Supplementary Material

A convenient and mild protocol for preparation of α – trimethylsilyloxyphosphonates using sulfamic acid and their oxidation to α – ketophosphonates in the presence of *N*-bromosuccinimide

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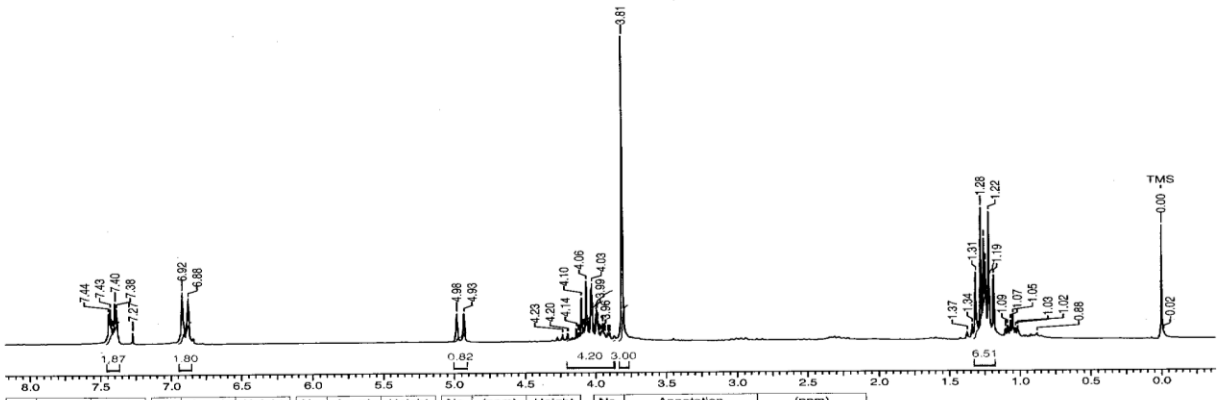
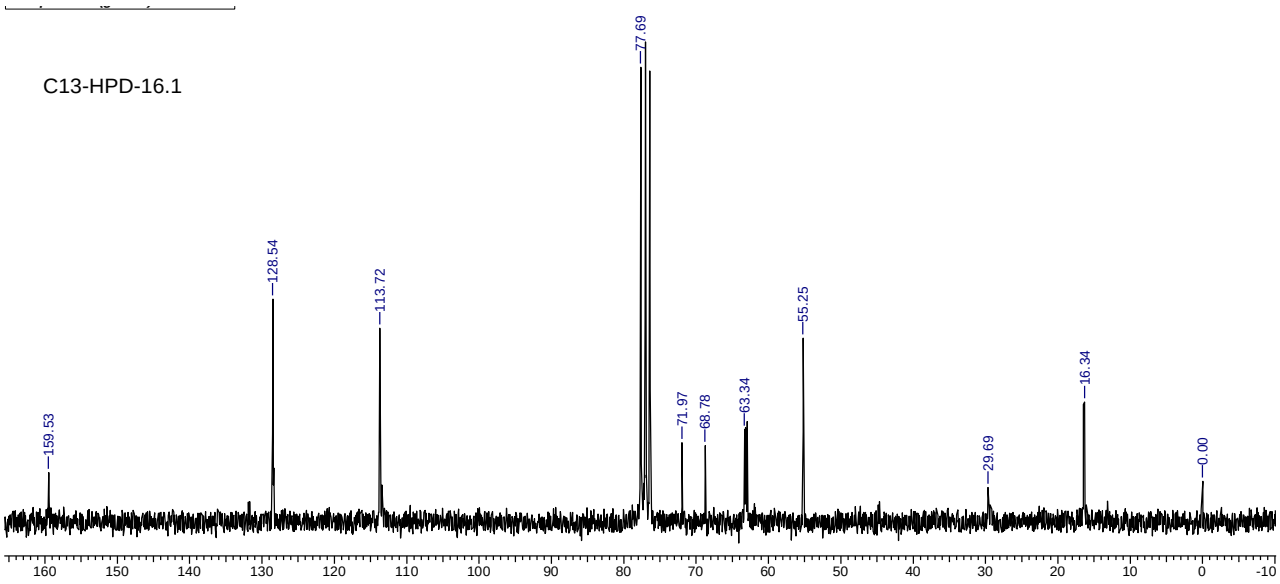
Table of Contents

Diethyl-1-hydroxy-1-(4-methoxyphenyl) methyl phosphonate (1a)



