

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF011923.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Jan 20 00:50:42 2023
 Response Via : Initial Calibration

Calibration Files

2.5 =BF132140.D 5 =BF132141.D 10 =BF132142.D 20 =BF132143.D 40 =BF132144.D 50 =BF132145.D 60 =BF132146.D 80 =BF132147.D

	Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----									
2)	1,4-Dioxane	0.624	0.591	0.586	0.580	0.553	0.575	0.553	0.580	4.24	
3)	Pyridine	1.663	1.539	1.599	1.567	1.496	1.554	1.480	1.557	3.98	
4)	n-Nitrosodimet...	0.731	0.705	0.733	0.730	0.724	0.761	0.742	0.732	2.31	
5) S	2-Fluorophenol	1.301	1.246	1.204	1.116	1.063	1.077	1.009	1.145	9.35	
6)	Aniline	2.241	2.090	2.044	1.937	1.865	1.940	1.857	1.996	6.91	
7) S	Phenol-d6	1.696	1.541	1.516	1.404	1.325	1.352	1.254	1.441	10.54	
8)	2-Chlorophenol	1.351	1.306	1.286	1.183	1.129	1.136	1.034	1.203	9.50	
9)	Benzaldehyde		1.086	1.022	0.903	0.814	0.812		0.927	13.33	
10) C	Phenol	1.733	1.636	1.580	1.468	1.375	1.408	1.303	1.500	10.29	
11)	bis(2-Chloroet...	1.461	1.341	1.325	1.236	1.178	1.219	1.131	1.270	8.87	
12)	1,3-Dichlorobe...	1.556	1.458	1.406	1.312	1.242	1.269	1.174	1.345	9.97	
13) C	1,4-Dichlorobe...	1.544	1.451	1.419	1.314	1.238	1.266	1.163	1.342	9.99	
14)	1,2-Dichlorobe...	1.495	1.391	1.326	1.200	1.128	1.134	1.014	1.241	13.62	
15)	Benzyl Alcohol	1.128	1.103	1.125	1.106	1.090	1.105	1.060	1.102	2.07	
16)	2,2'-oxybis(1-...	2.119	1.959	1.937	1.815	1.731	1.743	1.617	1.846	9.20	
17)	2-Methylphenol	1.172	1.098	1.104	1.042	0.990	1.019	0.955	1.054	7.08	
18)	Hexachloroethane	0.503	0.486	0.495	0.489	0.466	0.485	0.449	0.482	3.82	
19) P	n-Nitroso-di-n...	0.922	1.015	0.971	0.921	0.847	0.797	0.814	0.776	0.883	9.86
20)	3+4-Methylphenols	1.509	1.435	1.426	1.317	1.235	1.258	1.119	1.328	10.25	
21) I	Naphthalene-d8	-----ISTD-----									
22)	Acetophenone	0.579	0.528	0.504	0.462	0.431	0.442	0.419	0.481	12.18	
23) S	Nitrobenzene-d5	0.363	0.366	0.383	0.383	0.371	0.388	0.381	0.376	2.54	
24)	Nitrobenzene	0.397	0.392	0.410	0.406	0.388	0.406	0.391	0.399	2.20	
25)	Isophorone	0.767	0.740	0.738	0.719	0.711	0.739	0.743	0.737	2.45	
26) C	2-Nitrophenol	0.099	0.105	0.128	0.148	0.154			0.127	19.49	
27)	2,4-Dimethylph...	0.334	0.330	0.324	0.322	0.308	0.313	0.300	0.319	3.82	
28)	bis(2-Chloroet...	0.497	0.471	0.461	0.430	0.407	0.421	0.406	0.442	7.97	
29) C	2,4-Dichloroph...	0.303	0.298	0.313	0.309	0.294	0.305	0.296	0.303	2.28	
30)	1,2,4-Trichlor...	0.388	0.360	0.355	0.338	0.320	0.328	0.316	0.344	7.49	
31)	Naphthalene	1.185	1.119	1.075	0.998	0.942	0.965	0.907	1.027	9.89	
32)	Benzoic acid		0.118	0.151	0.188	0.200	0.228	0.235	0.187	24.10	
33)	4-Chloroaniline	0.496	0.474	0.458	0.437	0.411	0.410	0.390	0.440	8.72	
34) C	Hexachlorobuta...	0.252	0.234	0.234	0.227	0.220	0.230	0.220	0.231	4.75	
35)	Caprolactam	0.075	0.081	0.086	0.090	0.089	0.090	0.089	0.086	6.65	
36) C	4-Chloro-3-met...	0.299	0.305	0.314	0.309	0.305	0.302	0.298	0.305	1.80	
37)	2-Methylnaphth...	0.828	0.783	0.739	0.684	0.643	0.655	0.619	0.707	11.04	
38)	1-Methylnaphth...	0.774	0.719	0.690	0.638	0.599	0.609	0.577	0.658	10.93	

