethane	0.650	0.580	0.519	0.543	0.500	0.509	0.550	10.3	
Trichlorofluoromethane	0.988	0.951	0.859	0.927	0.863	0.875	0.911	5.9	
1,1,2-Trichlorotrifluoroethane	0.577	0.581	0.522	0.567	0.526	0.532	0.551	4.9	
Tert butyl alcohol		0.145	0.135	0.142	0.124	0.115	0.132	9.4	
1,1-Dichloroethene	0.660	0.622	0.553	0.588	0.551	0.557	0.588	7.6	
Acrolein		0.121	0.070	0.065	0.061	0.060	0.075	34.1	
Acrylonitrile	0.332	0.349	0.308	0.343	0.317	0.313	0.327	5.1	
Acetone	0.423	0.284	0.252	0.283	0.251	0.247	0.290	23.2	
Carbon Disulfide	2.325	1.864	1.602	1.721	1.558	1.503	1.762	17.3	
Methyl tert-butyl Ether	2.478	2.266	2.013	2.199	2.010	2.014	2.163	8.8	
Methyl Acetate	1.024	0.912	0.819	0.864	0.781	0.822	0.870	10	
Methylene Chloride	0.782	0.707	0.616	0.670	0.619	0.629	0.670	9.7	
trans-1,2-Dichloroethene	0.703	0.656	0.557	0.620	0.575	0.580	0.615	9.1	
Vinyl Acetate	1.743	1.757	1.524	1.643	1.483	1.396	1.591	9.2	
1,1-Dichloroethane	1.315	1.274	1.122	1.206	1.136	1.152	1.201	6.6	
Cyclohexane		1.439	1.140	1.169	1.066	1.062	1.175	13.1	
2-Butanone	0.504	0.473	0.420	0.466	0.425	0.420	0.451	7.7	
Carbon Tetrachloride	0.470	0.471	0.409	0.449	0.423	0.426	0.441	5.9	
2,2-Dichloropropane	1.174	1.154	1.024	1.084	0.983	1.032	1.075	7.1	
cis-1,2-Dichloroethene	0.882	0.810	0.694	0.764	0.714	0.720	0.764	9.3	
Bromochloromethane	0.545	0.608	0.436	0.465	0.495	0.506	0.509	12	
Chloroform	1.318	1.233	1.122	1.196	1.105	1.104	1.180	7.3	
1,1,1-Trichloroethane	1.095	1.083	0.953	1.026	0.949	0.949	1.009	6.8	
Methylcyclohexane	0.611	0.579	0.513	0.549	0.524	0.531	0.551	6.8	
1,1-Dichloropropene	0.509	0.488	0.426	0.466	0.443	0.448	0.463	6.7	

* 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.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: Q1942 SAS No.: Q1942 SDG No.: Q1942
Instrument ID: MSVOA_N Calibration Date(s): 04/15/2025 04/15/2025
Heated Purge: (Y/N) N Calibration Time(s): 11:29 14:29
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF001 = VN086277.D		RRF005 = VN086278.D		RRF010 = VN086279.D			
		RRF020 = VN086280.D		RRF050 = VN086281.D		RRF100 = VN086282.D			
COMPOUND	RRF001	RRF005	RRF010	RRF020	RRF050	RRF100	RRF	% RSD	
Benzene	1.648	1.545	1.389	1.508	1.409	1.411	1.485	6.8	
1,2-Dichloroethane	0.526	0.496	0.448	0.482	0.444	0.446	0.474	7.1	
Trichloroethene	0.390	0.357	0.334	0.352	0.338	0.341	0.352	5.8	
1,2-Dichloropropane	0.378	0.383	0.355	0.368	0.349	0.347	0.364	4.2	
Dibromomethane	0.234	0.244	0.220	0.239	0.227	0.226	0.232	3.7	
Bromodichloromethane	0.531	0.530	0.477	0.510	0.475	0.477	0.500	5.4	
4-Methyl-2-Pentanone	0.522	0.522	0.479	0.521	0.484	0.471	0.500	4.9	
Toluene	1.003	0.963	0.865	0.941	0.892	0.895	0.927	5.6	
t-1,3-Dichloropropene	0.576	0.574	0.528	0.572	0.547	0.554	0.558	3.4	
cis-1,3-Dichloropropene	0.679	0.636	0.580	0.621	0.577	0.587	0.613	6.5	
1,1,2-Trichloroethane	0.367	0.357	0.315	0.332	0.318	0.313	0.333	6.9	
1,3-Dichloropropane	0.629	0.617	0.567	0.602	0.564	0.571	0.592	4.7	
2-Chloroethyl Vinyl ether	0.294	0.354	0.242	0.275	0.287	0.294	0.291	12.5	
2-Hexanone	0.394	0.387	0.355	0.383	0.355	0.349	0.371	5.3	
Dibromochloromethane	0.377	0.381	0.354	0.375	0.353	0.356	0.366	3.5	
1,2-Dibromoethane	0.359	0.342	0.319	0.350	0.324	0.323	0.336	4.9	
Tetrachloroethene	0.419	0.399	0.358	0.390	0.371	0.370	0.385	5.8	
Chlorobenzene	1.235	1.175	1.058	1.117	1.050	1.059	1.116	6.8	
1,1,1,2-Tetrachloroethane	0.400	0.396	0.349	0.368	0.347	0.348	0.368	6.7	
Hexachloroethane	0.617	0.586	0.530	0.557	0.518	0.538	0.558	6.7	
Ethyl Benzene	2.210	2.112	1.873	2.028	1.918	1.941	2.014	6.4	
m/p-Xylenes	0.809	0.795	0.705	0.757	0.727	0.734	0.754	5.4	
o-Xylene	0.791	0.792	0.709	0.753	0.713	0.718	0.746	5.2	
Styrene	1.306	1.288	1.156	1.245	1.218	1.246	1.243	4.3	
Bromoform	0.306	0.294	0.258	0.279	0.261	0.264	0.277	7	
Isopropylbenzene	4.666	4.271	3.991	4.181	3.728	3.706	4.090	8.9	
1,1,2,2-Tetrachloroethane	1.347	1.294	1.181	1.212	1.035	0.985	1.176	12.1	
1,2,3-Trichloropropane	1.518	1.144	1.153	1.182	1.042	1.040	1.180	14.9	
Bromobenzene	0.968	0.935	0.905	0.946	0.850	0.833	0.906	6	
n-propylbenzene	5.366	5.072	4.629	4.862	4.488	4.501	4.820	7.3	