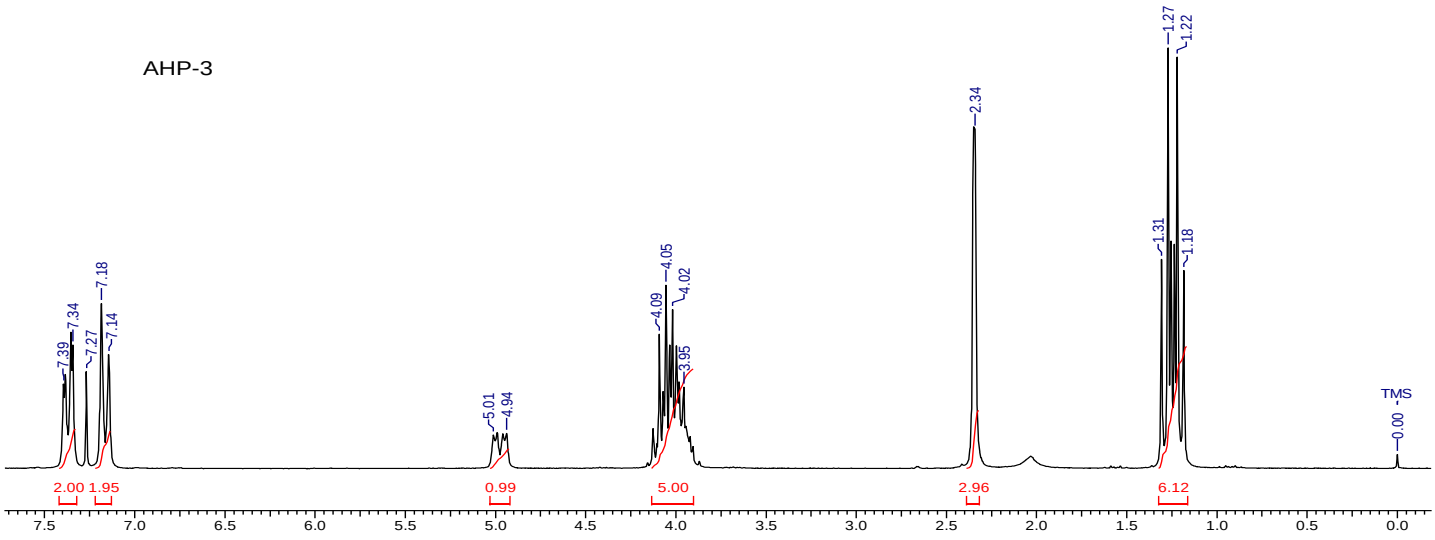
No.	(ppm)	Height
1	-0.02	0.023
2	0.00	0.372
3	0.88	0.019
4	1.02	0.042
5	1.03	0.037
6	1.05	0.079
7	1.07	0.061
8	1.09	0.045
9	1.10	0.034
10	1.19	0.209
11	1.22	0.419
12	1.24	0.254
13	1.26	0.332
14	1.28	0.433
15	1.31	0.220
16	1.34	0.049
17	1.37	0.025
18	3.81	1.000
19	3.90	0.026
20	3.91	0.021
21	3.91	0.026
22	3.93	0.026
23	3.94	0.029
24	3.95	0.058
25	3.96	0.033
26	3.97	0.030
27	3.98	0.068
28	3.99	0.103
29	4.00	0.084
30	4.01	0.028
31	4.03	0.190
32	4.03	0.143
33	4.05	0.041
34	4.06	0.197
35	4.08	0.046
36	4.10	0.143
37	4.12	0.029
38	4.14	0.043
39	4.20	0.026
40	4.23	0.023
41	4.93	0.093
42	4.98	0.093
43	6.88	0.147
44	6.92	0.167
45	7.27	0.035
46	7.38	0.113
47	7.40	0.132
48	7.41	0.051
49	7.42	0.052
50	7.43	0.114
51	7.44	0.099

No.	Annotation	(ppm)
1	TMS	0.00



No.	(ppm)	Height
1	0.00	0.084
2	16.34	0.249
3	29.69	0.072
4	55.25	0.382
5	63.34	0.193
6	68.78	0.159
7	71.97	0.165
8	77.69	0.947
9	113.72	0.404
10	128.54	0.464
11	159.53	0.102

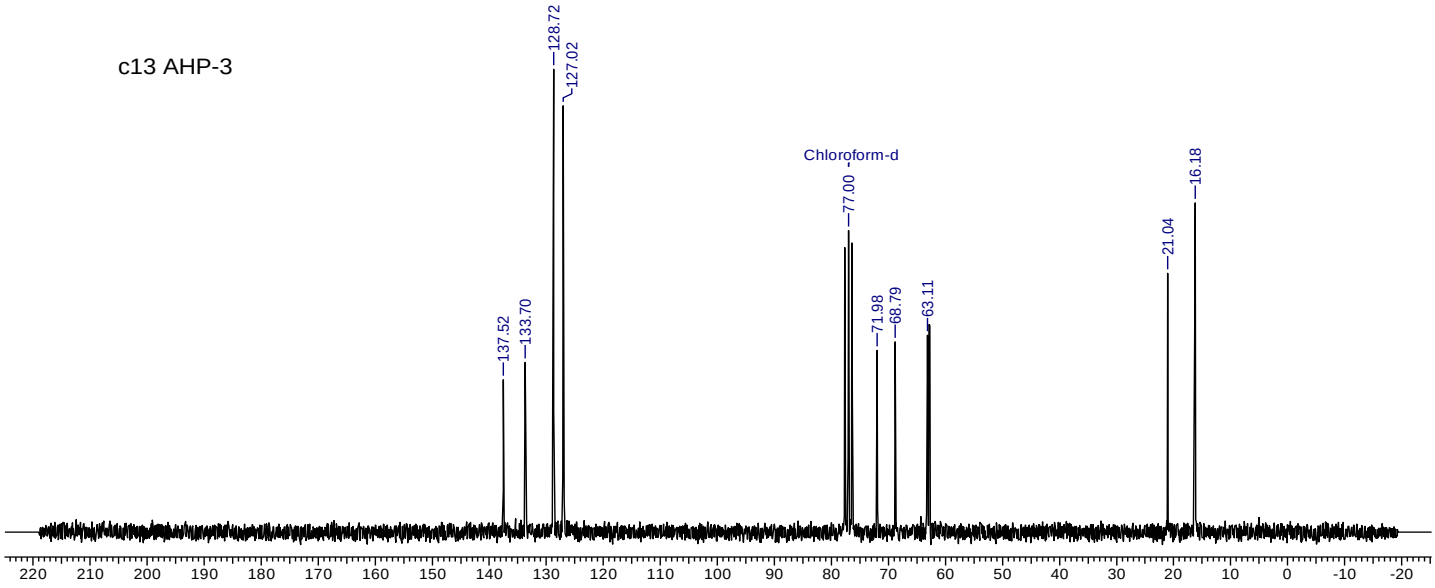
Diethyl [(hydroxyl)(4-methylphenyl) methyl] phosphonate (3a)



No.	(ppm)	Height
1	0.00	0.033
2	1.18	0.471
3	1.22	0.979
4	1.27	1.000
5	1.31	0.498
6	2.34	0.807
7	3.95	0.193
8	4.02	0.378
9	4.05	0.436

