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Supplementary Material

^1H and ^{13}C NMR Spectra

Control of Diastereo- and Enantioselectivity in Metal-Catalysed 1,3-Dipolar Cycloaddition Reactions of Nitrones with Alkenes. Experimental and Theoretical Investigations

Kurt V. Gothelf, Rita G. Hazell and Karl Anker Jørgensen*

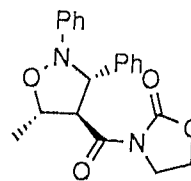
Department of Chemistry

Aarhus University

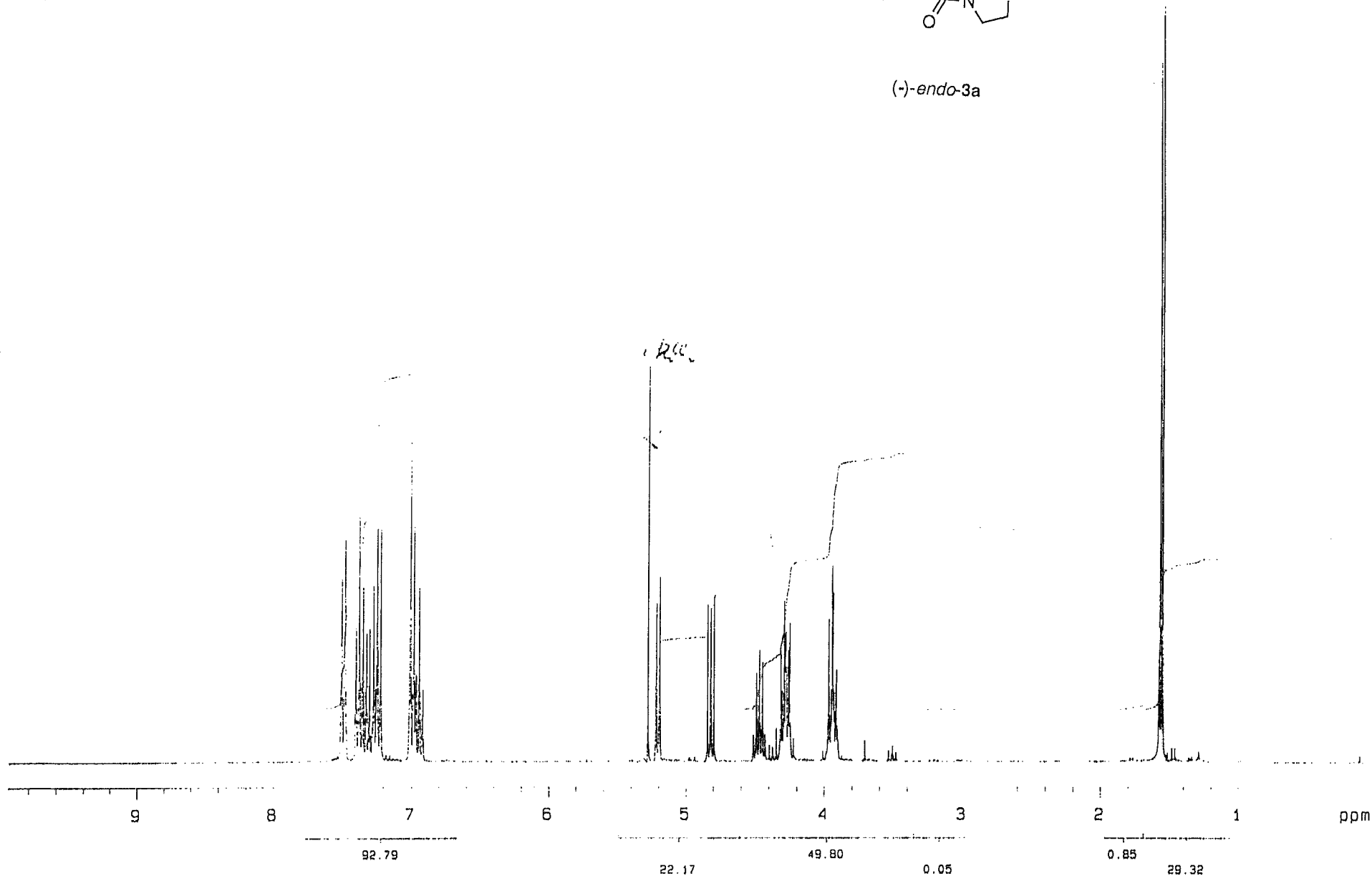
DK-8000 Aarhus C, Denmark

Note: Spectra, not found in the material are available in Supplementary Material in ref. 8a.

KG SK259
PL2 PH ENDO



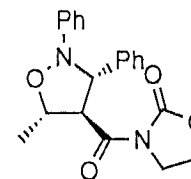
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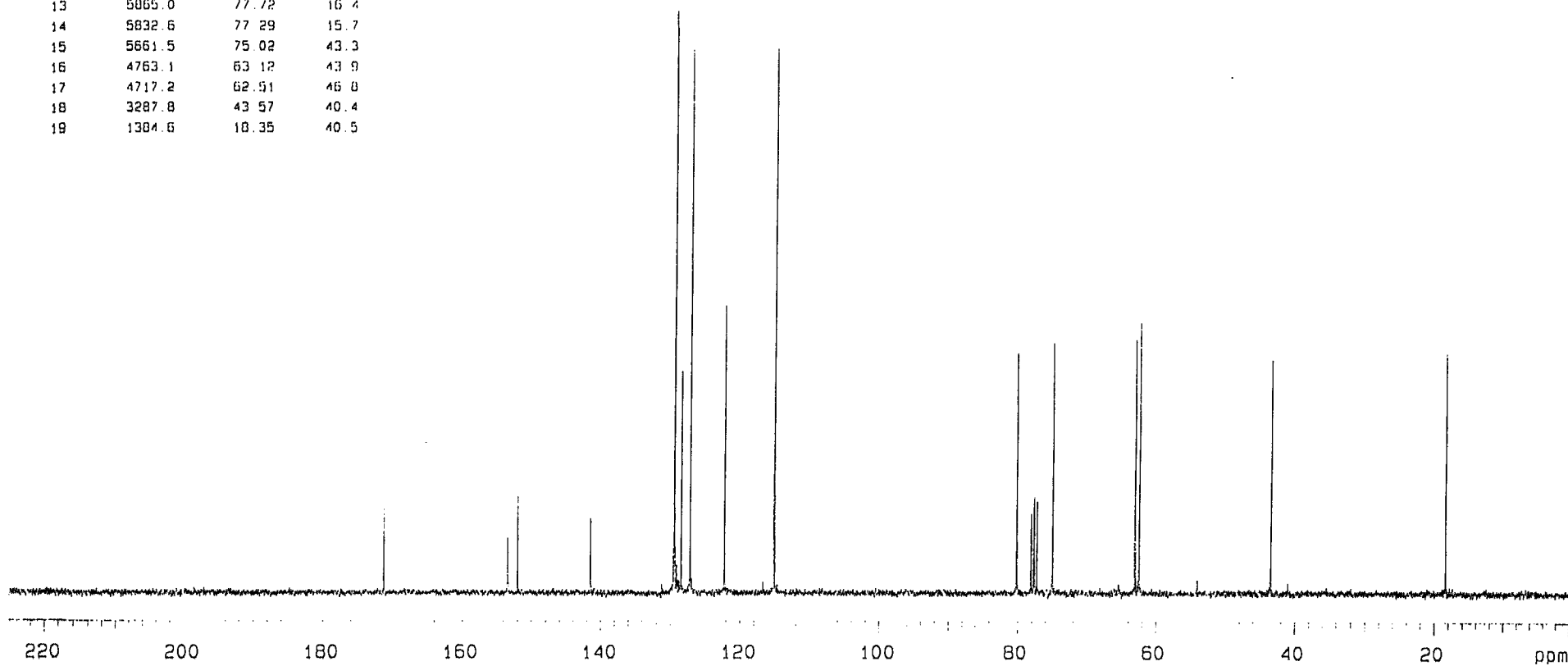
6 355-2

