

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: P4442 SAS No.: P4442 SDG No.: P4442
Instrument ID: MSVOA_X Calibration Date(s): 10/23/2024 10/23/2024
Heated Purge: (Y/N) N Calibration Time(s): 08:59 11:41
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX043480.D		RRF020 = VX043481.D		RRF050 = VX043482.D		
		RRF100 = VX043483.D		RRF150 = VX043484.D		RRF001 = VX043486.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
Dichlorodifluoromethane	0.623	0.555	0.537	0.522	0.570	0.584	0.565	6.3
Chloromethane	0.783	0.688	0.703	0.652	0.711	0.924	0.743	13.2
Vinyl Chloride	0.740	0.617	0.638	0.606	0.664	0.689	0.659	7.6
Ethyl Acetate	0.512	0.458	0.425	0.415	0.467	0.422	0.450	8.2
Bromomethane	0.354	0.268	0.269	0.258	0.299		0.289	13.6
Chloroethane	0.309	0.237	0.227	0.215	0.231	0.288	0.251	15.1
Trichlorofluoromethane	0.933	0.883	0.868	0.854	0.942	1.032	0.919	7.2
1,1,2-Trichlorotrifluoroethane	0.574	0.524	0.521	0.513	0.566	0.581	0.547	5.6
Tert butyl alcohol	0.117	0.119	0.120	0.116	0.137		0.122	7
1,1-Dichloroethene	0.581	0.530	0.541	0.527	0.581	0.509	0.545	5.4
Acrolein	0.127	0.108	0.116	0.109	0.129		0.118	8.2
Acrylonitrile	0.294	0.285	0.283	0.281	0.323	0.308	0.296	5.6
Acetone	0.355	0.311	0.294	0.272	0.312	0.373	0.319	11.9
Carbon Disulfide	1.079	1.025	1.121	1.155	1.355	1.259	1.166	10.5
Methyl tert-butyl Ether	2.122	1.909	1.995	1.874	2.147	2.017	2.010	5.5
Methyl Acetate	0.974	0.815	0.783	0.759	0.867	1.113	0.885	15.3
Methylene Chloride	0.782	0.657	0.679	0.628	0.701	0.825	0.712	10.7
trans-1,2-Dichloroethene	0.648	0.596	0.606	0.588	0.650	0.707	0.633	7.1
Vinyl Acetate	1.520	1.453	1.556	1.507	1.750	1.357	1.524	8.6
1,1-Dichloroethane	1.305	1.195	1.225	1.168	1.292	1.304	1.248	4.8
Cyclohexane	0.930	0.874	0.849	0.834	0.906		0.879	4.5
2-Butanone	0.474	0.422	0.419	0.399	0.465	0.471	0.442	7.3
Carbon Tetrachloride	0.439	0.421	0.428	0.449	0.470	0.465	0.445	4.4
2,2-Dichloropropane	1.174	0.987	1.020	0.971	1.065	1.036	1.042	7
cis-1,2-Dichloroethene	0.863	0.754	0.783	0.742	0.842	0.797	0.797	6
Bromochloromethane	0.571	0.507	0.560	0.522	0.543	0.532	0.539	4.4
Chloroform	1.459	1.305	1.326	1.256	1.379	1.494	1.370	6.7
1,1,1-Trichloroethane	1.083	1.040	1.068	1.047	1.152	1.164	1.092	4.9
Methylcyclohexane	0.474	0.480	0.462	0.478	0.503	0.520	0.486	4.3
1,1-Dichloropropene	0.425	0.392	0.392	0.401	0.420	0.414	0.407	3.6