No.	(ppm)	Height
10	4.09	0.319
11	4.94	0.083
12	5.01	0.079
13	7.14	0.271
14	7.18	0.392
15	7.27	0.230
16	7.34	0.294
17	7.39	0.200

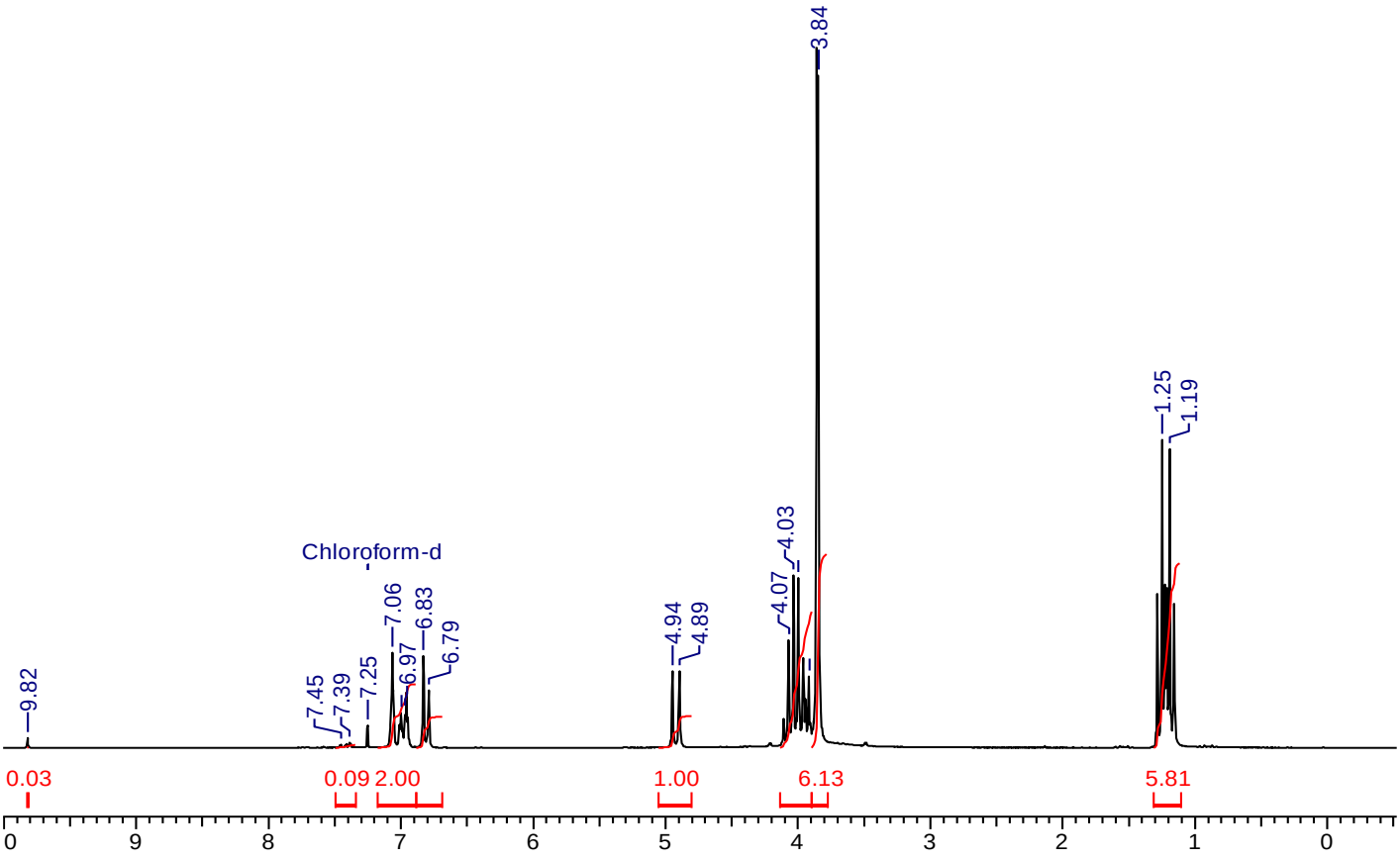
No.	Annotation	(ppm)
1	TMS	0.00



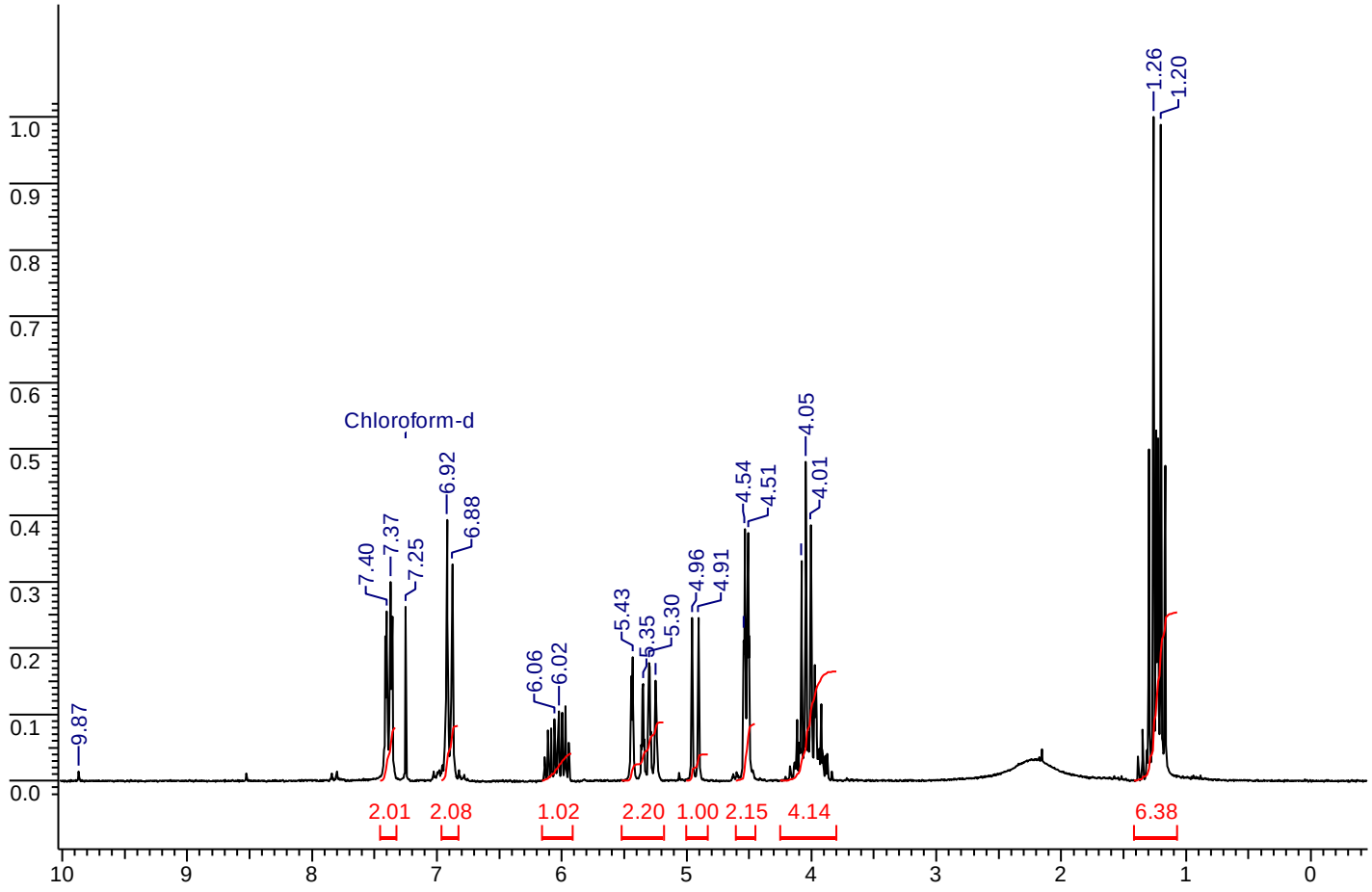
No.	(ppm)	Height
1	16.18	0.711
2	21.04	0.559
3	63.11	0.425
4	68.79	0.411
5	71.98	0.392
6	77.00	0.651