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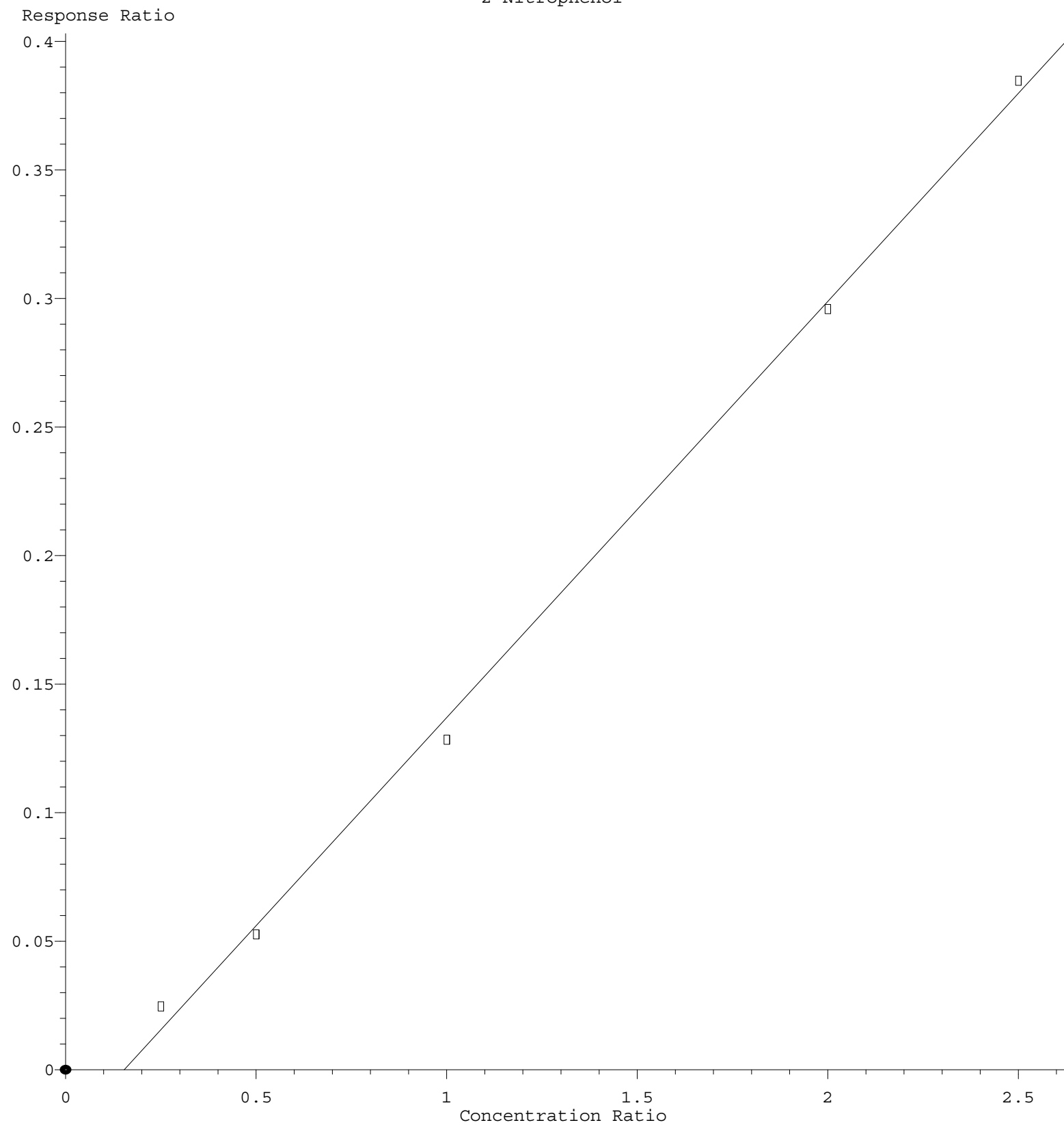
39) I	Acenaphthene-d10	-----ISTD-----									
40)	1,2,4,5-Tetrac...	0.789	0.737	0.719	0.684	0.641	0.667	0.634	0.696	8.04	
41) P	Hexachlorocycl...	0.306	0.342	0.390	0.389	0.422	0.428	0.380		12.43	
42) S	2,4,6-Tribromo...	0.197	0.207	0.222	0.221	0.217	0.219	0.212	0.214	4.25	
43) C	2,4,6-Trichlor...	0.392	0.414	0.445	0.448	0.437	0.451	0.436	0.432	4.95	
44)	2,4,5-Trichlor...	0.475	0.487	0.519	0.523	0.504	0.524	0.504	0.505	3.69	
45) S	2-Fluorobiphenyl	1.669	1.529	1.407	1.250	1.162	1.197		1.369	14.76	
46)	1,1'-Biphenyl	1.813	1.710	1.657	1.537	1.450	1.490	1.388	1.578	9.70	
47)	2-Chloronaphth...	1.372	1.294	1.270	1.195	1.131	1.167	1.110	1.220	7.81	
48)	2-Nitroaniline	0.245	0.288	0.354	0.380	0.391	0.405	0.395	0.351	17.42	
49)	Acenaphthylene	2.180	2.078	2.033	1.912	1.834	1.851	1.771	1.951	7.63	
50)	Dimethylphthalate	1.562	1.520	1.519	1.435	1.369	1.396	1.338	1.449	5.95	
51)	2,6-Dinitrotol...	0.224	0.253	0.286	0.301	0.300	0.307	0.296	0.281	10.95	
52) C	Acenaphthene	1.315	1.269	1.214	1.141	1.085	1.123	1.070	1.174	8.01	
53)	3-Nitroaniline	0.256	0.289	0.318	0.322	0.319	0.307	0.291	0.300	7.88	
54) P	2,4-Dinitrophenol	0.078	0.097	0.111	0.124	0.131		0.108		19.86	
55)	Dibenzofuran	2.079	1.971	1.883	1.771	1.692	1.707	1.594	1.814	9.44	
56) P	4-Nitrophenol	0.172	0.191	0.221	0.232	0.242	0.239	0.233	0.218	12.18	
57)	2,4-Dinitrotol...	0.266	0.281	0.340	0.355	0.372	0.379	0.366	0.337	13.46	
58)	Fluorene	1.619	1.504	1.416	1.282	1.219	1.221	1.148	1.344	12.87	
59)	2,3,4,6-Tetrac...	0.344	0.366	0.400	0.405	0.393	0.399	0.382	0.384	5.77	
60)	Diethylphthalate	1.495	1.493	1.485	1.423	1.389	1.362	1.296	1.420	5.37	
61)	4-Chlorophenyl...	0.838	0.783	0.750	0.704	0.664	0.673	0.625	0.720	10.37	
62)	4-Nitroaniline	0.258	0.275	0.293	0.282	0.290	0.283	0.276	0.279	4.12	
63)	Azobenzene	1.594	1.515	1.498	1.401	1.349	1.354	1.268	1.426	8.00	
64) I	Phenanthrene-d10	-----ISTD-----									
65)	4,6-Dinitro-2-...	0.058	0.072	0.085	0.094	0.103	0.109	0.087		22.26	
66) c	n-Nitrosodiphe...	0.705	0.681	0.655	0.614	0.598	0.628	0.601	0.641	6.46	
67)	4-Bromophenyl-...	0.260	0.253	0.247	0.237	0.230	0.244	0.236	0.244	4.25	
68)	Hexachlorobenzene	0.260	0.248	0.243	0.235	0.229	0.242	0.237	0.242	4.22	
69)	Atrazine	0.204	0.202	0.203	0.197	0.190	0.198	0.190	0.198	2.96	
70) C	Pentachlorophenol	0.123	0.136	0.156	0.162	0.167	0.174	0.172	0.156	12.45	
71)	Phenanthrene	1.231	1.134	1.083	0.997	0.960	1.003	0.939	1.050	10.02	
72)	Anthracene	1.244	1.150	1.104	1.007	0.965	1.006	0.956	1.062	10.15	
73)	Carbazole	1.046	0.997	0.952	0.865	0.829	0.852	0.808	0.907	10.07	
74)	Di-n-butylphth...	1.021	1.052	1.071	0.990	0.977	1.001	0.955	1.010	4.07	
75) C	Fluoranthene	1.297	1.190	1.123	1.008	0.979	1.002	0.949	1.078	11.96	
76) I	Chrysene-d12	-----ISTD-----									
77)	Benzydine	0.607	0.635	0.615	0.682	0.569	0.574	0.521	0.600	8.60	
78)	Pyrene	1.905	1.890	1.961	1.847	1.820	1.833	1.646	1.843	5.41	
79) S	Terphenyl-d14	1.378	1.298	1.274	1.157	1.116	1.127	1.007	1.194	10.71	
80)	Butylbenzylpht...	0.360	0.428	0.535	0.582	0.598	0.624	0.612	0.534	19.03	
81)	Benzo(a)anthra...	1.454	1.419	1.446	1.403	1.402	1.471	1.406	1.429	1.95	
82)	3,3'-Dichlorob...	0.310	0.345	0.403	0.422	0.418	0.456	0.430	0.398	12.91	
83)	Chrysene	1.457	1.365	1.351	1.331	1.310	1.380	1.325	1.360	3.62	
84)	Bis(2-ethylhex...	0.472	0.547	0.691	0.768	0.788	0.841	0.830	0.705	20.44	
85) c	Di-n-octyl pht...	0.595	0.816	1.093	1.187	1.360	1.445	1.083		30.01#	

