



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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: REMI02
 Lab Code: CHEM Case No.: O2505 SAS No.: O2505 SDG No.: O2505
 Instrument ID: MSVOA_X Calibration Date(s): 04/25/2023 04/25/2023
 Heated Purge: (Y/N) N Calibration Time(s): 10:37 13:21
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF001 = VX035272.D		RRF005 = VX035273.D		RRF020 = VX035274.D			
		RRF050 = VX035275.D		RRF150 = VX035277.D		RRF100 = VX035279.D			
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF150	RRF100	RRF	% RSD	
Dichlorodifluoromethane	0.488	0.488	0.515	0.550	0.543	0.589	0.529	7.5	
Chloromethane	0.521	0.467	0.445	0.473	0.484	0.498	0.481	5.4	
Vinyl Chloride	0.485	0.479	0.449	0.478	0.488	0.518	0.483	4.6	
Bromomethane		0.316	0.307	0.317	0.328	0.336	0.321	3.5	
Chloroethane	0.332	0.268	0.264	0.277	0.268	0.285	0.282	9	
Trichlorofluoromethane	0.848	0.740	0.719	0.732	0.713	0.778	0.755	6.8	
1,1,2-Trichlorotrifluoroethane	0.562	0.496	0.459	0.493	0.483	0.532	0.504	7.3	
1,1-Dichloroethene	0.545	0.475	0.444	0.471	0.475	0.504	0.486	7.2	
Acetone	0.310	0.255	0.247	0.253	0.237	0.270	0.262	9.9	
Carbon Disulfide	1.168	1.018	1.053	1.182	1.259	1.304	1.164	9.6	
Methyl tert-butyl Ether	1.731	1.674	1.558	1.657	1.649	1.727	1.666	3.8	
Methyl Acetate	1.071	0.953	0.968	1.022	1.018	1.048	1.013	4.5	
Methylene Chloride	0.840	0.588	0.536	0.539	0.536	0.565	0.601	19.8	
trans-1,2-Dichloroethene	0.567	0.535	0.488	0.514	0.515	0.546	0.527	5.2	
1,1-Dichloroethane	0.982	0.949	0.895	0.949	0.944	0.997	0.953	3.7	
Cyclohexane		0.842	0.832	0.855	0.841	0.909	0.856	3.6	
2-Butanone	0.395	0.386	0.365	0.382	0.373	0.394	0.382	3.1	
Carbon Tetrachloride	0.427	0.412	0.429	0.466	0.485	0.511	0.455	8.5	
cis-1,2-Dichloroethene	0.713	0.600	0.569	0.598	0.606	0.634	0.620	8.1	
Bromochloromethane	0.364	0.421	0.404	0.415	0.417	0.414	0.406	5.2	
Chloroform	0.969	0.967	0.924	0.960	0.950	0.999	0.962	2.6	
1,1,1-Trichloroethane	0.848	0.797	0.778	0.851	0.874	0.908	0.843	5.7	
Methylcyclohexane	0.593	0.561	0.550	0.580	0.579	0.637	0.583	5.2	
Benzene	1.473	1.386	1.313	1.345	1.325	1.406	1.375	4.3	
1,2-Dichloroethane	0.514	0.498	0.464	0.482	0.479	0.504	0.490	3.8	
Trichloroethene	0.391	0.383	0.358	0.372	0.372	0.395	0.379	3.6	
1,2-Dichloropropane	0.366	0.335	0.325	0.344	0.344	0.364	0.347	4.7	
Bromodichloromethane	0.404	0.406	0.406	0.455	0.470	0.490	0.438	8.7	
4-Methyl-2-Pentanone	0.465	0.459	0.439	0.454	0.434	0.461	0.452	2.8	
Toluene	0.911	0.880	0.829	0.864	0.845	0.899	0.871	3.6	
t-1,3-Dichloropropene	0.351	0.368	0.434	0.496	0.539	0.559	0.458	19.1	
cis-1,3-Dichloropropene	0.419	0.459	0.496	0.553	0.577	0.603	0.518	13.8	
1,1,2-Trichloroethane	0.382	0.344	0.326	0.343	0.336	0.352	0.347	5.6	

* 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.