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2	11579.7	153.45	9.4
3	11477.4	152.10	16.9
4	10679.2	141.52	12.7
5	9776.7	129.56	90.5
6	9767.3	129.43	95.6
7	9696.3	128.49	37.4
8	9599.3	127.21	91.9
9	9231.0	122.33	48.4
10	8690.5	115.16	92.1
11	6051.7	80.20	41.7
12	5897.3	78.15	13.11
13	5865.0	77.72	16.4
14	5832.6	77.29	15.7
15	5661.5	75.02	43.3
16	4763.1	63.12	43.9
17	4717.2	62.51	46.0
18	3287.8	43.57	40.4
19	1384.6	18.35	40.5

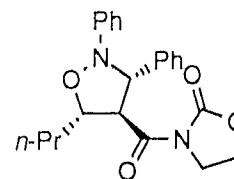


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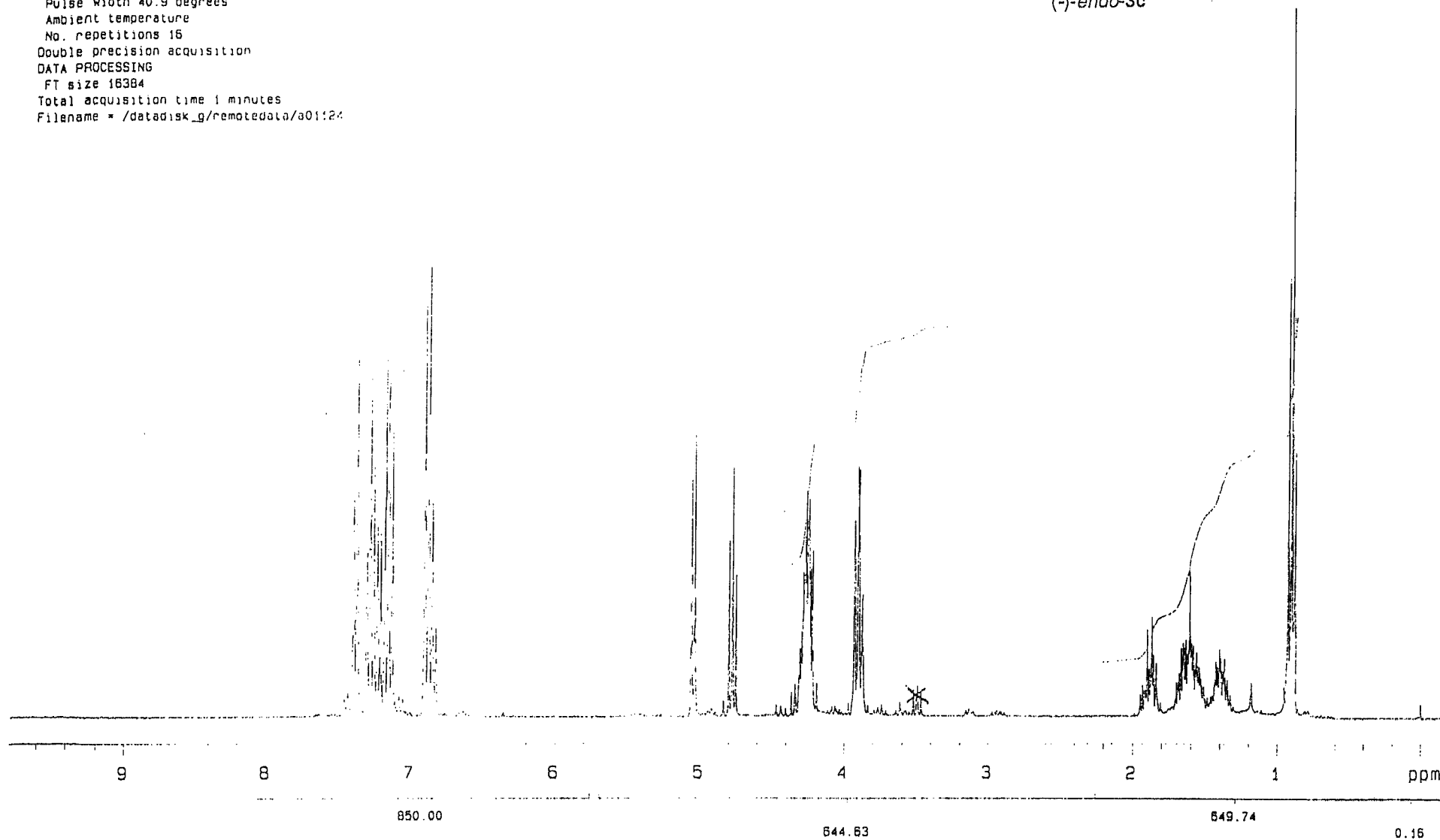