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86) I	Perylene-d12	-----ISTD-----								
87)	Indeno(1,2,3-c...	1.093	1.197	1.461	1.579	1.556	1.661	1.613	1.451	15.17
88)	Benzo(b)fluora...	1.288	1.234	1.181	1.230	1.164	1.212	1.214	1.218	3.28
89)	Benzo(k)fluora...	1.336	1.302	1.303	1.211	1.157	1.208	1.177	1.242	5.66
90) C	Benzo(a)pyrene	1.124	1.102	1.157	1.195	1.167	1.243	1.212	1.171	4.23
91)	Dibenzo(a,h)an...	0.926	1.009	1.215	1.294	1.249	1.323	1.268	1.184	12.94
92)	Benzo(g,h,i)pe...	0.925	1.038	1.267	1.354	1.328	1.422	1.385	1.246	15.21

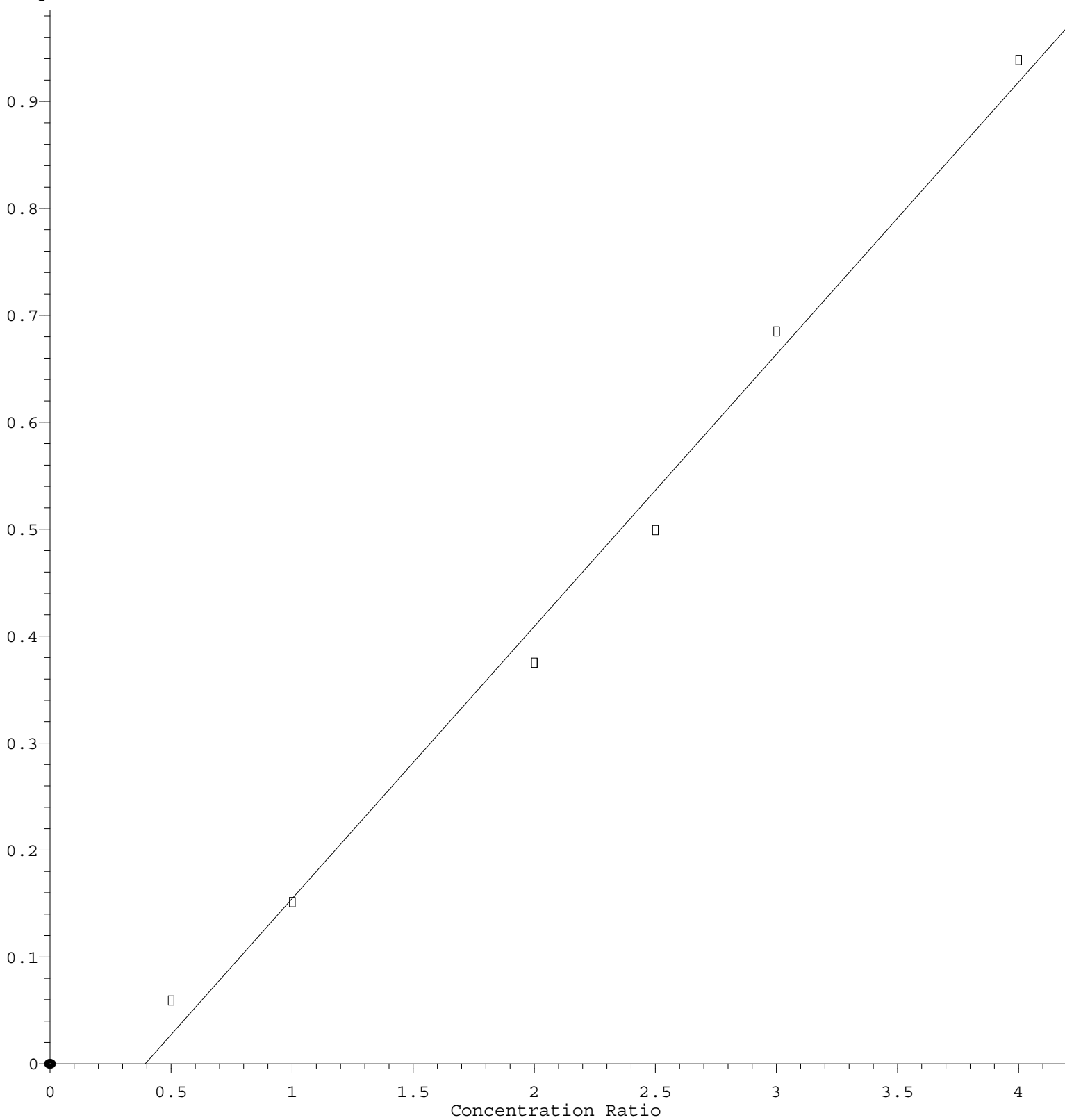
(#) = Out of Range

2-Nitrophenol



Benzoic acid

Response Ratio



$$\text{Response} = 2.545\text{e-}001 * \text{Amt} - 9.992\text{e-}002$$

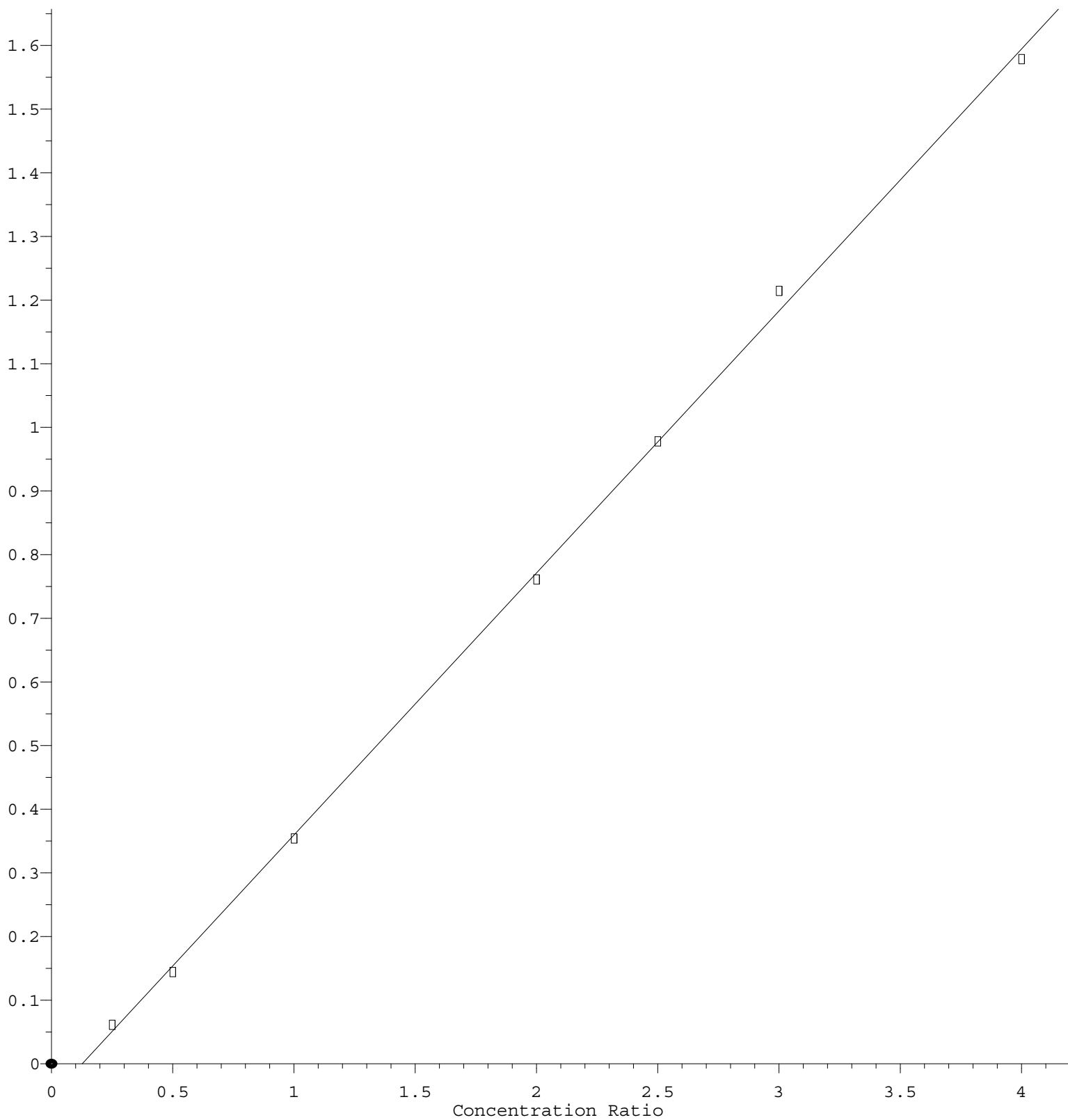
Coef of Det (r^2) = 0.991816 Curve Fit: Linear

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2-Nitroaniline

Response Ratio



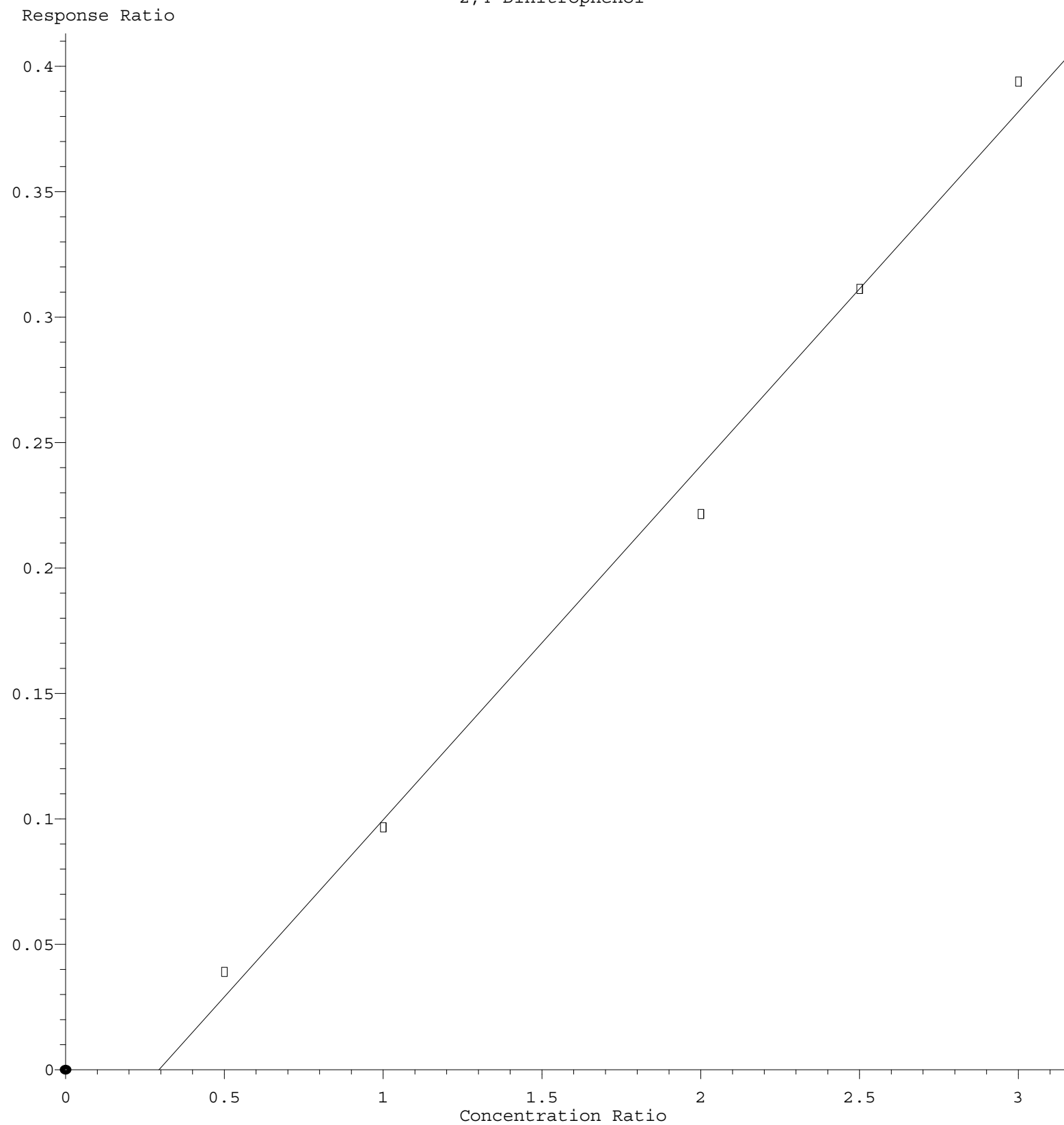
$$\text{Response} = 4.118\text{e-}001 * \text{Amt} - 5.219\text{e-}002$$

