

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\

Method File : VL091725AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

Last Update : Thu Sep 18 02:57:46 2025

Response Via : Initial Calibration

Calibration Files

0.03=VL042934.D 0.1 =VL042933.D 0.5 =VL042932.D 1 =VL042931.D 2 =VL042930.D 10 =VL042935.D 15 =VL042936.D

Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD

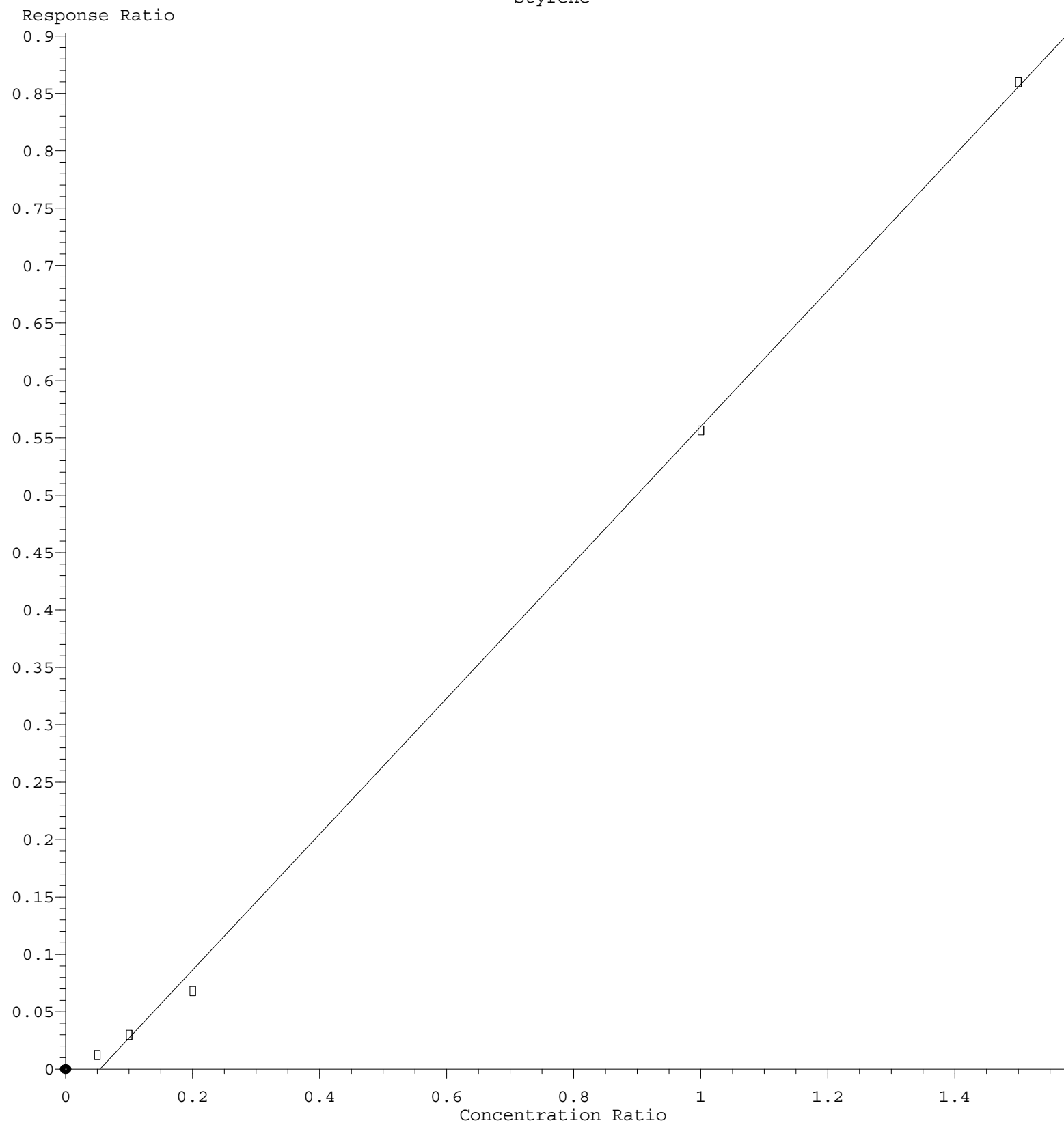
1) I Bromochloromethane	-----ISTD-----								
2) T Dichlorodifluo...			1.465	1.446	1.419	1.445	1.366	1.428	2.68
3) Chlorodifluoro...			1.556	1.534	1.491	1.484	1.454	1.504	2.71
4) Chloromethane			0.588	0.622	0.536	0.574	0.550	0.574	5.88
5) T Vinyl Chloride	0.669	0.586	0.545	0.504	0.497	0.500	0.491	0.542	12.13
6) T Bromomethane			0.217	0.175	0.178	0.190	0.181	0.188	8.96
7) Chloroethane			0.192	0.213	0.190	0.201	0.201	0.199	4.63
8) T Dichlorotetra...			1.154	1.166	1.103	1.143	1.100	1.133	2.65
9) T Propene			0.515	0.564	0.548	0.538	0.581	0.549	4.59
10) T Heptane			1.004	1.233	1.352	1.616	1.599	1.361	18.93
11) T Trichlorofluor...			1.400	1.490	1.370	1.429	1.366	1.411	3.63
12) T 1,1,2-Trichlor...			1.135	1.135	1.064	1.113	1.064	1.102	3.26
13) Ethanol			0.070	0.059	0.056	0.048	0.048	0.056	16.18