* 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.: P4442 SAS No.: P4442 SDG No.: P4442
Instrument ID: MSVOA_X Calibration Date(s): 10/23/2024 10/23/2024
Heated Purge: (Y/N) N Calibration Time(s): 08:59 11:41
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX043480.D		RRF020 = VX043481.D		RRF050 = VX043482.D		
		RRF100 = VX043483.D		RRF150 = VX043484.D		RRF001 = VX043486.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
Benzene	1.507	1.374	1.362	1.348	1.394	1.434	1.403	4.2
1,2-Dichloroethane	0.535	0.498	0.497	0.486	0.517	0.475	0.501	4.3
Trichloroethene	0.356	0.349	0.328	0.330	0.346	0.449	0.359	12.5
1,2-Dichloropropane	0.343	0.336	0.331	0.327	0.337	0.264	0.323	9.1
Dibromomethane	0.243	0.226	0.226	0.229	0.249	0.212	0.231	5.7
Bromodichloromethane	0.464	0.444	0.462	0.468	0.511	0.443	0.465	5.3
4-Methyl-2-Pentanone	0.433	0.436	0.427	0.425	0.467	0.386	0.429	6
Toluene	0.882	0.859	0.828	0.821	0.862	0.808	0.843	3.4
t-1,3-Dichloropropene	0.410	0.420	0.446	0.467	0.504	0.377	0.437	10.3
cis-1,3-Dichloropropene	0.463	0.478	0.502	0.518	0.557	0.428	0.491	9.1
1,1,2-Trichloroethane	0.307	0.298	0.297	0.297	0.313	0.301	0.302	2.1
1,3-Dichloropropane	0.569	0.525	0.520	0.508	0.534	0.495	0.525	4.8
2-Chloroethyl Vinyl ether	0.192	0.200	0.208	0.206	0.230	0.155	0.198	12.6
2-Hexanone	0.303	0.320	0.315	0.319	0.349	0.305	0.319	5.1
Dibromochloromethane	0.256	0.286	0.311	0.320	0.356	0.248	0.296	13.8
1,2-Dibromoethane	0.303	0.310	0.300	0.304	0.332	0.282	0.305	5.4
Tetrachloroethene	0.370	0.350	0.315	0.321	0.324	0.402	0.347	9.8
Chlorobenzene	1.166	1.063	1.029	1.046	1.117	1.202	1.104	6.3
1,1,1,2-Tetrachloroethane	0.329	0.341	0.346	0.358	0.389	0.328	0.349	6.5
Hexachloroethane	0.440	0.449	0.453	0.503	0.556	0.469	0.478	9.2
Ethyl Benzene	1.797	1.753	1.731	1.772	1.872	1.752	1.779	2.8
m/p-Xylenes	0.677	0.679	0.658	0.677	0.712	0.675	0.680	2.6
o-Xylene	0.703	0.686	0.668	0.673	0.718	0.670	0.687	3
Styrene	1.054	1.133	1.133	1.154	1.244	1.043	1.127	6.5
Bromoform	0.188	0.183	0.193	0.214	0.257	0.159	0.199	16.9
Isopropylbenzene	3.696	3.638	3.364	3.516	3.586	3.784	3.597	4.1
1,1,2,2-Tetrachloroethane	1.160	1.072	0.994	1.008	1.100	1.331	1.111	11.2
1,2,3-Trichloropropane	1.033	0.948	0.899	0.959	1.042	0.991	0.979	5.6
Bromobenzene	0.981	0.908	0.858	0.893	0.910	0.984	0.922	5.4
n-propylbenzene	4.042	4.006	3.847	4.024	4.142	4.430	4.082	4.8

* 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.: P4442 SAS No.: P4442 SDG No.: P4442
Instrument ID: MSVOA_X Calibration Date(s): 10/23/2024 10/23/2024
Heated Purge: (Y/N) N Calibration Time(s): 08:59 11:41
GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX043480.D		RRF020 = VX043481.D		RRF050 = VX043482.D		
		RRF100 = VX043483.D		RRF150 = VX043484.D		RRF001 = VX043486.D		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF001	RRF	% RSD
2-Chlorotoluene	3.034	2.796	2.573	2.587	2.665	3.162	2.803	8.7
1,3,5-Trimethylbenzene	3.321	3.170	2.953	3.076	3.113	3.281	3.153	4.3
4-Chlorotoluene	3.133	3.136	2.993	3.049	3.150	4.019	3.247	11.8
tert-Butylbenzene	3.227	2.979	2.800	2.905	2.993	3.017	2.987	4.7
1,2,4-Trimethylbenzene	3.236	3.199	3.049	3.133	3.197	3.566	3.230	5.5
sec-Butylbenzene	3.552	3.616	3.373	3.528	3.603	3.741	3.569	3.4
p-Isopropyltoluene	2.947	3.031	2.928	3.062	3.119	2.957	3.007	2.5
1,3-Dichlorobenzene	1.669	1.670	1.622	1.651	1.715	2.098	1.738	10.3
1,4-Dichlorobenzene	1.926	1.650	1.605	1.677	1.673	2.430	1.827	17.3
n-Butylbenzene	2.302	2.435	2.371	2.606	2.735	2.538	2.498	6.4
1,2-Dichlorobenzene	1.790	1.649	1.579	1.622	1.669	2.114	1.737	11.4
1,2-Dibromo-3-Chloropropane	0.209	0.192	0.198	0.217	0.246	0.136	0.200	18.2
1,2,4-Trichlorobenzene	0.844	0.873	0.894	0.967	1.055	1.273	0.984	16.3
Hexachlorobutadiene	0.371	0.359	0.349	0.363	0.384	0.411	0.373	5.9
Naphthalene	2.593	2.614	2.662	2.844	3.153	3.996	2.977	18.2
1,2,3-Trichlorobenzene	0.929	0.884	0.892	0.924	1.012	1.211	0.975	12.7
1,2-Dichloroethane-d4	0.919	0.861	0.886	0.755	0.868		0.858	7.2
Dibromofluoromethane	0.337	0.344	0.361	0.322	0.357		0.344	4.6
Toluene-d8	1.176	1.230	1.265	1.144	1.222		1.207	3.9
4-Bromofluorobenzene	0.415	0.458	0.469	0.424	0.468		0.447	5.7

* 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.