Coef of Det (r^2) = 0.999189 Curve Fit: Linear

Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF011923.M

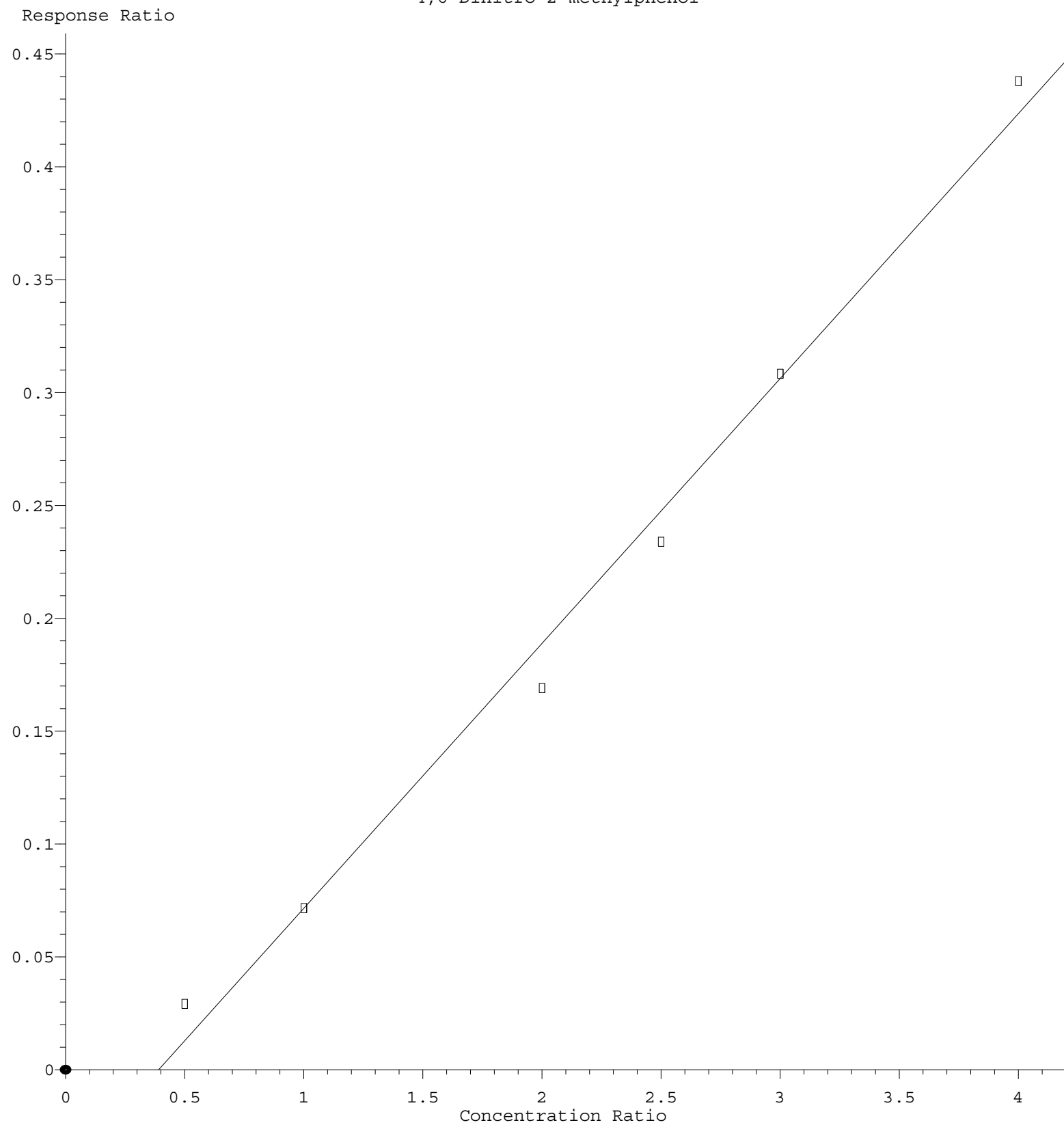
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2,4-Dinitrophenol