7	127.02	0.920
8	128.72	1.000
9	133.70	0.367
10	137.52	0.329

No.	Annotation	(ppm)
1	Chloroform-d	77.00

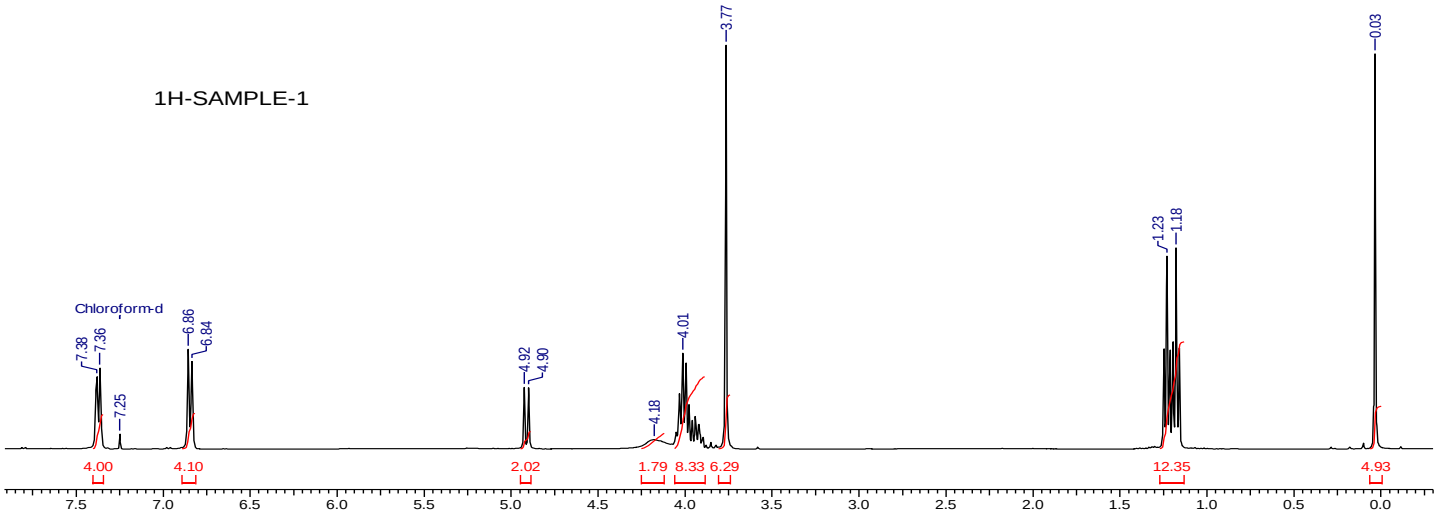
Diethyl-1-hydroxy-1-(3,4-dimethoxyphenyl) methyl phosphonate, (6a)



Diethyl-1-hydroxy-1-(4-allyloxyphenyl) methyl phosphonate(7a)



Diethyl-α-trimethylsilyloxy-4-methoxybenzylphosphonate (1b)