14) T Bromoethene			0.407	0.414	0.366	0.391	0.386	0.393	4.73
15) T Acetone			1.420	1.359	1.246	1.072	1.045	1.228	13.65
16) T 1,3-Butadiene			0.579	0.529	0.472	0.494	0.494	0.514	8.13
17) tert-Butyl alc...			1.224	1.255	1.114	1.170	1.151	1.183	4.78
18) T 1,1-Dichloroet...			0.474	0.489	0.482	0.488	0.479	0.483	1.33
19) T Isopropyl Alcohol			0.721	0.680	0.617	0.644	0.631	0.659	6.40
20) T Methylene Chlo...			0.716	0.611	0.510	0.421	0.415	0.535	24.11
21) T Allyl Chloride			0.883	0.815	0.814	0.826	0.824	0.833	3.47
22) T trans-1,2-Dich...			0.550	0.575	0.528	0.549	0.533	0.547	3.34
23) T Vinyl Acetate			1.374	1.284	1.357	1.484	1.638	1.427	9.65
24) T 1,1-Dichloroet...			1.105	1.080	1.050	1.099	1.067	1.080	2.08
25) T Ethyl Acetate			2.360	2.502	2.630	2.836	2.786	2.623	7.52
26) T Hexane			0.939	1.026	1.145	1.242	1.276	1.126	12.66
27) T Carbon Disulfide			1.436	1.458	1.317	1.375	1.355	1.388	4.18
28) T Methyl tert-Bu...			0.643	0.624	0.574	0.617	0.634	0.619	4.31
29) T Chloroform			1.803	1.891	1.823	1.865	1.817	1.840	1.99
30) T Cyclohexane			0.625	0.735	0.815	1.011	1.054	0.848	21.47
31) T cis-1,2-Dichlo...			0.968	1.086	1.102	1.149	1.190	1.099	7.64
32) T 1,1,1-Trichlor...	2.127	1.510	1.666	1.661	1.662	1.709	1.715	1.721	11.12