Response = $1.411\text{e-}001 * \text{Amt} - 4.154\text{e-}002$
Coef of Det (r^2) = 0.992791 Curve Fit: Linear
Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8270-BF011923.M
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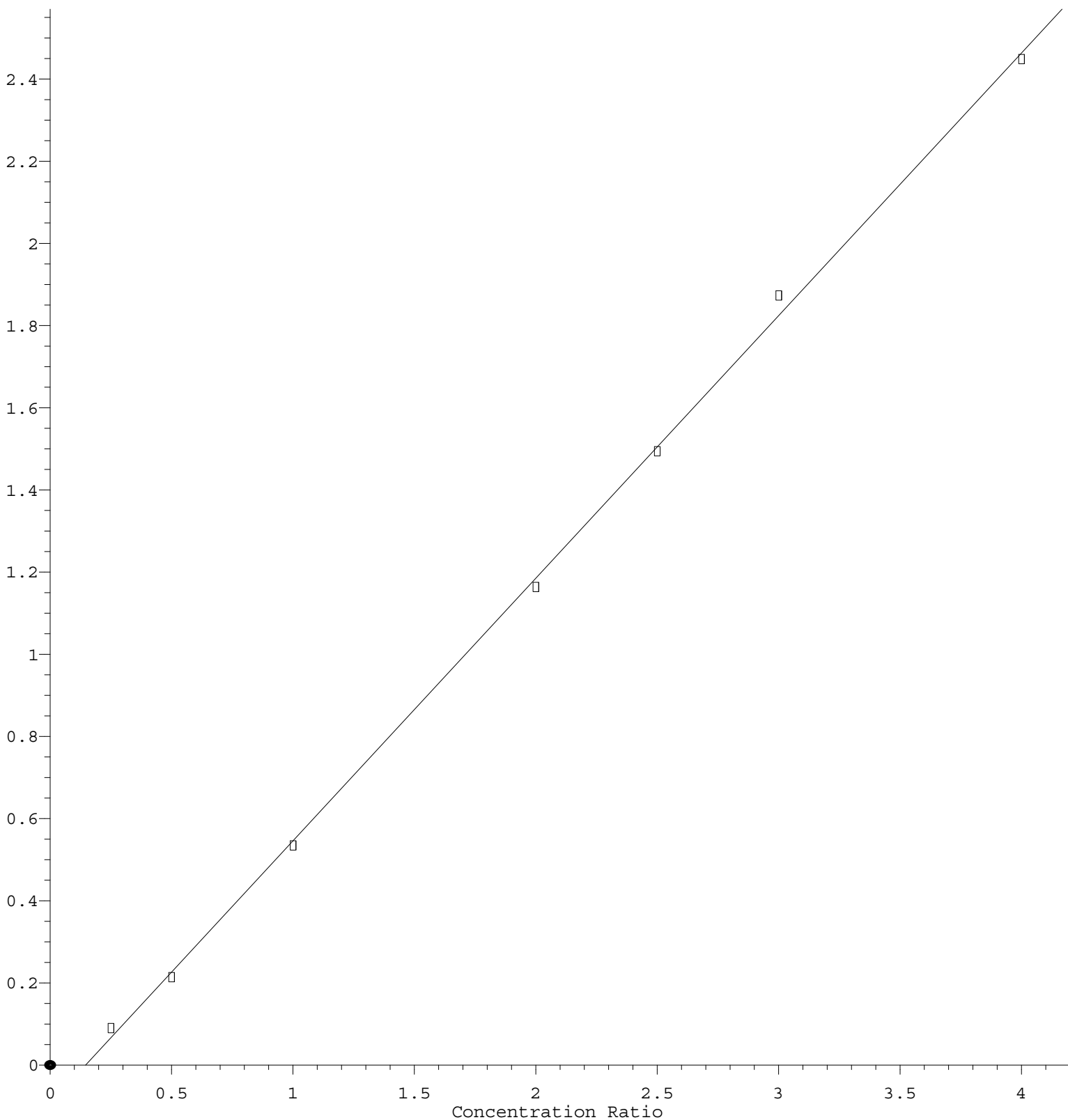
4,6-Dinitro-2-methylphenol



Response = $1.173 \times 10^{-1} \times \text{Amt} - 4.581 \times 10^{-2}$
Coef of Det (r^2) = 0.990888 Curve Fit: Linear
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Butylbenzylphthalate

Response Ratio



$$\text{Response} = 6.394\text{e-}001 * \text{Amt} - 9.337\text{e-}002$$

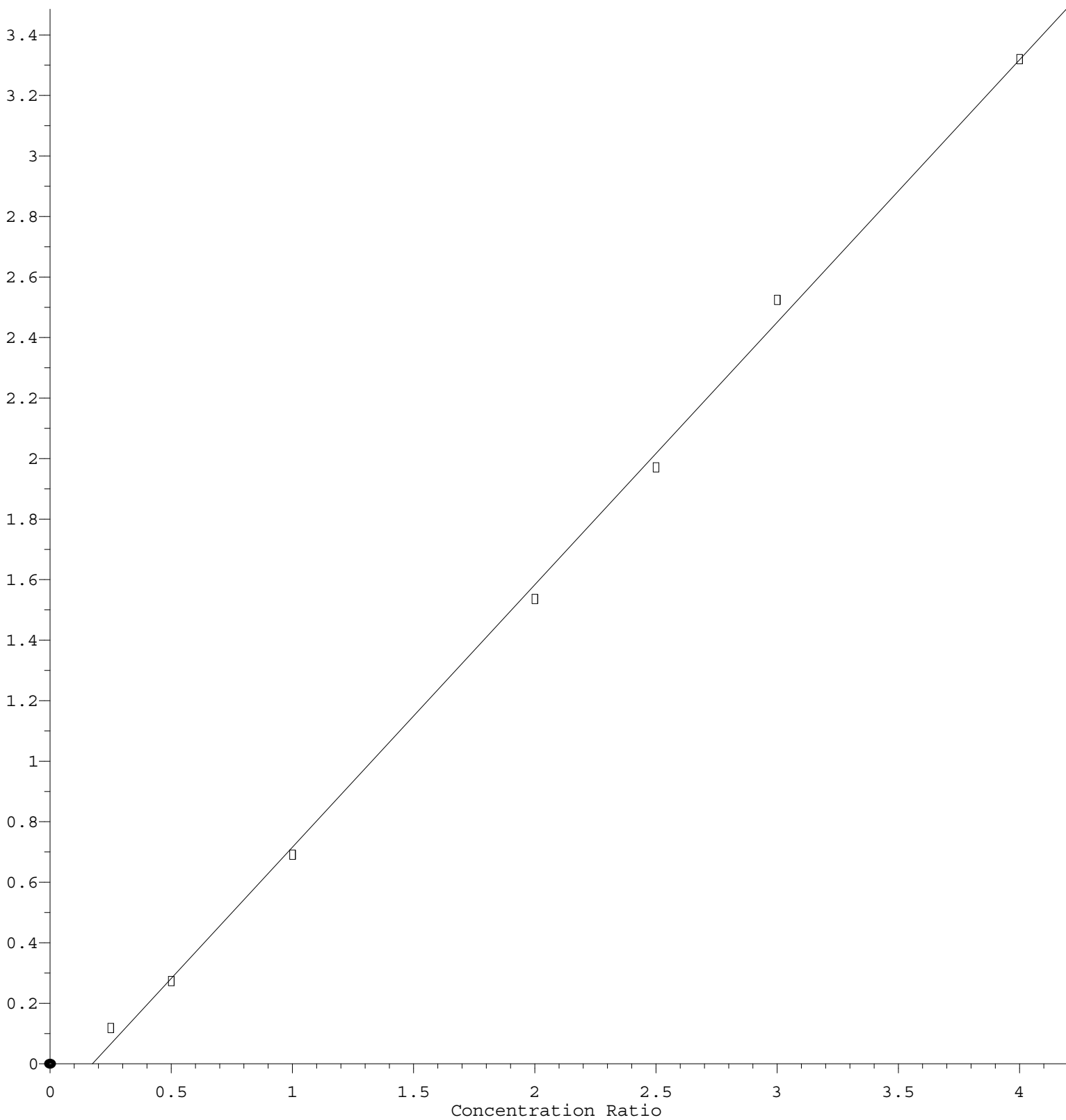
Coef of Det (r^2) = 0.999143 Curve Fit: Linear