* 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: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: Q1942 SAS No.: Q1942 SDG No.: Q1942
 Instrument ID: MSVOA_N Calibration Date(s): 04/15/2025 04/15/2025
 Heated Purge: (Y/N) N Calibration Time(s): 11:29 14:29
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF001 = VN086277.D		RRF005 = VN086278.D		RRF010 = VN086279.D			
		RRF020 = VN086280.D		RRF050 = VN086281.D		RRF100 = VN086282.D			
COMPOUND	RRF001	RRF005	RRF010	RRF020	RRF050	RRF100	RRF	% RSD	
2-Chlorotoluene	3.378	3.247	2.908	3.058	2.759	2.745	3.016	8.6	
1,3,5-Trimethylbenzene	3.800	3.518	3.178	3.418	3.083	3.088	3.348	8.5	
4-Chlorotoluene	3.304	3.152	2.851	3.047	2.810	2.812	2.996	6.9	
tert-Butylbenzene	3.382	3.057	2.795	2.886	2.608	2.675	2.901	9.8	
1,2,4-Trimethylbenzene	3.782	3.644	3.262	3.431	3.171	3.156	3.408	7.6	
sec-Butylbenzene	4.451	4.309	3.897	3.991	3.763	3.729	4.023	7.3	
p-Isopropyltoluene	3.603	3.487	3.174	3.290	3.158	3.185	3.316	5.6	
1,3-Dichlorobenzene	1.866	1.822	1.618	1.698	1.610	1.608	1.704	6.7	
1,4-Dichlorobenzene	1.942	1.815	1.615	1.713	1.614	1.597	1.716	8	
n-Butylbenzene	3.209	3.013	2.746	2.921	2.838	2.910	2.939	5.4	
1,2-Dichlorobenzene	1.819	1.820	1.565	1.646	1.559	1.502	1.652	8.4	
1,2-Dibromo-3-Chloropropane	0.234	0.274	0.229	0.251	0.222	0.213	0.237	9.2	
1,2,4-Trichlorobenzene	0.822	0.865	0.730	0.793	0.765	0.771	0.791	6	
Hexachlorobutadiene	0.308	0.339	0.286	0.301	0.280	0.278	0.299	7.6	
Naphthalene	3.012	2.955	2.601	2.904	2.675	2.674	2.804	6.2	
1,2,3-Trichlorobenzene	0.819	0.810	0.697	0.749	0.708	0.709	0.749	7.2	
1,2-Dichloroethane-d4		0.746	0.745	0.707	0.719	0.708	0.725	2.6	
Dibromofluoromethane		0.267	0.255	0.230	0.215	0.194	0.232	12.8	
Toluene-d8		1.247	1.281	1.185	1.251	1.237	1.240	2.8	
4-Bromofluorobenzene		0.459	0.456	0.421	0.459	0.467	0.452	4	

* 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.