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 Instrument ID: MSVOA_X Calibration Date(s): 04/25/2023 04/25/2023
 Heated Purge: (Y/N) N Calibration Time(s): 10:37 13:21
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF001 = VX035272.D			RRF005 = VX035273.D		RRF020 = VX035274.D	
		RRF050 = VX035275.D			RRF150 = VX035277.D		RRF100 = VX035279.D	
COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF150	RRF100	RRF	% RSD
2-Hexanone	0.339	0.342	0.332	0.347	0.322	0.354	0.339	3.3
Dibromochloromethane	0.271	0.290	0.315	0.355	0.375	0.390	0.333	14.4
1,2-Dibromoethane	0.355	0.347	0.345	0.362	0.361	0.379	0.358	3.4
Tetrachloroethene	0.447	0.394	0.356	0.363	0.351	0.386	0.383	9.4
Chlorobenzene	1.214	1.127	0.997	1.030	1.022	1.101	1.082	7.6
Ethyl Benzene	1.993	1.874	1.739	1.854	1.811	1.969	1.873	5.1
m/p-Xylenes	0.731	0.731	0.679	0.710	0.697	0.760	0.718	4
o-Xylene	0.705	0.717	0.669	0.697	0.690	0.745	0.704	3.7
Styrene	1.078	1.132	1.088	1.154	1.147	1.248	1.141	5.3
Bromoform	0.213	0.219	0.234	0.279	0.306	0.321	0.262	17.7
Isopropylbenzene	3.616	3.740	3.546	3.603	3.607	3.818	3.655	2.8
1,1,2,2-Tetrachloroethane	1.225	1.172	1.082	1.102	1.085	1.142	1.134	5
1,3-Dichlorobenzene	1.794	1.735	1.619	1.675	1.721	1.816	1.727	4.3
1,4-Dichlorobenzene	2.166	1.837	1.637	1.681	1.706	1.834	1.810	10.6
1,2-Dichlorobenzene	2.007	1.786	1.599	1.632	1.600	1.738	1.727	9.1
1,2-Dibromo-3-Chloropropane	0.202	0.192	0.214	0.238	0.261	0.258	0.227	12.8
1,2,4-Trichlorobenzene	1.123	0.998	1.002	1.058	1.132	1.201	1.085	7.4
1,2,3-Trichlorobenzene	1.181	1.071	1.004	1.046	1.098	1.156	1.093	6.1
1,2-Dichloroethane-d4		0.633	0.613	0.597	0.573	0.600	0.603	3.7
Dibromofluoromethane		0.302	0.309	0.308	0.297	0.318	0.307	2.6
Toluene-d8		1.179	1.191	1.167	1.087	1.165	1.158	3.5
4-Bromofluorobenzene		0.428	0.442	0.436	0.421	0.450	0.435	2.6

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VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: REMI02
 Lab Code: CHEM Case No.: O2505 SAS No.: O2505 SDG No.: O2505
 Instrument ID: MSVOA_Y Calibration Date(s): 04/24/2023 04/24/2023
 Heated Purge: (Y/N) Y Calibration Time(s): 11:26 13:19
 GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF005 = VY013393.D		RRF010 = VY013394.D		RRF020 = VY013395.D			
		RRF050 = VY013396.D		RRF100 = VY013397.D		RRF150 = VY013398.D			
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
Dichlorodifluoromethane	0.389	0.497	0.490	0.489	0.500	0.487	0.475	9	
Chloromethane	0.634	0.672	0.622	0.623	0.615	0.656	0.637	3.5	
Vinyl Chloride	0.628	0.631	0.616	0.620	0.643	0.668	0.634	3	
Bromomethane	0.542	0.524	0.484	0.472	0.483	0.528	0.506	5.8	
Chloroethane	0.432	0.422	0.414	0.415	0.447	0.500	0.438	7.5	
Trichlorofluoromethane	0.938	0.978	0.979	0.953	0.969	0.949	0.961	1.8	
1,1,2-Trichlorotrifluoroethane	0.536	0.542	0.549	0.523	0.546	0.539	0.539	1.7	
1,1-Dichloroethene	0.506	0.512	0.522	0.525	0.523	0.529	0.520	1.7	
Acetone	0.225	0.198	0.189	0.237	0.211	0.235	0.216	9.2	
Carbon Disulfide	1.555	1.728	1.695	1.727	1.701	1.722	1.688	3.9	
Methyl tert-butyl Ether	1.455	1.450	1.431	1.556	1.489	1.621	1.500	4.9	
Methyl Acetate	0.749	0.705	0.663	0.724	0.667	0.770	0.713	6	
Methylene Chloride	1.590	1.194	0.879	0.665	0.600	0.613	0.924	42.9	
trans-1,2-Dichloroethene	0.536	0.588	0.564	0.581	0.558	0.581	0.568	3.4	
1,1-Dichloroethane	1.034	1.071	1.034	1.057	1.019	1.089	1.050	2.5	
Cyclohexane	1.062	0.970	0.959	0.943	0.973	0.982	0.981	4.2	
2-Butanone	0.272	0.264	0.247	0.288	0.265	0.306	0.274	7.5	
Carbon Tetrachloride	0.521	0.557	0.546	0.553	0.560	0.545	0.547	2.6	
cis-1,2-Dichloroethene	0.615	0.634	0.618	0.633	0.613	0.653	0.628	2.5	
Bromochloromethane	0.366	0.399	0.391	0.369	0.339	0.373	0.373	5.7	
Chloroform	1.033	1.085	1.032	1.040	1.009	1.066	1.044	2.6	
1,1,1-Trichloroethane	0.926	0.942	0.922	0.938	0.923	0.940	0.932	1	
Methylcyclohexane	0.566	0.573	0.596	0.628	0.667	0.662	0.615	7.1	
Benzene	1.438	1.501	1.447	1.487	1.456	1.492	1.470	1.8	
1,2-Dichloroethane	0.476	0.501	0.468	0.491	0.464	0.485	0.481	2.9	
Trichloroethene	0.397	0.392	0.389	0.395	0.386	0.387	0.391	1.1	
1,2-Dichloropropane	0.373	0.391	0.380	0.387	0.377	0.398	0.384	2.4	
Bromodichloromethane	0.503	0.524	0.504	0.522	0.505	0.529	0.515	2.3	
4-Methyl-2-Pentanone	0.348	0.358	0.344	0.390	0.371	0.405	0.369	6.5	
Toluene	0.830	0.903	0.877	0.904	0.881	0.913	0.885	3.4	
t-1,3-Dichloropropene	0.499	0.547	0.537	0.564	0.546	0.576	0.545	4.9	
cis-1,3-Dichloropropene	0.595	0.612	0.600	0.624	0.609	0.637	0.613	2.5	
1,1,2-Trichloroethane	0.311	0.310	0.297	0.308	0.293	0.308	0.305	2.4	