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Bis(2-ethylhexyl)phthalate

Response Ratio



$$\text{Response} = 8.674\text{e-}001 * \text{Amt} - 1.515\text{e-}001$$

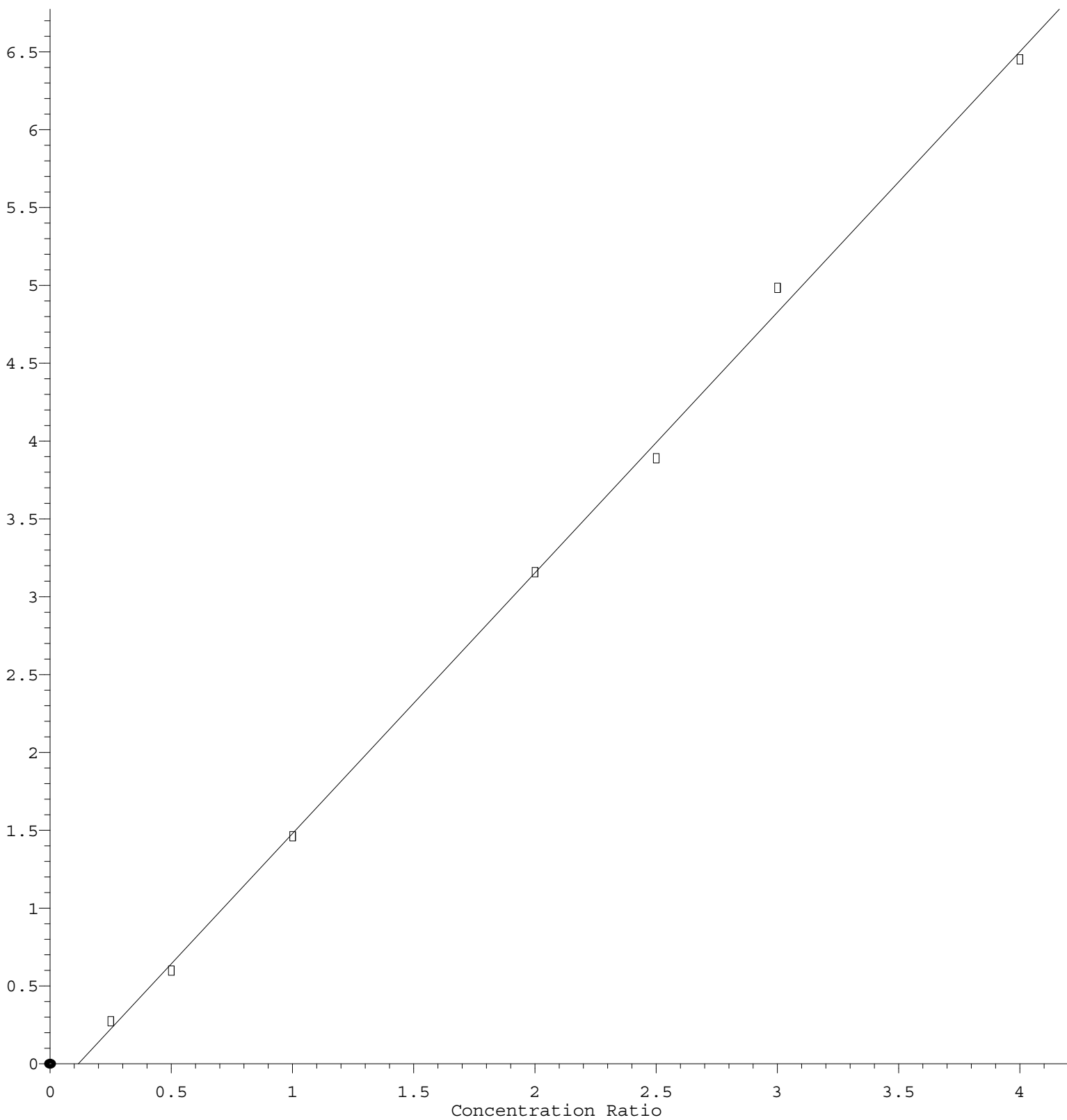
Coef of Det (r^2) = 0.998465 Curve Fit: Linear