33) I 1,4-Difluorobenzene	-----ISTD-----								
34) T 2-Butanone			0.596	0.627	0.659	0.674	0.685	0.648	5.65
35) T Carbon Tetrach...	0.887	0.719	0.690	0.681	0.641	0.691	0.666	0.711	11.42
36) T Benzene			0.816	0.829	0.839	0.924	0.954	0.872	7.16
37) T 1,2-Dichloroet...			0.529	0.519	0.512	0.527	0.524	0.522	1.34
38) T Trichloroethene	0.503	0.376	0.373	0.353	0.354	0.402	0.403	0.395	13.08
39) T 1,2-Dichloropr...			0.358	0.351	0.338	0.357	0.357	0.353	2.37

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40) T	1,4-Dioxane			0.099	0.122	0.113	0.147	0.144	0.125	16.30
41) T	Tetrahydrofuran			0.290	0.266	0.298	0.363	0.387	0.321	16.10
42) T	Bromodichlorom...			0.783	0.742	0.714	0.762	0.746	0.750	3.40
43) T	Methyl Methacr...			0.227	0.248	0.276	0.345	0.364	0.292	20.57
44) T	2,2,4-Trimethy...			1.170	1.300	1.471	1.687	1.646	1.455	15.20
45) T	t-1,3-Dichloro...			0.251	0.274	0.283	0.352	0.380	0.308	17.89
46) T	cis-1,3-Dichlo...			0.366	0.385	0.390	0.474	0.508	0.425	14.72
47) T	1,1,2-Trichlor...			0.352	0.353	0.352	0.376	0.365	0.359	2.94
48) T	Dibromochlorom...			0.548	0.562	0.536	0.588	0.580	0.563	3.84
49) T	Bromoform			0.429	0.411	0.425	0.472	0.460	0.439	5.87
50) T	4-Methyl-2-Pen...			0.595	0.664	0.728	0.933	0.955	0.775	20.83
51) T	2-Hexanone			0.423	0.450	0.510	0.740	0.755	0.576	27.84
52) T	Tetrachloroethene	0.327	0.224	0.256	0.254	0.263	0.279	0.281	0.269	11.80
53) T	Toluene			0.598	0.670	0.758	1.001	1.040	0.813	24.32
54) T	1,2-Dibromoethane	0.433		0.436	0.448	0.444	0.508	0.505	0.462	7.47
-----ISTD-----										
55) I	Chlorobenzene-d5									
56) T	1,1,1,2-Tetrac...			0.517	0.512	0.493	0.527	0.498	0.509	2.78
57) T	Chlorobenzene			0.949	0.886	0.898	0.970	0.919	0.924	3.79
58) T	Ethyl Benzene			0.942	1.017	1.196	1.650	1.637	1.288	26.17
59) T	m/p-Xylene			0.738	0.884	1.104	1.392	1.325	1.089	25.72
60) T	o-Xylene			0.726	0.844	1.096	1.402	1.343	1.082	27.48
61) T	Styrene			0.245	0.299	0.340	0.556	0.573	0.403	37.70
62) T	Isopropylbenzene			1.142	1.307	1.541	2.003	1.891	1.577	23.38
63) T	1,1,2,2-Tetrac...	0.970	0.748	0.730	0.723	0.747	0.803	0.752	0.782	11.13
64) T	n-propylbenzene			0.277	0.343	0.413	0.517	0.494	0.409	24.68
65) T	tert-Butylbenzene			0.818	1.112	1.398	1.753	1.656	1.347	28.70
66) T	Benzyl Chloride			0.091	0.109	0.117	0.150	0.159	0.125	22.74
67) T	sec-Butylbenzene			1.399	1.798	2.090	2.561	2.401	2.050	22.80
68) S	1-Bromo-4-Fluo...	0.743	0.753	0.778	0.782	0.781	0.837	0.797	0.782	3.93
69) T	p-Isopropyltol...			0.986	1.282	1.606	2.067	1.958	1.580	28.70
70) T	n-Butylbenzene			0.982	1.300	1.709	2.228	2.085	1.661	31.50
71) T	2-Chlorotoluene			0.834	0.945	1.116	1.503	1.451	1.170	25.50
72) T	4-Ethyltoluene			0.779	0.977	1.252	1.691	1.633	1.267	31.48
73) T	1,3,5-Trimethy...			0.670	0.868	1.076	1.398	1.343	1.071	28.88
74) T	1,2,4-Trimethy...			0.781	1.074	1.337	1.603	1.498	1.258	26.47
75) T	1,3-Dichlorobe...			0.703	0.714	0.802	0.904	0.867	0.798	11.20
76) T	1,4-Dichlorobe...			0.629	0.674	0.762	0.913	0.860	0.768	15.65
77) T	1,2-Dichlorobe...			0.689	0.786	0.813	0.897	0.839	0.805	9.52
78) T	Hexachloro-1,3...			0.533	0.496	0.513	0.524	0.504	0.514	2.95
79) T	Naphthalene	0.394		0.438	0.609	0.972	1.344	1.338	0.849	50.88
80) T	Naphthalene,2-...			0.172	0.156	0.223	0.376	0.449	0.275	47.42
81) T	1,2,4-Trichlor...			0.267	0.366	0.485	0.635	0.645	0.479	34.52

