

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: P5193 SAS No.: P5193 SDG No.: P5193
Instrument ID: MSVOA_X Calibration Date(s): 11/21/2024 11/21/2024
Heated Purge: (Y/N) N Calibration Time(s): 09:47 12:03
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF001 = VX043925.D		RRF005 = VX043926.D		RRF020 = VX043927.D			
		RRF050 = VX043928.D		RRF100 = VX043929.D		RRF150 = VX043930.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Dichlorodifluoromethane	0.634	0.633	0.641	0.684	0.601	0.608	0.633	4.6	
Chloromethane	0.578	0.662	0.720	0.697	0.665	0.677	0.667	7.3	
Vinyl Chloride	0.675	0.708	0.730	0.762	0.695	0.684	0.709	4.6	
Ethyl Acetate	0.517	0.549	0.549	0.610	0.539	0.552	0.553	5.6	
Bromomethane		0.425	0.438	0.445	0.429	0.442	0.436	2	
Chloroethane	0.579	0.429	0.404	0.459	0.368	0.354	0.432	18.9	
Trichlorofluoromethane	1.038	1.267	1.335	1.357	1.281	1.328	1.268	9.3	
1,1,2-Trichlorotrifluoroethane	0.592	0.585	0.605	0.658	0.589	0.599	0.605	4.5	
Tert butyl alcohol		0.123	0.133	0.145	0.134	0.154	0.138	8.7	
1,1-Dichloroethene	0.596	0.530	0.585	0.600	0.572	0.576	0.576	4.4	
Acrolein		0.158	0.128	0.145	0.145	0.148	0.145	7.5	
Acrylonitrile	0.301	0.322	0.343	0.370	0.332	0.345	0.335	7	
Acetone	0.401	0.396	0.401	0.425	0.370	0.370	0.394	5.4	
Carbon Disulfide	1.082	0.956	1.078	1.287	1.330	1.398	1.188	14.6	
Methyl tert-butyl Ether	1.732	1.991	2.212	2.264	2.160	2.192	2.092	9.5	
Methyl Acetate	0.931	0.871	0.911	0.987	0.894	0.910	0.917	4.3	
Methylene Chloride	0.704	0.656	0.684	0.667	0.643	0.655	0.668	3.3	
trans-1,2-Dichloroethene	0.545	0.563	0.609	0.633	0.600	0.619	0.595	5.7	
Vinyl Acetate	1.245	1.542	1.833	1.941	1.858	1.914	1.722	15.9	
1,1-Dichloroethane	0.980	1.118	1.221	1.256	1.185	1.208	1.161	8.6	
Cyclohexane		0.911	0.976	1.041	0.926	0.925	0.956	5.6	
2-Butanone	0.448	0.486	0.538	0.567	0.500	0.510	0.508	8.1	
Carbon Tetrachloride	0.439	0.466	0.491	0.558	0.520	0.528	0.500	8.7	
2,2-Dichloropropane	0.902	0.997	1.062	1.141	1.082	1.109	1.049	8.3	
cis-1,2-Dichloroethene	0.674	0.673	0.761	0.792	0.745	0.767	0.735	6.8	
Bromochloromethane	0.501	0.611	0.482	0.450	0.500	0.523	0.511	10.7	
Chloroform	1.070	1.238	1.309	1.316	1.269	1.293	1.249	7.4	
1,1,1-Trichloroethane	0.873	1.005	1.133	1.184	1.119	1.149	1.077	10.9	
Methylcyclohexane	0.544	0.556	0.564	0.656	0.574	0.576	0.578	6.9	
1,1-Dichloropropene	0.382	0.430	0.449	0.494	0.452	0.465	0.445	8.4	

