

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
 Lab Code: CHEM Case No.: Q1328 SAS No.: Q1328 SDG No.: Q1328
 Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025
 Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN085438.D		RRF050 = VN085439.D		RRF020 = VN085440.D			
		RRF010 = VN085441.D		RRF005 = VN085442.D		RRF001 = VN085443.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Dichlorodifluoromethane	0.664	0.629	0.681	0.667	0.708	0.714	0.677	4.6	
Chloromethane	0.680	0.680	0.727	0.693	0.779	0.839	0.733	8.8	
Vinyl Chloride	0.697	0.686	0.727	0.711	0.781	0.819	0.737	7.1	
Ethyl Acetate	0.496	0.488	0.488	0.452	0.520	0.504	0.491	4.7	
Bromomethane	0.392	0.417	0.454	0.437	0.525		0.445	11.3	
Chloroethane	0.435	0.424	0.468	0.429	0.505	0.542	0.467	10.3	
Trichlorofluoromethane	1.046	0.997	1.097	1.040	1.077	1.157	1.069	5.1	
1,1,2-Trichlorotrifluoroethane	0.590	0.542	0.609	0.587	0.639	0.646	0.602	6.4	
Tert butyl alcohol	0.085	0.093	0.095	0.092	0.097		0.092	4.8	
1,1-Dichloroethene	0.548	0.533	0.556	0.526	0.559	0.497	0.537	4.3	
Acrolein	0.136	0.140	0.124	0.131	0.101		0.126	12.1	
Acrylonitrile	0.289	0.298	0.303	0.275	0.299	0.298	0.294	3.4	
Acetone	0.238	0.252	0.252	0.247	0.269	0.306	0.261	9.3	
Carbon Disulfide	1.555	1.477	1.647	1.537	1.719	1.978	1.652	11	
Methyl tert-butyl Ether	1.834	1.873	1.853	1.664	1.685	1.545	1.742	7.5	
Methyl Acetate	0.751	0.790	0.758	0.779	0.810	0.871	0.793	5.5	
Methylene Chloride	0.629	0.629	0.658	0.606	0.696	0.656	0.646	4.9	
trans-1,2-Dichloroethene	0.571	0.555	0.574	0.539	0.569	0.632	0.573	5.5	
Vinyl Acetate	1.495	1.495	1.466	1.279	1.270	1.110	1.353	11.7	
1,1-Dichloroethane	1.164	1.170	1.206	1.100	1.226	1.204	1.178	3.8	
Cyclohexane	0.984	0.881	1.033	1.026	1.198		1.024	11.2	
2-Butanone	0.378	0.390	0.398	0.363	0.387	0.386	0.384	3.1	
Carbon Tetrachloride	0.574	0.530	0.579	0.529	0.565	0.567	0.557	4	
2,2-Dichloropropane	0.958	0.936	0.985	0.922	0.986	0.930	0.953	3	
cis-1,2-Dichloroethene	0.691	0.683	0.715	0.639	0.669	0.655	0.675	4	
Bromochloromethane	0.530	0.542	0.513	0.486	0.595	0.624	0.548	9.4	
Chloroform	1.197	1.175	1.241	1.169	1.253	1.273	1.218	3.6	
1,1,1-Trichloroethane	1.053	1.016	1.091	1.000	1.148	1.102	1.068	5.2	
Methylcyclohexane	0.564	0.463	0.477	0.407	0.437	0.397	0.457	13.3	
1,1-Dichloropropene	0.521	0.462	0.499	0.441	0.490	0.509	0.487	6.2	