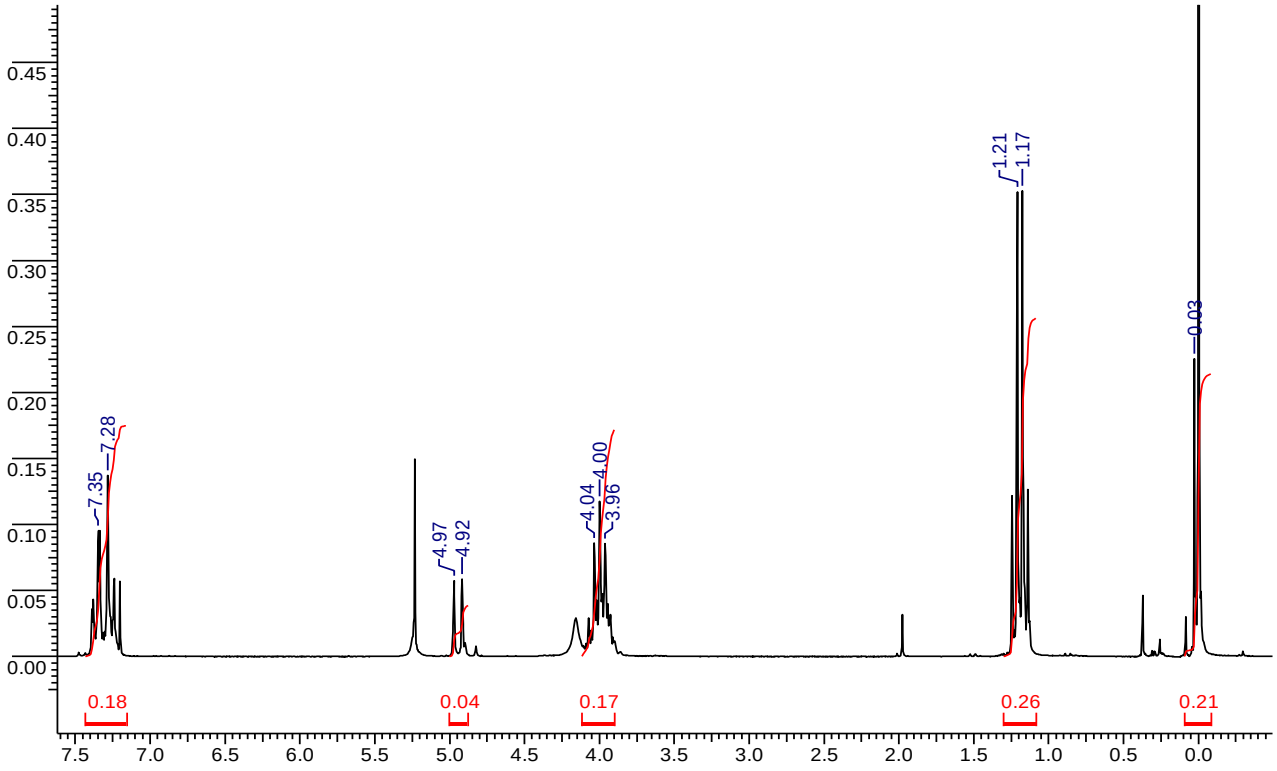


No.	(ppm)	Height
1	0.03	0.978
2	1.18	0.498
3	1.23	0.478
4	3.77	1.000
5	4.01	0.237
6	4.18	0.023
7	4.90	0.151

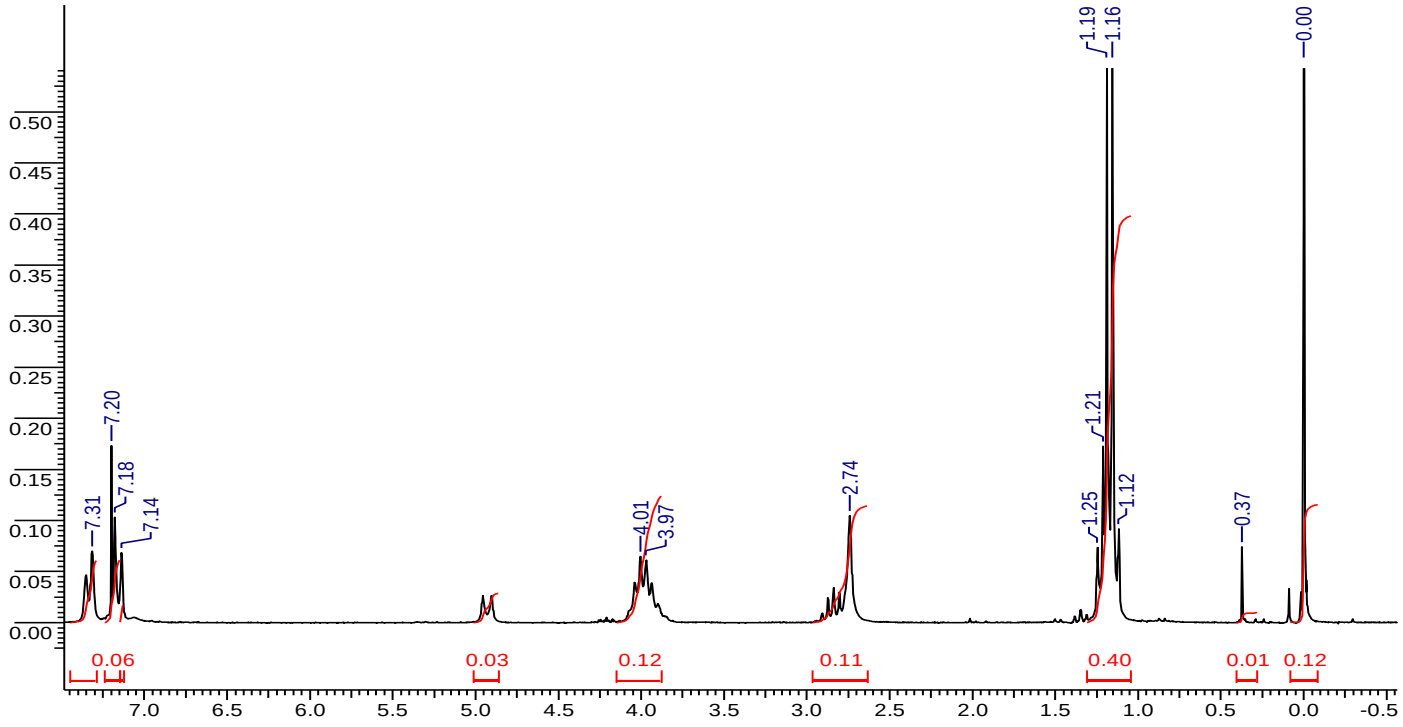
No.	(ppm)	Height
8	4.92	0.153
9	6.84	0.216
10	6.86	0.247
11	7.25	0.036
12	7.36	0.200
13	7.38	0.178