* 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.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: P5193 SAS No.: P5193 SDG No.: P5193
Instrument ID: MSVOA_X Calibration Date(s): 11/21/2024 11/21/2024
Heated Purge: (Y/N) N Calibration Time(s): 09:47 12:03
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID: RRF001 = VX043925.D RRF005 = VX043926.D RRF020 = VX043927.D RRF050 = VX043928.D RRF100 = VX043929.D RRF150 = VX043930.D								
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD
Benzene	1.211	1.369	1.457	1.494	1.388	1.402	1.387	7
1,2-Dichloroethane	0.499	0.546	0.585	0.603	0.551	0.558	0.557	6.4
Trichloroethene	0.547	0.372	0.368	0.373	0.345	0.352	0.393	19.5
1,2-Dichloropropane	0.288	0.322	0.361	0.371	0.346	0.350	0.340	8.8
Dibromomethane	0.239	0.240	0.280	0.293	0.276	0.284	0.269	8.6
Bromodichloromethane	0.349	0.425	0.501	0.544	0.528	0.545	0.482	16.4
4-Methyl-2-Pentanone	0.437	0.527	0.562	0.606	0.539	0.548	0.537	10.4
Toluene	0.636	0.839	0.883	0.921	0.850	0.852	0.830	12
t-1,3-Dichloropropene	0.341	0.413	0.507	0.569	0.549	0.570	0.491	19.2
cis-1,3-Dichloropropene	0.409	0.462	0.569	0.611	0.580	0.601	0.539	15.4
1,1,2-Trichloroethane	0.287	0.340	0.375	0.370	0.340	0.345	0.343	9.1
1,3-Dichloropropane	0.480	0.574	0.620	0.625	0.579	0.585	0.577	9
2-Chloroethyl Vinyl ether	0.159	0.327	0.276	0.307	0.284	0.287	0.273	21.6
2-Hexanone	0.297	0.393	0.431	0.471	0.410	0.419	0.403	14.5
Dibromochloromethane	0.249	0.292	0.344	0.396	0.380	0.401	0.344	18
1,2-Dibromoethane	0.258	0.339	0.373	0.385	0.358	0.367	0.346	13.3
Tetrachloroethene	0.304	0.342	0.336	0.349	0.315	0.332	0.330	5.1
Chlorobenzene	1.050	1.109	1.107	1.145	1.069	1.108	1.098	3.1
1,1,1,2-Tetrachloroethane	0.260	0.332	0.371	0.395	0.382	0.396	0.356	14.8
Hexachloroethane	0.450	0.443	0.496	0.588	0.581	0.625	0.530	14.6
Ethyl Benzene	1.579	1.831	1.910	2.024	1.884	1.938	1.861	8.2
m/p-Xylenes	0.610	0.663	0.704	0.762	0.700	0.725	0.694	7.6
o-Xylene	0.543	0.665	0.691	0.757	0.693	0.716	0.678	10.7
Styrene	0.859	1.025	1.174	1.263	1.186	1.217	1.121	13.5
Bromoform	0.145	0.200	0.222	0.284	0.286	0.306	0.240	25.9
Isopropylbenzene	3.435	3.927	3.996	4.097	3.679	3.927	3.843	6.3
1,1,2,2-Tetrachloroethane	1.198	1.356	1.375	1.393	1.260	1.314	1.316	5.7
1,2,3-Trichloropropane	0.863	1.246	1.153	1.181	1.053	1.084	1.096	12.2
Bromobenzene	0.794	0.958	0.955	0.975	0.883	0.936	0.917	7.4
n-propylbenzene	3.667	4.115	4.469	4.733	4.286	4.486	4.293	8.6

* 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.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: P5193 SAS No.: P5193 SDG No.: P5193
Instrument ID: MSVOA_X Calibration Date(s): 11/21/2024 11/21/2024
Heated Purge: (Y/N) N Calibration Time(s): 09:47 12:03
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF001 = VX043925.D		RRF005 = VX043926.D		RRF020 = VX043927.D			
		RRF050 = VX043928.D		RRF100 = VX043929.D		RRF150 = VX043930.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
2-Chlorotoluene	2.487	2.766	2.868	2.857	2.581	2.726	2.714	5.6	
1,3,5-Trimethylbenzene	2.704	3.115	3.352	3.444	3.118	3.238	3.162	8.2	
4-Chlorotoluene	2.660	3.005	3.187	3.329	3.025	3.180	3.064	7.5	
tert-Butylbenzene	2.581	3.097	3.266	3.440	3.152	3.269	3.134	9.4	
1,2,4-Trimethylbenzene	2.557	3.173	3.366	3.440	3.124	3.228	3.148	9.9	
sec-Butylbenzene	3.116	3.921	3.968	4.249	3.812	3.974	3.840	10	
p-Isopropyltoluene	2.255	3.043	3.316	3.521	3.219	3.362	3.119	14.5	
1,3-Dichlorobenzene	1.580	1.656	1.701	1.764	1.623	1.696	1.670	3.9	
1,4-Dichlorobenzene	1.730	1.638	1.706	1.782	1.650	1.710	1.702	3.1	
n-Butylbenzene	1.897	2.580	2.805	3.184	2.909	3.126	2.750	17.2	
1,2-Dichlorobenzene	1.506	1.733	1.723	1.768	1.642	1.740	1.685	5.8	
1,2-Dibromo-3-Chloropropane	0.213	0.254	0.252	0.284	0.275	0.304	0.264	12	
1,2,4-Trichlorobenzene	0.849	0.905	0.987	1.084	1.012	1.125	0.994	10.5	
Hexachlorobutadiene	0.382	0.384	0.376	0.411	0.384	0.419	0.393	4.5	
Naphthalene	2.605	3.361	3.698	4.005	3.733	4.058	3.576	15	
1,2,3-Trichlorobenzene	0.753	0.960	1.055	1.118	1.018	1.130	1.006	13.8	
1,2-Dichloroethane-d4		0.926	0.876	0.751	0.855	0.880	0.858	7.6	
Dibromofluoromethane		0.371	0.353	0.327	0.359	0.376	0.357	5.4	
Toluene-d8		1.327	1.237	1.104	1.232	1.257	1.232	6.6	
4-Bromofluorobenzene		0.401	0.414	0.387	0.438	0.455	0.419	6.6	

* 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.