61355-3

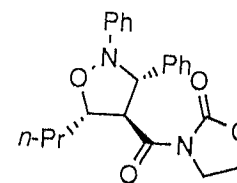
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 Pulse width 40.9 degrees
 Ambient temperature
 No. repetitions 16
 Double precision acquisition
 DATA PROCESSING
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 Total acquisition time 1 minutes
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(-)-endo-3c



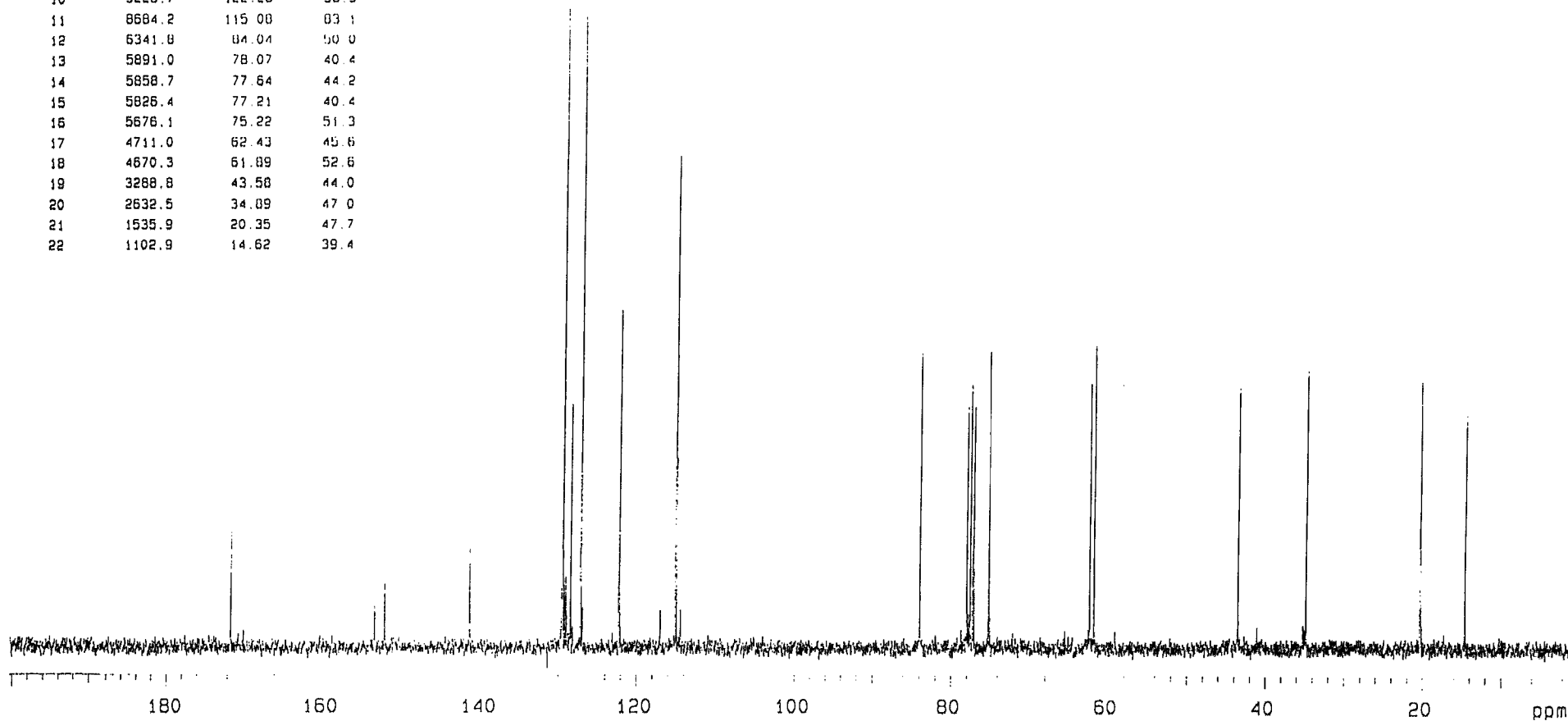
67 355-4



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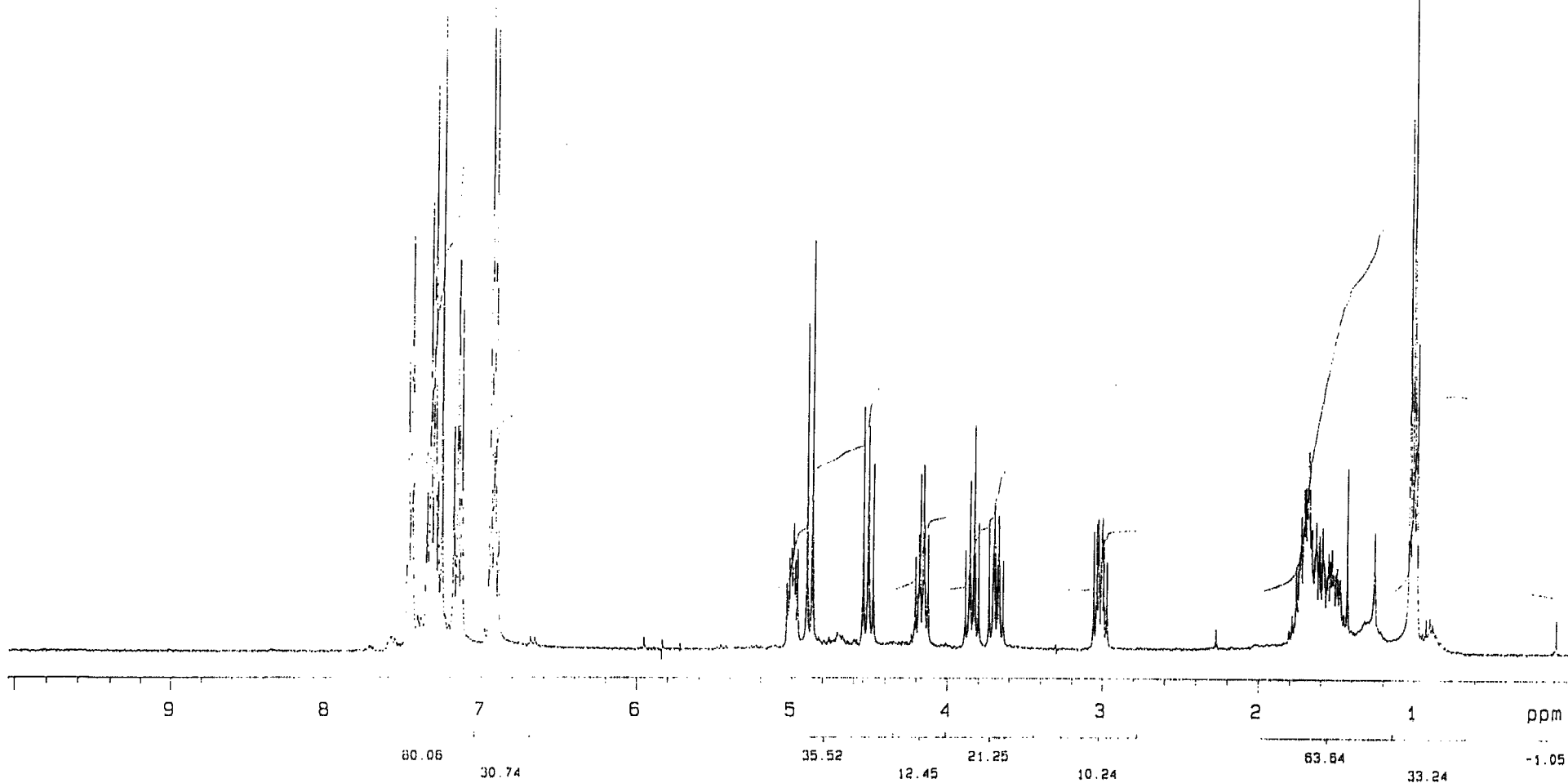
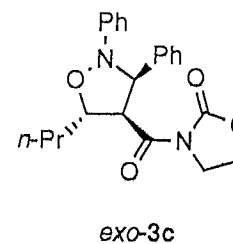
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1	12954.9	171.67	21.3
2	11572.4	153.35	8.8
3	11479.5	152.12	18.0
4	10669.8	141.39	21.0
5	9774.6	129.53	82.4
6	9766.2	129.42	108.8
7	9741.2	129.09	11.8
8	9695.3	128.48	40.8
9	9595.1	127.15	107.0
10	9225.7	122.26	56.9
11	8684.2	115.00	83.1
12	6341.8	84.04	50.0
13	5891.0	78.07	40.4
14	5858.7	77.64	44.2
15	5826.4	77.21	40.4
16	5676.1	75.22	51.3
17	4711.0	62.43	45.6
18	4670.3	61.89	52.6
19	3288.8	43.58	44.0
20	2632.5	34.89	47.0
21	1535.9	20.35	47.7
22	1102.9	14.62	39.4