No.	Annotation	(ppm)
1	Chloroform-d	7.25

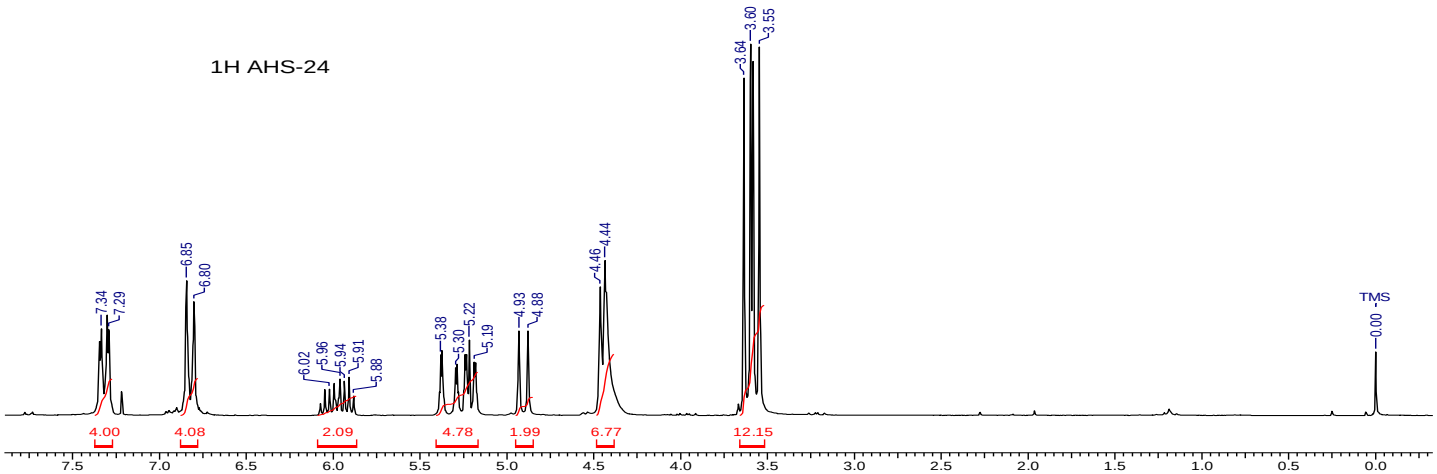
Diethyl-α-trimethylsilyloxy-4-chlorobenzylphosphonate (2b)



Diethyl-α-trimethylsilyloxy-4-isopropylbenzylphosphonate (4b)



Diethyl-α-trimethylsilyloxy-(4-allyloxybenzoyl)benzylphosphonate (7b)

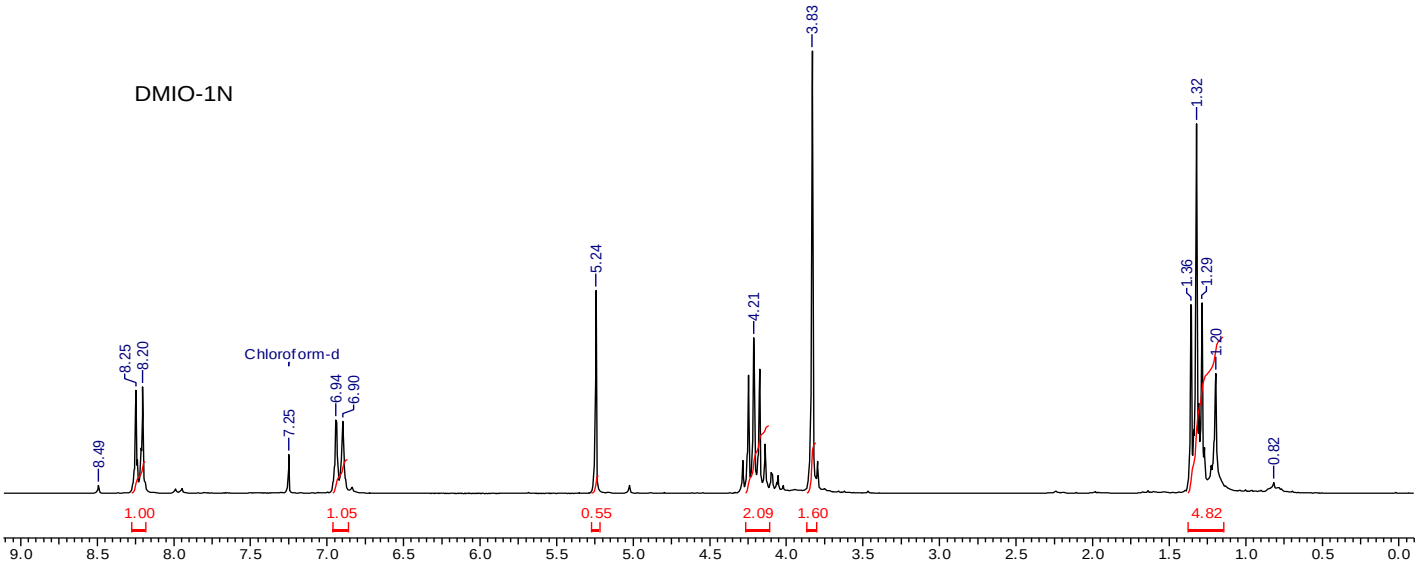


No.	(ppm)	Height
1	0.00	0.170
2	3.55	0.992
3	3.60	1.000
4	3.64	0.908
5	4.44	0.417
6	4.46	0.346
7	4.88	0.227
8	4.93	0.228
9	5.19	0.143
10	5.22	0.203
11	5.30	0.128

