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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alliance | Contract: CHEM02

Lab Code: ACE | SDG No.: Q3087

Instrument ID: MSVOA_N | Calibration Date(s): 08/21/2025 08/21/2025

Heated Purge: (Y/N) N | Calibration Time(s): 12:09 14:44

GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID: RRF001 = VN087619.D RRF005 = VN087620.D RRF020 = VN087621.D
RRF050 = VN087622.D RRF100 = VN087623.D RRF150 = VN087624.D

COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Dichlorodifluoromethane	0.707	0.579	0.606	0.810	0.777	0.782	0.710	13.7
Chloromethane	0.739	0.637	0.710	0.795	0.752	0.747	0.730	7.3
Vinyl Chloride	0.909	0.739	0.832	0.903	0.847	0.846	0.846	7.3
Ethyl Acetate	0.877	0.700	0.761	0.742	0.731	0.731	0.757	8.2
Bromomethane		0.388	0.393	0.448	0.466	0.488	0.437	10.2
Chloroethane	0.727	0.528	0.599	0.603	0.558	0.554	0.595	11.9
Trichlorofluoromethane	1.323	1.139	1.242	1.274	1.227	1.233	1.240	4.9
1,1,2-Trichlorotrifluoroethane	0.879	0.648	0.677	0.695	0.654	0.656	0.701	12.6
Tert butyl alcohol		0.170	0.187	0.184	0.174	0.174	0.178	4
1,1-Dichloroethene	0.892	0.649	0.730	0.700	0.667	0.687	0.721	12.3
Acrolein		0.251	0.198	0.215	0.196	0.233	0.219	10.8
Acrylonitrile	0.555	0.466	0.510	0.498	0.487	0.493	0.502	6
Acetone	0.633	0.634	0.584	0.522	0.484	0.489	0.558	12.3
Carbon Disulfide	2.272	1.746	1.970	2.003	1.937	1.979	1.985	8.5
Methyl tert-butyl Ether	2.859	2.508	2.740	2.733	2.643	2.742	2.704	4.4
Methyl Acetate	1.450	1.043	1.097	1.157	1.117	1.141	1.168	12.3
Methylene Chloride	1.494	0.916	0.875	0.823	0.779	0.799	0.948	28.8
trans-1,2-Dichloroethene	0.952	0.734	0.768	0.750	0.737	0.745	0.781	10.8
Vinyl Acetate	2.629	2.379	2.484	2.692	2.576	2.629	2.565	4.5
1,1-Dichloroethane	1.798	1.500	1.549	1.501	1.454	1.471	1.546	8.3
Cyclohexane		1.490	1.310	1.234	1.201	1.207	1.289	9.4
2-Butanone	0.783	0.722	0.757	0.732	0.700	0.707	0.734	4.3
Carbon Tetrachloride	0.571	0.509	0.568	0.542	0.549	0.542	0.547	4.1
2,2-Dichloropropane	1.500	1.243	1.326	1.317	1.277	1.296	1.327	6.8
cis-1,2-Dichloroethene	0.997	0.916	0.937	0.941	0.908	0.905	0.934	3.7
Bromochloromethane	0.800	0.781	0.722	0.701	0.748	0.731	0.747	5
Chloroform	1.677	1.535	1.629	1.579	1.519	1.528	1.578	4
1,1,1-Trichloroethane	1.510	1.297	1.359	1.303	1.265	1.288	1.337	6.8
Methylcyclohexane	0.686	0.580	0.610	0.590	0.597	0.596	0.610	6.3
1,1-Dichloropropene	0.700	0.508	0.550	0.528	0.522	0.514	0.554	13.2