(#) = Out of Range

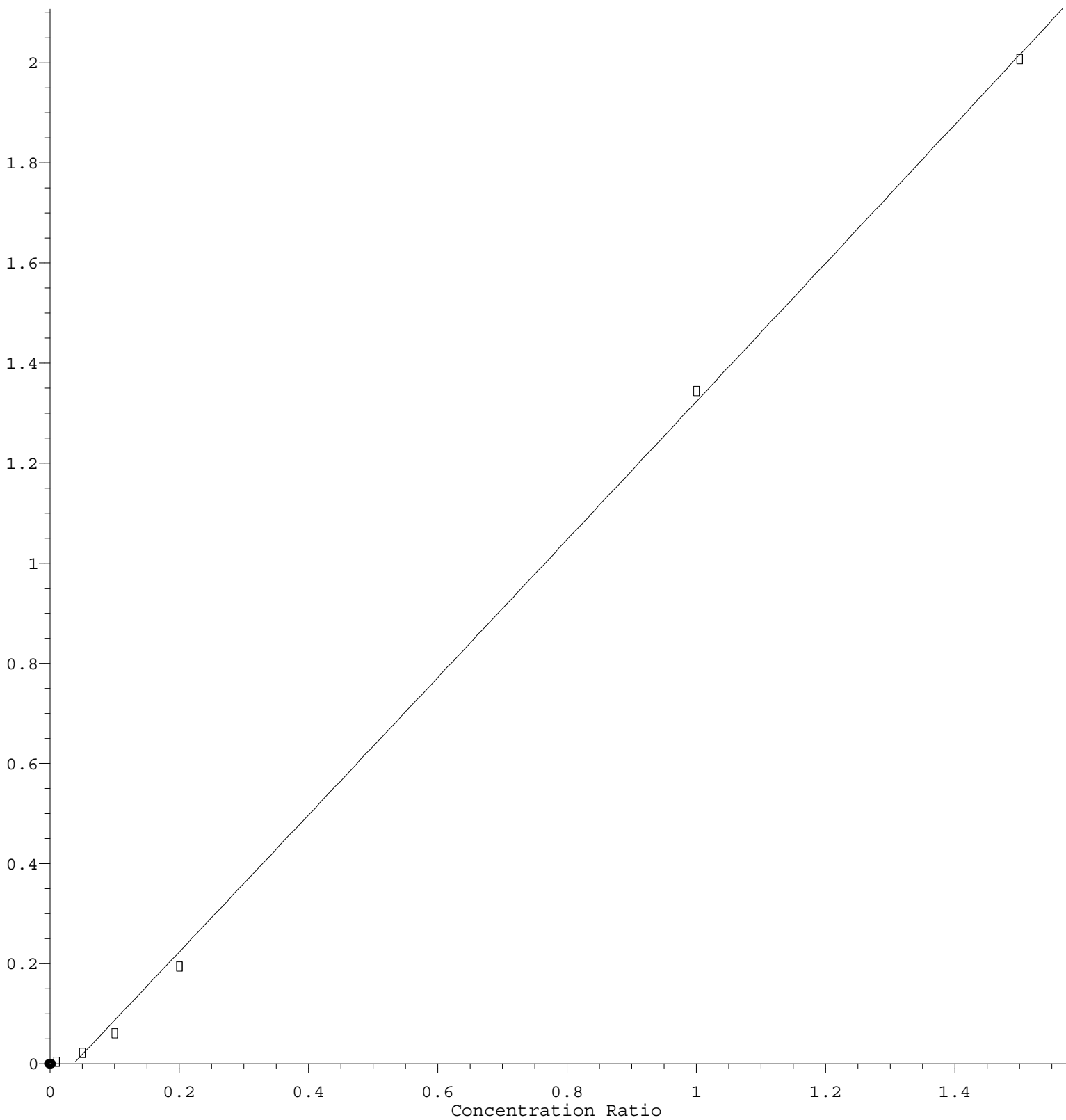
Styrene



Response = 5.919e-001 * Amt - 3.215e-002
 Coef of Det (r^2) = 0.998999 Curve Fit: Linear
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Naphthalene