No.	(ppm)	Height
12	5.38	0.164
13	5.88	0.052
14	5.91	0.103
15	5.94	0.093
16	5.96	0.098
17	6.02	0.070
18	6.80	0.307
19	6.85	0.363
20	7.29	0.232
21	7.34	0.233

No.	Annotation	(ppm)
1	TMS	0.00

Diethyl (4-methoxybenzoyl) phosphonate (1c)

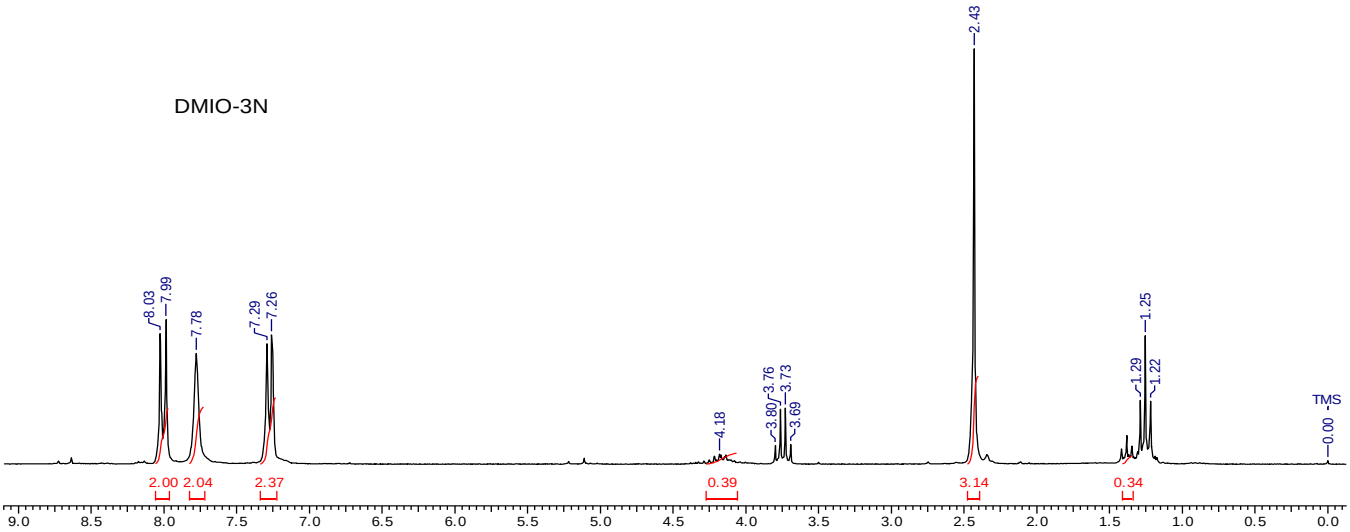


No.	(ppm)	Height
1	0.82	0.025
2	1.20	0.271
3	1.29	0.431
4	1.32	0.836
5	1.36	0.426
6	3.83	1.000
7	4.21	0.351

No.	(ppm)	Height
8	5.24	0.459
9	6.90	0.163
10	6.94	0.166
11	7.25	0.088
12	8.20	0.240
13	8.25	0.233
14	8.49	0.018

No.	Annotation	(ppm)
1	Chloroform-d	7.25

Diethyl (4-methylbenzoyl) phosphonate (3c)

