

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: CHEM02
Lab Code: CHEM Case No.: P4780 SAS No.: P4780 SDG No.: P4780
Instrument ID: MSVOA_N Calibration Date(s): 10/30/2024 10/30/2024
Heated Purge: (Y/N) N Calibration Time(s): 11:46 13:45
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF100 = VN084570.D		RRF050 = VN084571.D		RRF020 = VN084572.D			
		RRF010 = VN084573.D		RRF005 = VN084574.D		RRF001 = VN084575.D			
COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Dichlorodifluoromethane	0.571	0.552	0.552	0.598	0.594	0.581	0.575	3.4	
Chloromethane	0.658	0.672	0.725	0.871	0.995	1.789	0.952	45.2	
Vinyl Chloride	0.613	0.605	0.623	0.636	0.651	0.581	0.618	4	
Ethyl Acetate	0.424	0.422	0.429	0.404	0.466	0.410	0.426	5.1	
Bromomethane	0.292	0.296	0.310	0.336	0.405		0.328	14.2	
Chloroethane	0.378	0.376	0.413	0.426	0.475	0.863	0.488	38.3	
Trichlorofluoromethane	0.971	0.959	1.017	1.022	1.070	1.071	1.018	4.7	
1,1,2-Trichlorotrifluoroethane	0.566	0.557	0.571	0.585	0.588	0.586	0.575	2.2	
Tert butyl alcohol	0.082	0.086	0.090	0.100	0.118		0.095	15.1	
1,1-Dichloroethene	0.548	0.538	0.560	0.575	0.552	0.644	0.569	6.8	
Acrolein	0.086	0.088	0.101	0.096	0.104		0.095	8.2	
Acrylonitrile	0.264	0.271	0.282	0.282	0.294	0.263	0.276	4.4	
Acetone	0.209	0.204	0.213	0.223	0.241	0.338	0.238	21.3	
Carbon Disulfide	1.604	1.603	1.700	1.714	1.784	2.117	1.753	10.9	
Methyl tert-butyl Ether	1.773	1.758	1.802	1.779	1.786	1.572	1.745	4.9	
Methyl Acetate	0.731	0.749	0.954	1.044	1.266	2.291	1.172	49.7	
Methylene Chloride	0.604	0.602	0.633	0.658	0.714	0.600	0.635	7.1	
trans-1,2-Dichloroethene	0.565	0.563	0.596	0.600	0.584	0.601	0.585	2.9	
Vinyl Acetate	1.303	1.299	1.306	1.298	1.297	1.090	1.265	6.8	
1,1-Dichloroethane	1.067	1.066	1.114	1.127	1.203	1.033	1.102	5.5	
Cyclohexane	0.956	0.938	0.956	1.043	1.093		0.997	6.8	
2-Butanone	0.316	0.315	0.348	0.338	0.370	0.334	0.337	6.1	
Carbon Tetrachloride	0.530	0.514	0.532	0.548	0.537	0.488	0.525	4	
2,2-Dichloropropane	0.968	0.941	0.974	0.978	0.959	0.933	0.959	1.9	
cis-1,2-Dichloroethene	0.675	0.662	0.697	0.685	0.705	0.673	0.683	2.4	
Bromochloromethane	0.483	0.511	0.388	0.415	0.408	0.429	0.439	10.8	
Chloroform	1.099	1.086	1.142	1.154	1.222	1.025	1.121	6	
1,1,1-Trichloroethane	1.000	0.991	1.046	1.073	1.032	0.980	1.021	3.5	
Methylcyclohexane	0.546	0.509	0.495	0.487	0.458	0.371	0.478	12.5	
1,1-Dichloropropene	0.476	0.451	0.471	0.468	0.477	0.474	0.469	2	