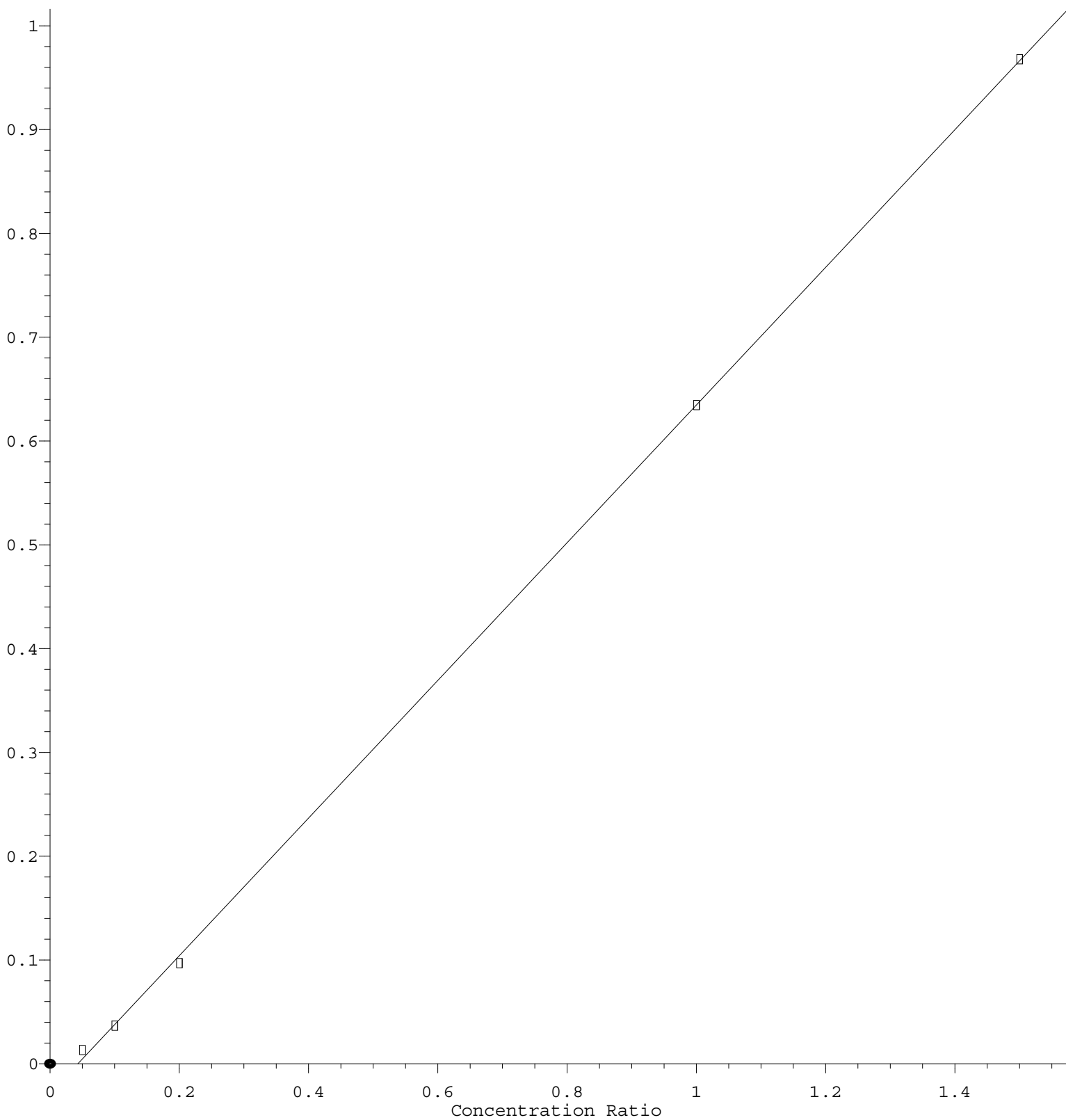
Response Ratio



$R = 8.404e-003 A^2 + 1.364e+000 A - 4.958e-002$
 Coef of Det (r^2) = 0.999008 Curve Fit: Quadratic
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1,2,4-Trichlorobenzene