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Indeno (1,2,3-cd)pyrene

Response Ratio



$$\text{Response} = 1.674\text{e}+000 * \text{Amt} - 1.957\text{e}-001$$

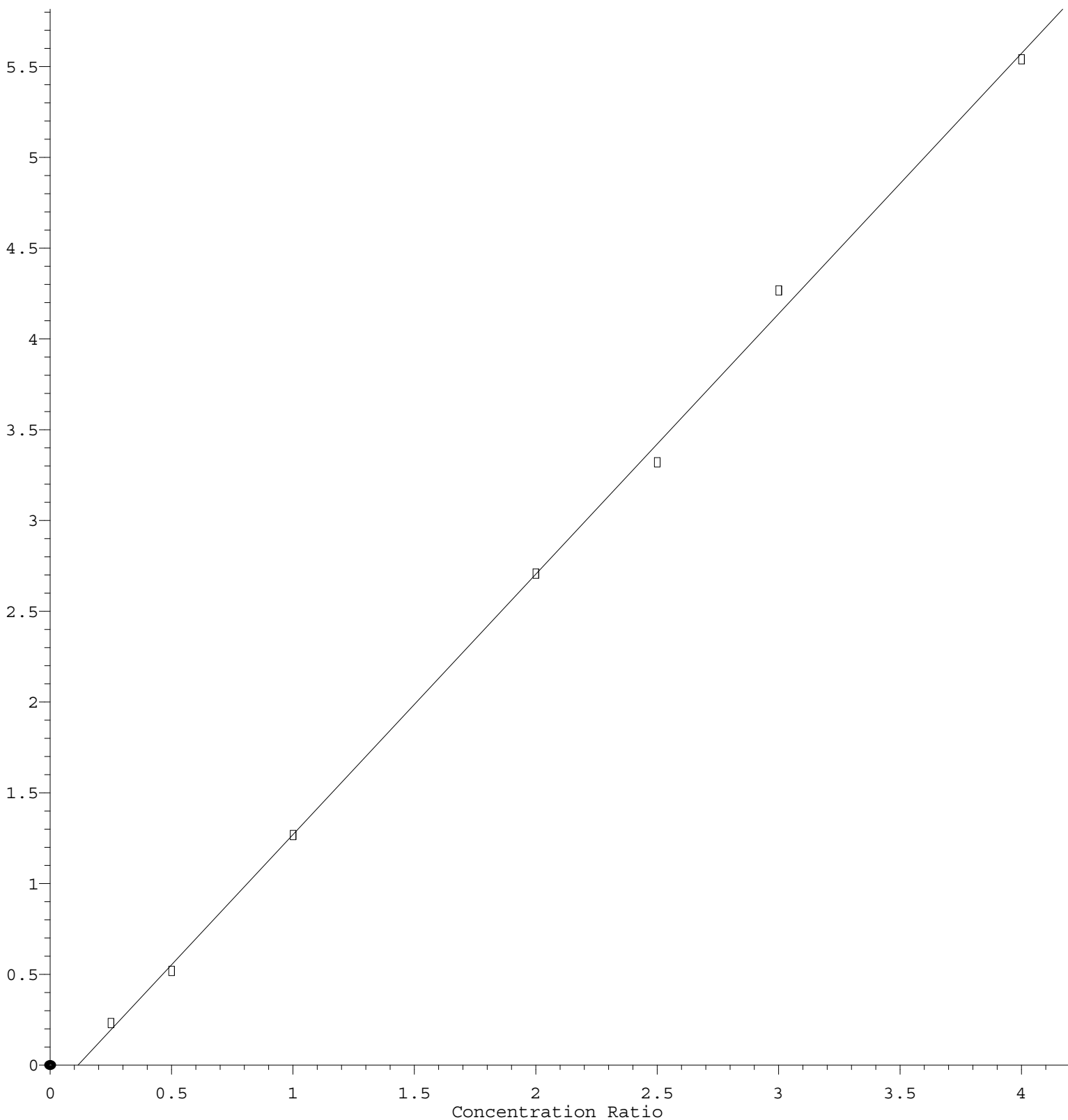
Coef of Det (r^2) = 0.998700 Curve Fit: Linear

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Benzo(g,h,i)perylene

Response Ratio



$$\text{Response} = 1.434\text{e}+000 * \text{Amt} - 1.648\text{e}-001$$

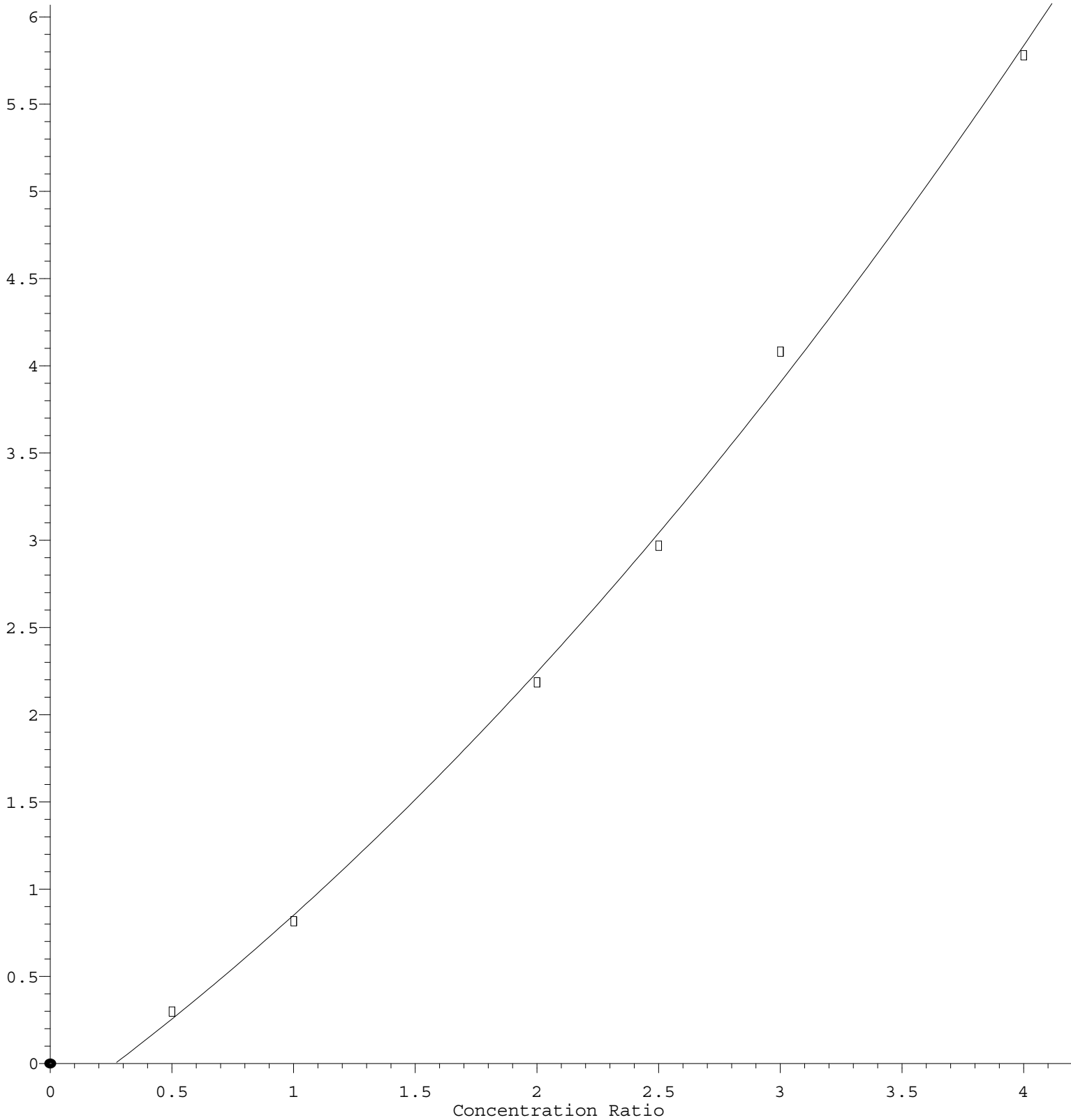
Coef of Det (r^2) = 0.998719 Curve Fit: Linear

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Di-n-octyl phthalate

Response Ratio



$R = 1.344e-001 A^2 + 9.896e-001 A - 2.736e-001$
 Coef of Det (r^2) = 0.997826 Curve Fit: Quadratic
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