* Compounds with required minimum RRF and maximum %RSD values.
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COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
Benzene	1.853	1.637	1.727	1.684	1.639	1.652	1.699	4.9
1,2-Dichloroethane	0.714	0.627	0.675	0.650	0.624	0.626	0.653	5.5
Trichloroethene	0.435	0.387	0.390	0.377	0.367	0.370	0.388	6.5
1,2-Dichloropropane	0.544	0.435	0.447	0.433	0.415	0.412	0.448	11
Dibromomethane	0.351	0.294	0.327	0.318	0.310	0.312	0.319	6.1
Bromodichloromethane	0.686	0.649	0.667	0.638	0.638	0.639	0.653	3
4-Methyl-2-Pentanone	0.701	0.675	0.744	0.736	0.718	0.704	0.713	3.5
Toluene	1.148	0.987	1.062	1.050	1.037	1.033	1.053	5
t-1,3-Dichloropropene	0.620	0.628	0.691	0.703	0.699	0.715	0.676	6.1
cis-1,3-Dichloropropene	0.717	0.640	0.712	0.718	0.714	0.710	0.702	4.3
1,1,2-Trichloroethane	0.439	0.383	0.417	0.408	0.400	0.397	0.407	4.7
1,3-Dichloropropane	0.781	0.656	0.743	0.731	0.708	0.706	0.721	5.8
2-Chloroethyl Vinyl ether	0.360	0.333	0.305	0.354	0.374	0.388	0.352	8.4
2-Hexanone	0.295	0.390	0.493	0.510	0.508	0.507	0.451	19.8
Dibromochloromethane	0.535	0.440	0.458	0.466	0.465	0.468	0.472	6.8
1,2-Dibromoethane	0.412	0.433	0.444	0.432	0.429	0.427	0.430	2.4
Tetrachloroethene	0.447	0.353	0.340	0.313	0.315	0.313	0.347	14.9
Chlorobenzene	1.408	1.164	1.253	1.210	1.216	1.212	1.244	6.9
1,1,1,2-Tetrachloroethane	0.391	0.404	0.427	0.421	0.416	0.418	0.413	3.1
Hexachloroethane	0.742	0.606	0.680	0.655	0.649	0.669	0.667	6.7
Ethyl Benzene	2.232	1.993	2.224	2.144	2.152	2.178	2.154	4
m/p-Xylenes	0.759	0.735	0.811	0.812	0.808	0.814	0.790	4.3
o-Xylene	0.777	0.707	0.794	0.796	0.788	0.784	0.774	4.3
Styrene	1.142	1.086	1.391	1.382	1.386	1.393	1.297	11
Bromoform	0.303	0.285	0.320	0.320	0.336	0.336	0.317	6.3
Isopropylbenzene	4.328	3.674	4.096	4.026	3.998	4.120	4.040	5.3
1,1,2,2-Tetrachloroethane	1.488	1.381	1.421	1.363	1.322	1.371	1.391	4.1
1,2,3-Trichloropropane	1.274	1.171	1.188	1.073	1.074	1.256	1.173	7.4
Bromobenzene	1.019	0.901	0.988	0.941	0.929	0.938	0.953	4.5
n-propylbenzene	5.137	4.545	5.125	5.024	4.965	5.064	4.977	4.4

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COMPOUND	RRF001	RRF005	RRF020	RRF050	RRF100	RRF150	$\overline{RRF}$	% RSD
2-Chlorotoluene	2.911	2.953	3.116	2.976	2.975	3.037	2.995	2.4
1,3,5-Trimethylbenzene	3.586	3.159	3.498	3.472	3.398	3.452	3.428	4.2
4-Chlorotoluene	3.352	3.001	3.225	3.153	3.069	3.093	3.149	4
tert-Butylbenzene	2.913	2.674	2.899	2.911	2.857	2.884	2.856	3.2
1,2,4-Trimethylbenzene	3.502	3.091	3.551	3.496	3.471	3.476	3.431	4.9
sec-Butylbenzene	4.464	4.019	4.367	4.225	4.163	4.194	4.239	3.7
p-Isopropyltoluene	3.656	3.249	3.550	3.530	3.502	3.512	3.500	3.8
1,3-Dichlorobenzene	2.087	1.770	1.940	1.827	1.806	1.826	1.876	6.3
1,4-Dichlorobenzene	2.348	1.884	1.956	1.867	1.818	1.841	1.952	10.2
n-Butylbenzene	3.764	3.208	3.589	3.461	3.398	3.435	3.476	5.4
1,2-Dichlorobenzene	1.942	1.662	1.853	1.755	1.723	1.743	1.780	5.7
1,2-Dibromo-3-Chloropropane	0.370	0.323	0.329	0.317	0.313	0.330	0.330	6.2
1,2,4-Trichlorobenzene	1.192	0.995	1.081	1.026	1.040	1.079	1.069	6.4
Hexachlorobutadiene	0.469	0.371	0.385	0.355	0.346	0.361	0.381	11.8
Naphthalene	3.989	3.240	3.724	3.754	3.917	4.089	3.786	7.9
1,2,3-Trichlorobenzene	1.140	0.972	1.059	1.006	1.019	1.072	1.045	5.7
1,2-Dichloroethane-d4		1.025	1.016	0.959	1.035	1.089	1.024	4.5
Dibromofluoromethane		0.369	0.344	0.334	0.373	0.386	0.361	6
Toluene-d8		1.384	1.266	1.223	1.408	1.475	1.351	7.7
4-Bromofluorobenzene		0.446	0.454	0.450	0.514	0.540	0.481	9

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