Response Ratio



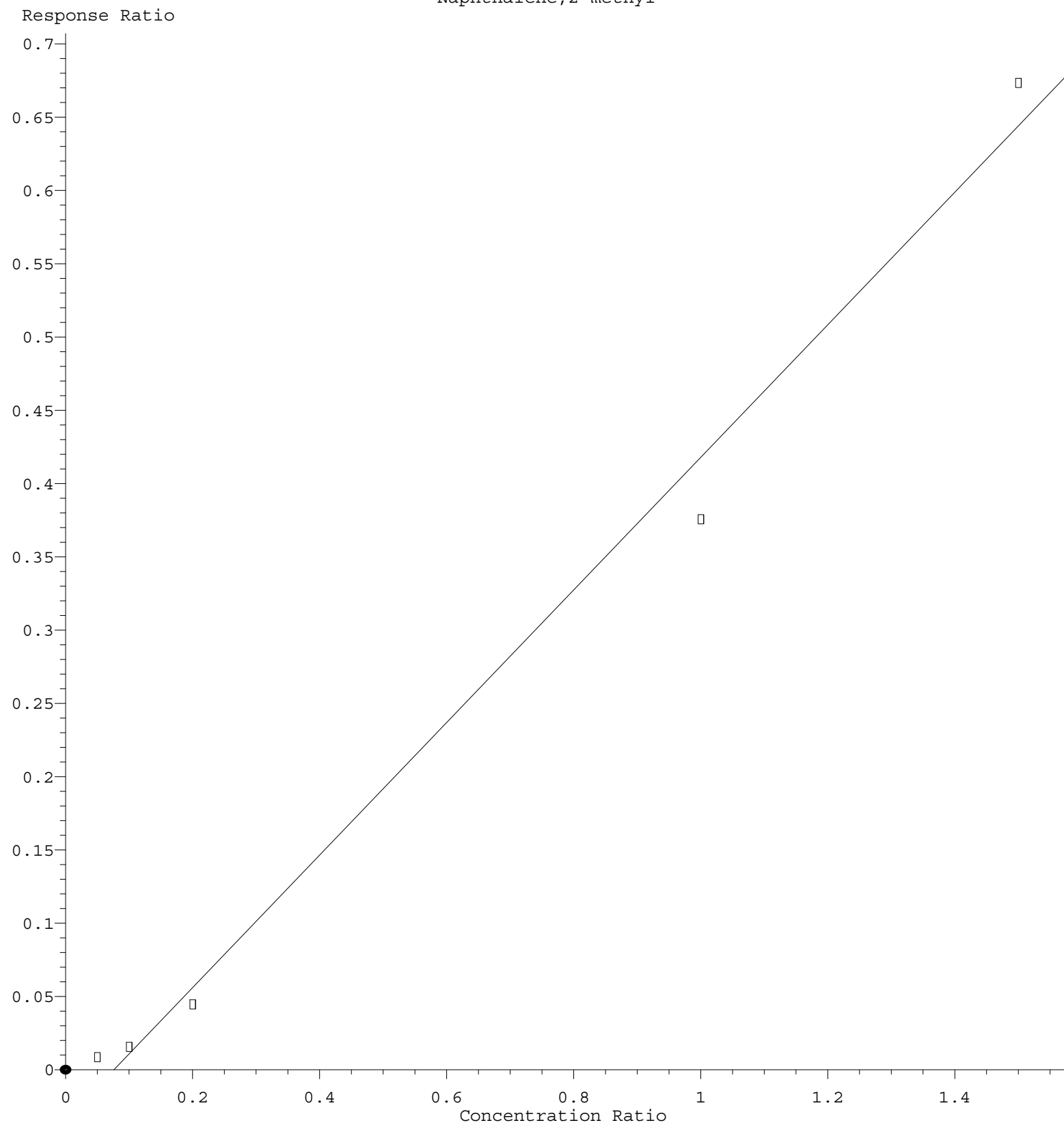
$$\text{Response} = 6.632\text{e-}001 * \text{Amt} - 2.819\text{e-}002$$