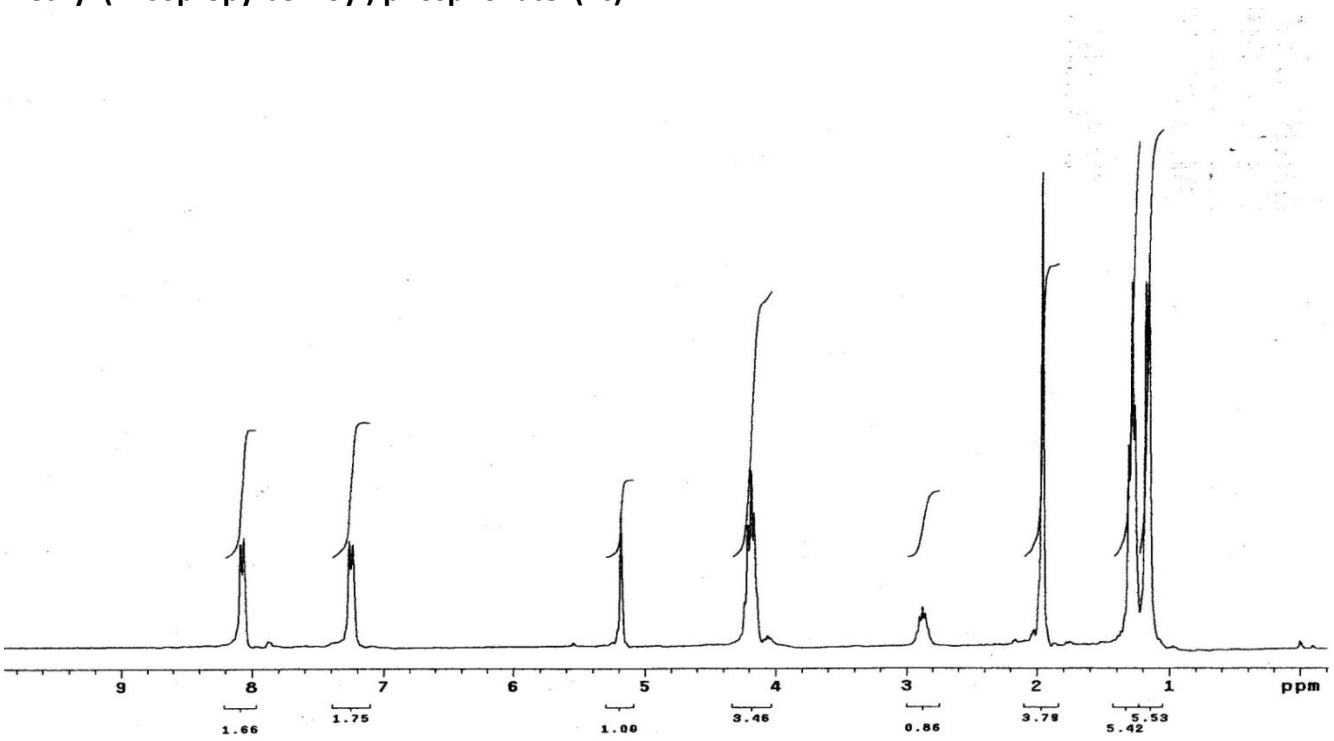


No.	(ppm)	Height
1	0.00	0.008
2	1.22	0.152
3	1.25	0.309
4	1.29	0.154
5	2.43	1.000
6	3.69	0.047
7	3.73	0.135
8	3.76	0.132

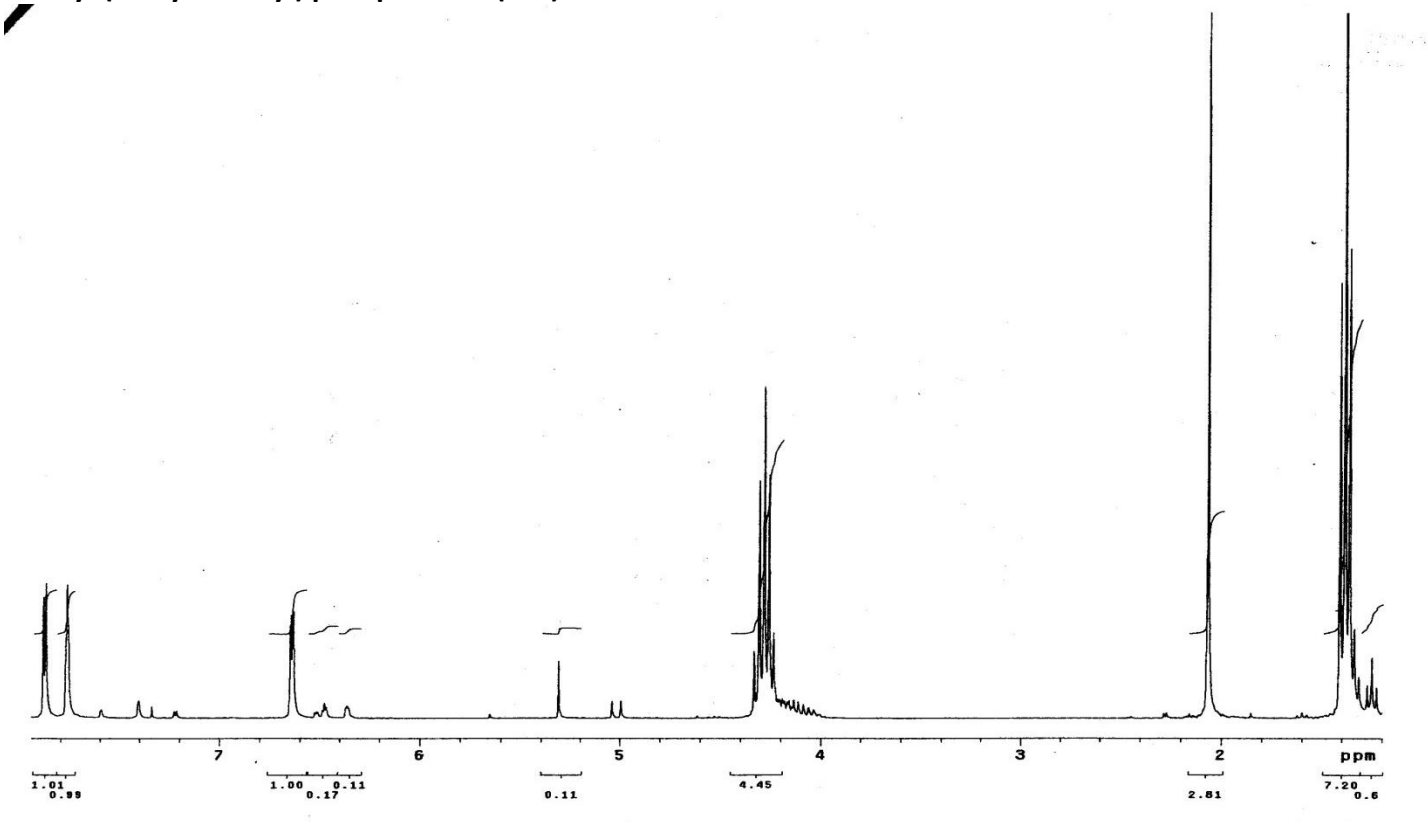
No.	(ppm)	Height
9	3.80	0.044
10	4.18	0.024
11	7.26	0.311
12	7.29	0.290
13	7.78	0.267
14	7.99	0.348
15	8.03	0.314

No.	Annotation	(ppm)
1	TMS	0.00

Diethyl (4-isopropylbenzoyl) phosphonate (4c)



Diethyl (furoylbenzoyl) phosphonate (10c)



Diisopropyl (2-thiophenoyl) phosphonate (11c)