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COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF100	RRF150	RRF	% RSD	
2-Hexanone	0.245	0.259	0.249	0.291	0.273	0.294	0.269	7.8	
Dibromochloromethane	0.356	0.377	0.367	0.383	0.360	0.376	0.370	2.8	
1,2-Dibromoethane	0.303	0.311	0.279	0.308	0.289	0.306	0.299	4.2	
Tetrachloroethene	0.384	0.384	0.368	0.383	0.386	0.375	0.380	1.8	
Chlorobenzene	1.077	1.116	1.074	1.094	1.087	1.087	1.089	1.4	
Ethyl Benzene	1.759	1.878	1.878	1.955	1.996	2.009	1.913	4.9	
m/p-Xylenes	0.654	0.725	0.726	0.744	0.761	0.754	0.727	5.3	
o-Xylene	0.634	0.672	0.680	0.714	0.713	0.713	0.688	4.7	
Styrene	1.029	1.147	1.139	1.187	1.189	1.208	1.150	5.6	
Bromoform	0.294	0.287	0.277	0.291	0.279	0.285	0.285	2.3	
Isopropylbenzene	3.365	3.588	3.680	3.898	4.055	4.105	3.782	7.6	
1,1,2,2-Tetrachloroethane	0.939	0.908	0.867	0.953	0.918	0.961	0.924	3.7	
1,3-Dichlorobenzene	1.777	1.763	1.716	1.774	1.721	1.724	1.746	1.6	
1,4-Dichlorobenzene	1.832	1.830	1.710	1.772	1.721	1.716	1.764	3.2	
1,2-Dichlorobenzene	1.580	1.595	1.521	1.622	1.563	1.579	1.577	2.1	
1,2-Dibromo-3-Chloropropane	0.166	0.165	0.145	0.164	0.162	0.177	0.163	6.2	
1,2,4-Trichlorobenzene	0.974	0.935	0.873	0.951	0.950	0.957	0.940	3.8	
1,2,3-Trichlorobenzene	0.837	0.830	0.788	0.861	0.859	0.853	0.838	3.3	
1,2-Dichloroethane-d4	0.619	0.590	0.575	0.520	0.476	0.508	0.548	10	
Dibromofluoromethane	0.340	0.336	0.327	0.296	0.291	0.297	0.314	7	
Toluene-d8	1.174	1.219	1.193	1.049	1.034	1.043	1.119	7.6	
4-Bromofluorobenzene	0.413	0.412	0.394	0.352	0.345	0.347	0.377	8.7	

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