Coef of Det (r^2) = 0.999823 Curve Fit: Linear

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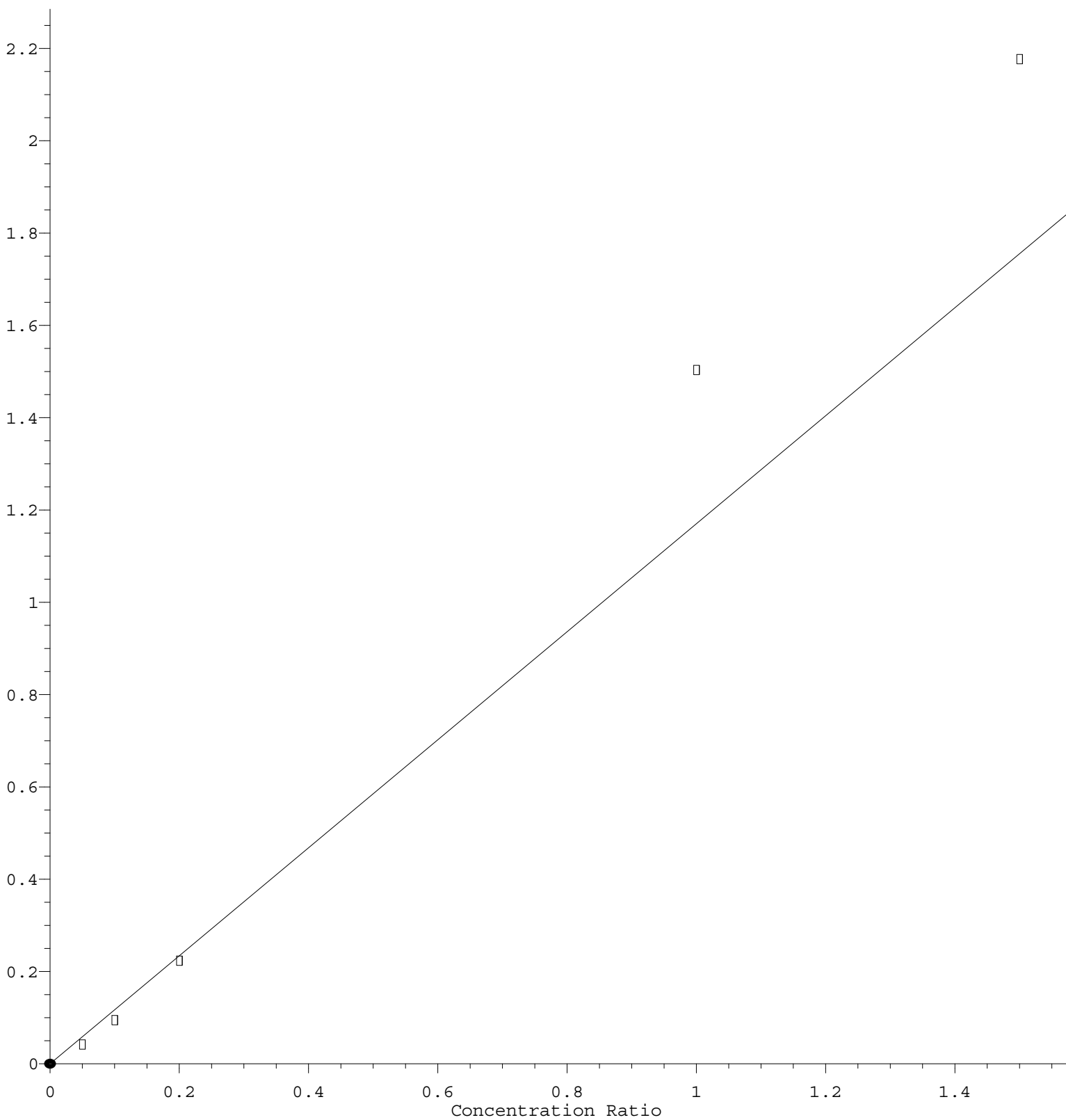
Naphthalene, 2-methyl-



Response = 4.526e-001 * Amt - 3.443e-002
 Coef of Det (r^2) = 0.990741 Curve Fit: Linear
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2-Chlorotoluene