* Compounds with required minimum RRF and maximum %RSD values.
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COMPOUND	RRF100	RRF050	RRF020	RRF010	RRF005	RRF001	RRF	% RSD	
Benzene	1.494	1.448	1.509	1.507	1.546	1.540	1.507	2.4	
1,2-Dichloroethane	0.488	0.494	0.493	0.492	0.503	0.459	0.488	3.1	
Trichloroethene	0.339	0.335	0.345	0.338	0.341	0.387	0.348	5.7	
1,2-Dichloropropane	0.356	0.348	0.358	0.357	0.373	0.330	0.354	4	
Dibromomethane	0.245	0.244	0.257	0.244	0.260	0.247	0.250	2.9	
Bromodichloromethane	0.528	0.521	0.526	0.522	0.529	0.530	0.526	0.7	
4-Methyl-2-Pentanone	0.424	0.423	0.416	0.417	0.412	0.344	0.406	7.6	
Toluene	0.923	0.899	0.919	0.902	0.891	0.757	0.882	7.1	
t-1,3-Dichloropropene	0.552	0.543	0.538	0.532	0.547	0.555	0.544	1.6	
cis-1,3-Dichloropropene	0.592	0.581	0.582	0.569	0.584	0.548	0.576	2.7	
1,1,2-Trichloroethane	0.336	0.329	0.334	0.342	0.342	0.309	0.332	3.7	
1,3-Dichloropropane	0.577	0.565	0.579	0.573	0.598	0.527	0.570	4.2	
2-Chloroethyl Vinyl ether	0.275	0.262	0.229	0.214	0.202	0.167	0.225	17.6	
2-Hexanone	0.314	0.312	0.301	0.297	0.294	0.256	0.296	7.1	
Dibromochloromethane	0.404	0.394	0.391	0.393	0.377	0.312	0.378	8.9	
1,2-Dibromoethane	0.340	0.333	0.341	0.335	0.355	0.336	0.340	2.4	
Tetrachloroethene	0.326	0.313	0.333	0.347	0.351	0.325	0.333	4.3	
Chlorobenzene	1.068	1.061	1.149	1.123	1.165	1.146	1.119	3.9	
1,1,1,2-Tetrachloroethane	0.375	0.375	0.392	0.390	0.404	0.399	0.389	3	
Hexachloroethane	0.578	0.589	0.617	0.633	0.626	0.681	0.621	5.9	
Ethyl Benzene	1.957	1.891	1.928	1.880	1.849	1.697	1.867	4.9	
m/p-Xylenes	0.737	0.728	0.737	0.701	0.683	0.654	0.707	4.8	
o-Xylene	0.703	0.690	0.701	0.679	0.645	0.550	0.661	8.9	
Styrene	1.223	1.205	1.206	1.144	1.093	1.050	1.154	6.1	
Bromoform	0.287	0.295	0.298	0.289	0.302	0.286	0.293	2.3	
Isopropylbenzene	3.558	3.570	3.701	3.605	3.402	3.188	3.504	5.2	
1,1,2,2-Tetrachloroethane	1.052	1.073	1.163	1.190	1.317	1.222	1.170	8.4	
1,2,3-Trichloropropane	0.873	0.887	0.958	1.020	1.013	1.246	0.999	13.6	
Bromobenzene	0.860	0.883	0.921	0.943	0.931	1.114	0.942	9.5	
n-propylbenzene	4.233	4.236	4.316	4.188	4.041	3.621	4.106	6.2	

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2-Chlorotoluene	2.581	2.621	2.848	2.700	2.746	2.601	2.683	3.8	
1,3,5-Trimethylbenzene	3.037	3.068	3.099	3.038	2.765	2.418	2.904	9.2	
4-Chlorotoluene	2.667	2.716	2.838	2.822	2.848	3.049	2.823	4.7	
tert-Butylbenzene	2.617	2.531	2.648	2.461	2.271	1.893	2.403	11.8	
1,2,4-Trimethylbenzene	3.151	3.148	3.265	3.075	2.766	2.579	2.997	8.9	
sec-Butylbenzene	3.600	3.538	3.608	3.517	3.145	2.962	3.395	8	
p-Isopropyltoluene	3.075	3.050	3.003	2.843	2.518	2.218	2.784	12.4	
1,3-Dichlorobenzene	1.642	1.668	1.770	1.802	1.884	2.264	1.838	12.3	
1,4-Dichlorobenzene	1.646	1.674	1.782	1.867	1.879	2.773	1.937	21.7	
n-Butylbenzene	2.728	2.619	2.623	2.457	2.454	2.747	2.605	4.9	
1,2-Dichlorobenzene	1.601	1.618	1.748	1.732	1.879	2.021	1.766	9.1	
1,2-Dibromo-3-Chloropropane	0.204	0.217	0.229	0.226	0.274	0.272	0.237	12.3	
1,2,4-Trichlorobenzene	0.852	0.865	0.895	0.881	0.956	1.353	0.967	19.9	
Hexachlorobutadiene	0.359	0.369	0.426	0.403	0.438	0.551	0.425	16.3	
Naphthalene	2.778	2.780	2.953	2.710	2.788	3.355	2.894	8.3	
1,2,3-Trichlorobenzene	0.832	0.841	0.953	0.877	0.939	1.189	0.939	14.1	
1,2-Dichloroethane-d4	0.689	0.721	0.708	0.722	0.771		0.722	4.2	
Dibromofluoromethane	0.334	0.344	0.326	0.336	0.353		0.338	3.1	
Toluene-d8	1.267	1.303	1.216	1.231	1.217		1.247	3	
4-Bromofluorobenzene	0.481	0.493	0.450	0.451	0.454		0.466	4.3	

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