* 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.: Q1328 SAS No.: Q1328 SDG No.: Q1328
 Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025
 Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN085438.D		RRF050 = VN085439.D		RRF020 = VN085440.D			
		RRF010 = VN085441.D		RRF005 = VN085442.D		RRF001 = VN085443.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Benzene	1.551	1.449	1.527	1.376	1.474	1.400	1.463	4.7	
1,2-Dichloroethane	0.569	0.547	0.575	0.522	0.574	0.517	0.551	4.8	
Trichloroethene	0.362	0.324	0.352	0.310	0.343	0.352	0.341	5.8	
1,2-Dichloropropane	0.390	0.371	0.388	0.334	0.388	0.371	0.374	5.7	
Dibromomethane	0.275	0.267	0.277	0.254	0.254	0.292	0.270	5.5	
Bromodichloromethane	0.590	0.559	0.579	0.514	0.569	0.484	0.549	7.5	
4-Methyl-2-Pentanone	0.499	0.492	0.495	0.432	0.443	0.380	0.457	10.3	
Toluene	0.964	0.870	0.919	0.808	0.835	0.690	0.848	11.3	
t-1,3-Dichloropropene	0.594	0.551	0.544	0.481	0.527	0.416	0.519	12	
cis-1,3-Dichloropropene	0.623	0.588	0.601	0.527	0.538	0.450	0.554	11.4	
1,1,2-Trichloroethane	0.348	0.340	0.353	0.309	0.349	0.314	0.335	5.7	
1,3-Dichloropropane	0.627	0.602	0.618	0.555	0.584	0.514	0.583	7.3	
2-Chloroethyl Vinyl ether	0.258	0.241	0.226	0.185	0.205	0.163	0.213	16.7	
2-Hexanone	0.358	0.357	0.353	0.298	0.302	0.261	0.321	12.6	
Dibromochloromethane	0.430	0.414	0.412	0.368	0.420	0.386	0.405	5.8	
1,2-Dibromoethane	0.349	0.334	0.356	0.309	0.321	0.334	0.334	5.2	
Tetrachloroethene	0.351	0.322	0.365	0.338	0.346	0.323	0.341	4.9	
Chlorobenzene	1.133	1.076	1.154	1.047	1.110	1.051	1.095	4	
1,1,1,2-Tetrachloroethane	0.404	0.392	0.408	0.371	0.412	0.425	0.402	4.7	
Hexachloroethane	0.645	0.577	0.613	0.574	0.616	0.681	0.618	6.6	
Ethyl Benzene	2.072	1.867	1.940	1.685	1.709	1.430	1.784	12.7	
m/p-Xylenes	0.775	0.707	0.750	0.615	0.616	0.492	0.659	16	
o-Xylene	0.738	0.681	0.713	0.584	0.582	0.482	0.630	15.5	
Styrene	1.271	1.173	1.186	0.956	0.929	0.742	1.043	19.2	
Bromoform	0.311	0.311	0.312	0.273	0.284	0.235	0.288	10.6	
Isopropylbenzene	3.922	3.448	3.681	3.272	3.157	2.766	3.375	12.1	
1,1,2,2-Tetrachloroethane	1.121	1.145	1.187	1.157	1.228	1.314	1.192	5.9	
1,2,3-Trichloropropane	1.061	0.893	1.118	0.957	0.965	1.104	1.016	9	
Bromobenzene	0.919	0.858	0.906	0.857	0.880	0.871	0.882	2.9	
n-propylbenzene	4.738	4.154	4.400	3.846	3.605	3.227	3.995	13.7	

* 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.: Q1328 SAS No.: Q1328 SDG No.: Q1328
 Instrument ID: MSVOA_N Calibration Date(s): 01/14/2025 01/14/2025
 Heated Purge: (Y/N) N Calibration Time(s): 14:56 17:19
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN085438.D		RRF050 = VN085439.D		RRF020 = VN085440.D			
		RRF010 = VN085441.D		RRF005 = VN085442.D		RRF001 = VN085443.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
2-Chlorotoluene	2.812	2.585	2.761	2.571	2.533	2.252	2.586	7.7	
1,3,5-Trimethylbenzene	3.260	2.940	3.140	2.695	2.529	2.160	2.787	14.7	
4-Chlorotoluene	2.847	2.588	2.820	2.512	2.536	2.144	2.574	9.9	
tert-Butylbenzene	2.726	2.439	2.570	2.236	2.189	1.885	2.341	12.8	
1,2,4-Trimethylbenzene	3.323	3.016	3.190	2.710	2.542	1.888	2.778	18.9	
sec-Butylbenzene	3.912	3.421	3.643	3.147	3.026	2.318	3.244	17.2	
p-Isopropyltoluene	3.286	2.872	2.942	2.541	2.368	1.777	2.631	20	
1,3-Dichlorobenzene	1.720	1.565	1.701	1.574	1.656	1.526	1.624	4.9	
1,4-Dichlorobenzene	1.706	1.562	1.713	1.607	1.743	1.767	1.683	4.8	
n-Butylbenzene	2.881	2.483	2.485	2.168	2.176	1.772	2.327	16.2	
1,2-Dichlorobenzene	1.611	1.555	1.654	1.532	1.600	1.766	1.620	5.2	
1,2-Dibromo-3-Chloropropane	0.218	0.222	0.224	0.212	0.228	0.202	0.218	4.3	
1,2,4-Trichlorobenzene	0.858	0.781	0.799	0.704	0.717	0.658	0.753	9.7	
Hexachlorobutadiene	0.386	0.367	0.396	0.395	0.441	0.413	0.400	6.3	
Naphthalene	2.588	2.482	2.348	1.958	1.987	2.115	2.246	11.8	
1,2,3-Trichlorobenzene	0.817	0.786	0.792	0.732	0.693	0.750	0.762	6	
1,2-Dichloroethane-d4	0.774	0.831	0.754	0.762	0.914		0.807	8.3	
Dibromofluoromethane	0.359	0.358	0.335	0.310	0.373		0.347	7.1	
Toluene-d8	1.339	1.267	1.207	1.076	1.274		1.232	8.1	
4-Bromofluorobenzene	0.475	0.449	0.410	0.357	0.417		0.422	10.6	

* 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.