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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1180 SAS No.: Q1180 SDG No.: Q1180

Instrument ID: MSVOA_X Calibration Date(s): 01/15/2025 01/15/2025

Heated Purge: (Y/N) N Calibration Time(s): 10:31 13:37

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX044648.D RRF005 = VX044649.D RRF020 = VX044650.D
RRF050 = VX044651.D RRF100 = VX044652.D RRF150 = VX044653.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.596	0.606	0.641	0.679	0.751	0.763	0.673	10.7
Chloromethane	0.826	0.712	0.723	0.710	0.682	0.713	0.728	6.9
Vinyl Chloride	0.801	0.681	0.681	0.702	0.699	0.749	0.719	6.6
Ethyl Acetate	0.420	0.485	0.472	0.463	0.487	0.498	0.471	5.9
Bromomethane		0.170	0.166	0.171	0.169	0.183	0.172	3.7
Chloroethane	0.165	0.123	0.113	0.117	0.124	0.149	0.132	15.7
Trichlorofluoromethane	0.859	0.749	0.755	0.765	0.808	0.830	0.795	5.7
1,1,2-Trichlorotrifluoroethane	0.678	0.563	0.562	0.554	0.598	0.629	0.597	8.1
Tert butyl alcohol		0.211	0.165	0.151	0.152	0.162	0.168	14.7
1,1-Dichloroethene	0.638	0.546	0.572	0.566	0.571	0.618	0.585	6
Acrolein		0.113	0.066	0.068	0.068	0.080	0.079	25.3
Acrylonitrile	0.350	0.337	0.325	0.313	0.329	0.326	0.330	3.8
Acetone	0.369	0.277	0.274	0.267	0.309	0.295	0.299	12.7
Carbon Disulfide	1.690	1.556	1.571	1.544	1.552	1.673	1.598	4.1
Methyl tert-butyl Ether	2.328	2.120	2.091	2.032	1.998	2.155	2.121	5.5
Methyl Acetate	1.041	0.832	0.826	0.880	0.942	1.006	0.921	9.8
Methylene Chloride	0.828	0.699	0.682	0.650	0.633	0.679	0.695	10
trans-1,2-Dichloroethene	0.738	0.607	0.590	0.568	0.559	0.605	0.611	10.7
Vinyl Acetate	1.848	1.805	1.757	1.650	1.637	1.708	1.734	4.9
1,1-Dichloroethane	1.251	1.164	1.161	1.126	1.111	1.238	1.175	4.9
Cyclohexane		0.938	0.956	0.931	0.935	0.991	0.950	2.6
2-Butanone	0.451	0.444	0.444	0.426	0.449	0.450	0.444	2.1
Carbon Tetrachloride	0.585	0.503	0.468	0.460	0.465	0.502	0.497	9.4
2,2-Dichloropropane	1.362	1.129	1.094	1.054	1.048	1.146	1.139	10.2
cis-1,2-Dichloroethene	0.940	0.735	0.746	0.717	0.704	0.771	0.769	11.3
Bromochloromethane	0.638	0.554	0.521	0.531	0.527	0.523	0.549	8.2
Chloroform	1.261	1.226	1.185	1.142	1.095	1.206	1.186	5
1,1,1-Trichloroethane	1.393	1.036	1.037	0.997	0.991	1.087	1.090	14
Methylcyclohexane	0.662	0.555	0.556	0.551	0.583	0.614	0.587	7.5
1,1-Dichloropropene	0.545	0.420	0.422	0.408	0.415	0.444	0.442	11.7

* 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.

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1180 SAS No.: Q1180 SDG No.: Q1180