Response Ratio



$$\text{Response} = 1.170\text{e}+000 * \text{Amt}$$

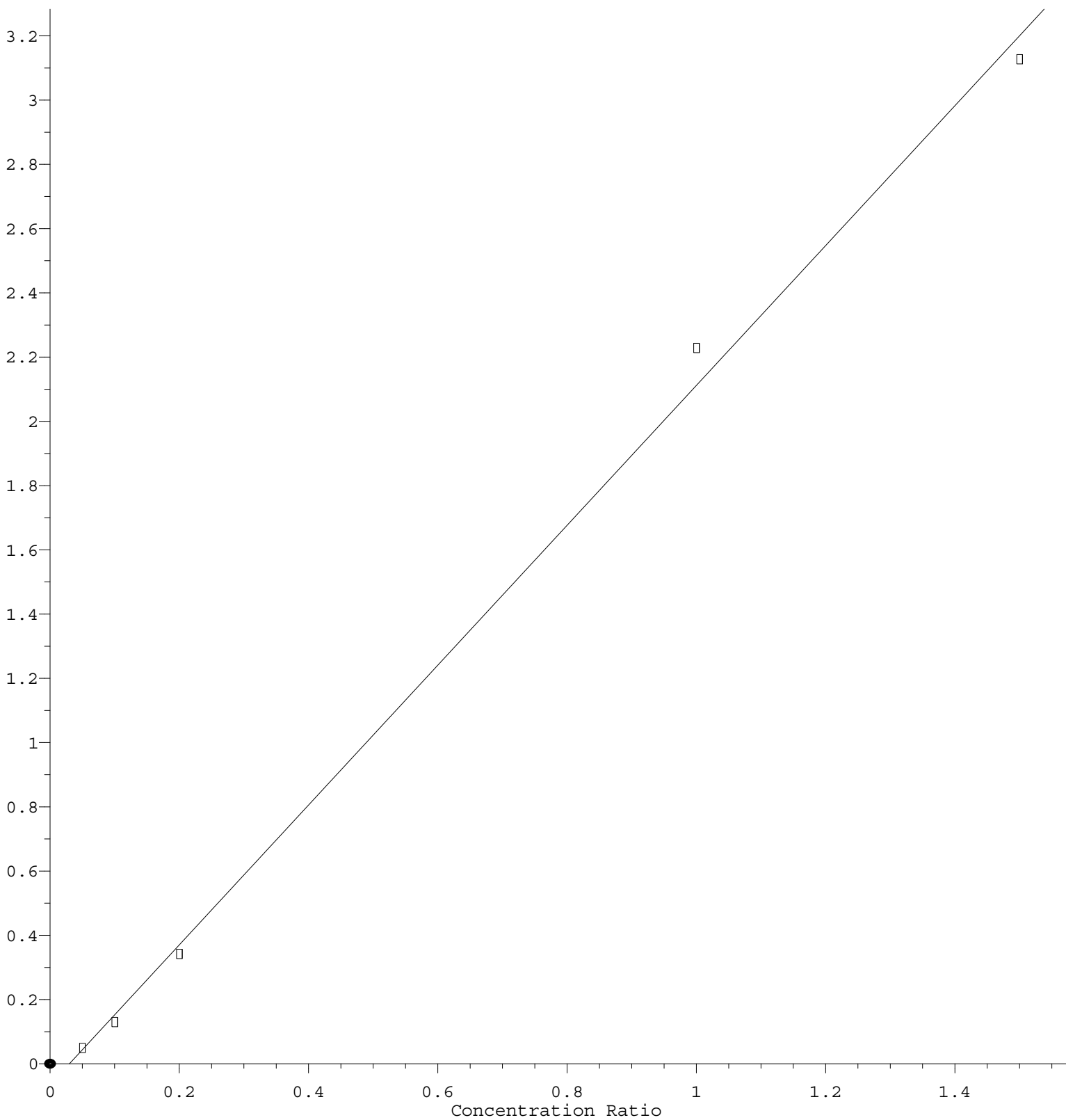
RF Rel Std Dev = 25.504% Curve Fit: Avg RF

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n-Butylbenzene

Response Ratio



$$\text{Response} = 2.177\text{e}+000 * \text{Amt} - 6.568\text{e}-002$$

Coef of Det (r^2) = 0.997454 Curve Fit: Linear

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