Instrument ID: MSVOA_X Calibration Date(s): 01/15/2025 01/15/2025

Heated Purge: (Y/N) N Calibration Time(s): 10:31 13:37

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX044648.D RRF005 = VX044649.D RRF020 = VX044650.D
RRF050 = VX044651.D RRF100 = VX044652.D RRF150 = VX044653.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Benzene	1.517	1.376	1.364	1.306	1.274	1.384	1.370	6.1
1,2-Dichloroethane	0.552	0.494	0.491	0.477	0.473	0.513	0.500	5.8
Trichloroethene	0.338	0.319	0.324	0.316	0.324	0.355	0.329	4.5
1,2-Dichloropropane	0.367	0.359	0.335	0.329	0.326	0.354	0.345	5
Dibromomethane	0.300	0.271	0.249	0.246	0.243	0.266	0.263	8.2
Bromodichloromethane	0.634	0.530	0.518	0.508	0.499	0.542	0.538	9.1
4-Methyl-2-Pentanone	0.549	0.489	0.481	0.449	0.445	0.458	0.479	8.1
Toluene	0.941	0.864	0.849	0.805	0.769	0.804	0.839	7.3
t-1,3-Dichloropropene	0.578	0.551	0.564	0.546	0.537	0.563	0.556	2.7
cis-1,3-Dichloropropene	0.684	0.589	0.603	0.574	0.567	0.603	0.603	7
1,1,2-Trichloroethane	0.401	0.342	0.341	0.319	0.312	0.321	0.339	9.6
1,3-Dichloropropane	0.652	0.594	0.581	0.555	0.527	0.557	0.578	7.5
2-Chloroethyl Vinyl ether	0.377	0.281	0.252	0.273	0.265	0.271	0.286	15.9
2-Hexanone	0.397	0.358	0.357	0.330	0.331	0.341	0.352	7.2
Dibromochloromethane	0.449	0.407	0.399	0.381	0.369	0.386	0.398	7.1
1,2-Dibromoethane	0.411	0.361	0.356	0.337	0.328	0.341	0.356	8.4
Tetrachloroethene	0.346	0.309	0.299	0.296	0.308	0.326	0.314	5.9
Chlorobenzene	1.178	1.085	1.036	1.008	0.998	1.067	1.062	6.2
1,1,1,2-Tetrachloroethane	0.420	0.398	0.376	0.367	0.361	0.394	0.386	5.7
Hexachloroethane	0.957	0.755	0.704	0.690	0.678	0.736	0.753	13.8
Ethyl Benzene	2.026	1.839	1.827	1.779	1.777	1.871	1.853	5
m/p-Xylenes	0.771	0.697	0.686	0.656	0.646	0.669	0.688	6.5
o-Xylene	0.787	0.713	0.690	0.665	0.644	0.674	0.695	7.3
Styrene	1.172	1.146	1.133	1.089	1.069	1.128	1.123	3.4
Bromoform	0.333	0.315	0.302	0.302	0.304	0.331	0.314	4.6
Isopropylbenzene	4.514	4.259	4.043	3.917	3.790	3.985	4.085	6.4
1,1,2,2-Tetrachloroethane	1.618	1.510	1.398	1.302	1.267	1.370	1.411	9.4
1,2,3-Trichloropropane	1.321	1.369	1.173	1.102	1.140	1.176	1.213	8.8
Bromobenzene	1.085	0.985	0.928	0.903	0.876	0.952	0.955	7.8
n-propylbenzene	4.902	4.366	4.481	4.392	4.346	4.541	4.505	4.6

* 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.

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02

Lab Code: CHEM Case No.: Q1180 SAS No.: Q1180 SDG No.: Q1180

Instrument ID: MSVOA_X Calibration Date(s): 01/15/2025 01/15/2025

Heated Purge: (Y/N) N Calibration Time(s): 10:31 13:37

GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX044648.D RRF005 = VX044649.D RRF020 = VX044650.D
RRF050 = VX044651.D RRF100 = VX044652.D RRF150 = VX044653.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
2-Chlorotoluene	3.385	2.964	2.860	2.763	2.657	2.831	2.910	8.7
1,3,5-Trimethylbenzene	3.707	3.522	3.312	3.187	3.057	3.167	3.325	7.4
4-Chlorotoluene	3.509	3.220	3.183	3.075	2.978	3.161	3.188	5.6
tert-Butylbenzene	4.017	3.693	3.410	3.304	3.137	3.300	3.477	9.3
1,2,4-Trimethylbenzene	3.967	3.380	3.346	3.211	3.097	3.273	3.379	9
sec-Butylbenzene	4.515	4.037	3.977	3.895	3.855	4.009	4.048	5.9
p-Isopropyltoluene	3.663	3.337	3.277	3.222	3.161	3.303	3.327	5.3
1,3-Dichlorobenzene	1.733	1.641	1.619	1.613	1.608	1.720	1.656	3.4
1,4-Dichlorobenzene	1.911	1.664	1.606	1.577	1.579	1.705	1.674	7.6
n-Butylbenzene	2.992	2.713	2.770	2.806	2.878	2.986	2.857	4
1,2-Dichlorobenzene	1.919	1.756	1.665	1.626	1.548	1.687	1.700	7.5
1,2-Dibromo-3-Chloropropane	0.407	0.355	0.320	0.310	0.322	0.356	0.345	10.3
1,2,4-Trichlorobenzene	0.956	0.943	0.945	1.031	1.061	1.163	1.016	8.5
Hexachlorobutadiene	0.419	0.384	0.373	0.393	0.401	0.426	0.399	5.1
Naphthalene	4.049	3.759	3.797	3.814	3.860	4.244	3.920	4.8
1,2,3-Trichlorobenzene	1.058	0.993	1.006	1.055	1.055	1.156	1.054	5.4
1,2-Dichloroethane-d4		0.863	0.691	0.745	0.689	0.785	0.755	9.6
Dibromofluoromethane		0.355	0.289	0.318	0.293	0.333	0.318	8.8
Toluene-d8		1.270	1.051	1.111	1.001	1.104	1.108	9.1
4-Bromofluorobenzene		0.445	0.394	0.421	0.383	0.421	0.413	6

* 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.