h 355-5

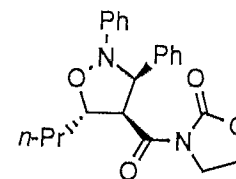
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RL1/PO/EXO



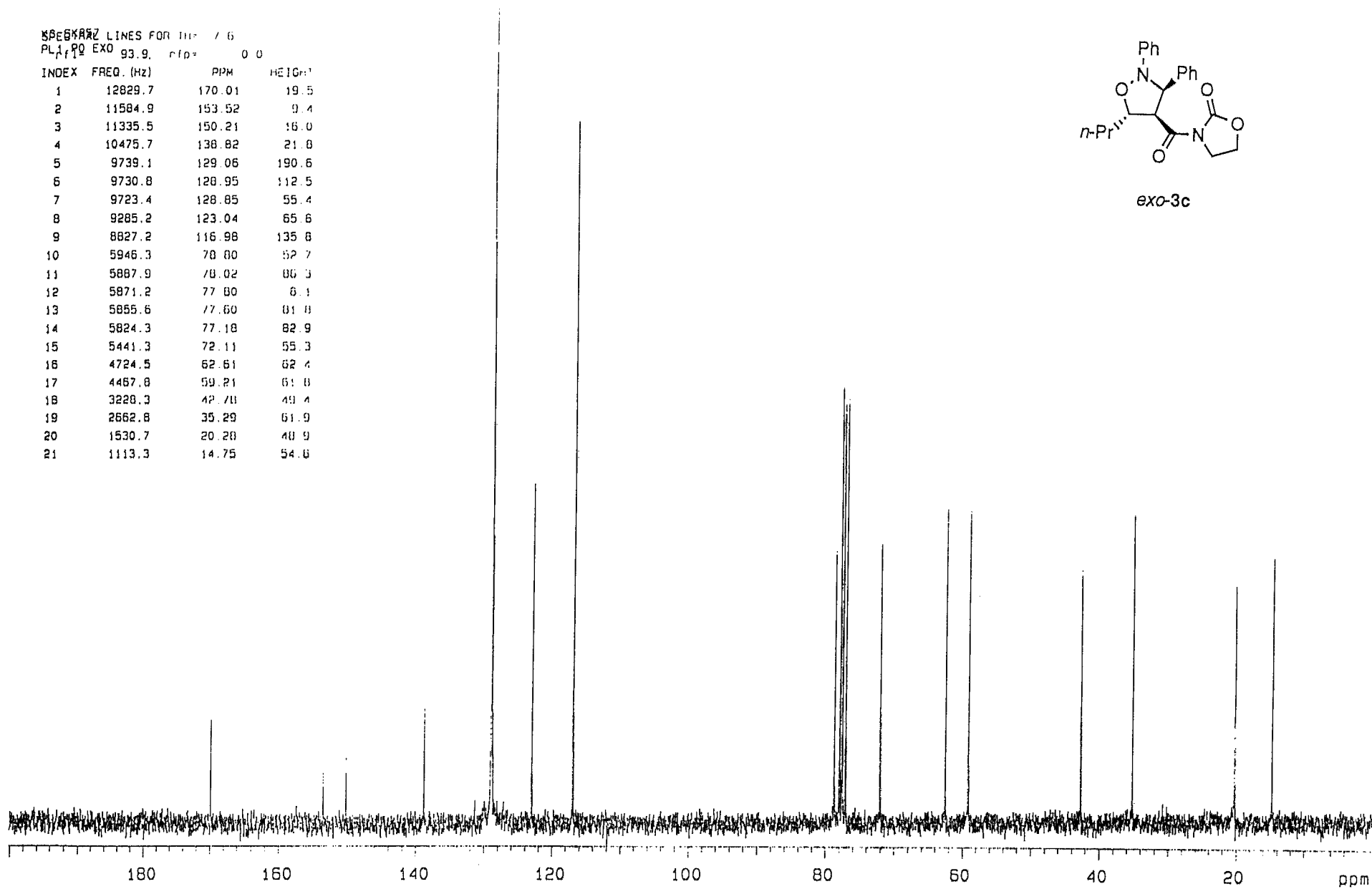
G 355-6

SPECTRAZ LINES FOR 1H- / 6
PL1, PQ EXO 93.9, r1p2 0 0

INDEX	FREQ. (Hz)	PPM	HEIGHT
1	12829.7	170.01	19.5
2	11584.9	153.52	9.4
3	11335.5	150.21	16.0
4	10475.7	138.82	21.0
5	9739.1	129.06	190.6
6	9730.8	128.95	112.5
7	9723.4	128.85	55.4
8	9285.2	123.04	65.6
9	8827.2	116.98	135.8
10	5946.3	78.80	52.7
11	5887.9	78.02	86.3
12	5871.2	77.80	6.1
13	5855.6	77.60	81.8
14	5824.3	77.18	82.9
15	5441.3	72.11	55.3
16	4724.5	62.61	62.4
17	4467.8	59.21	61.8
18	3228.3	42.78	49.4
19	2662.8	35.29	61.9
20	1530.7	20.28	48.9
21	1113.3	14.75	54.6

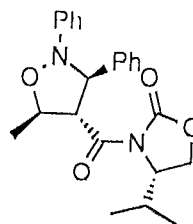


exo-3c



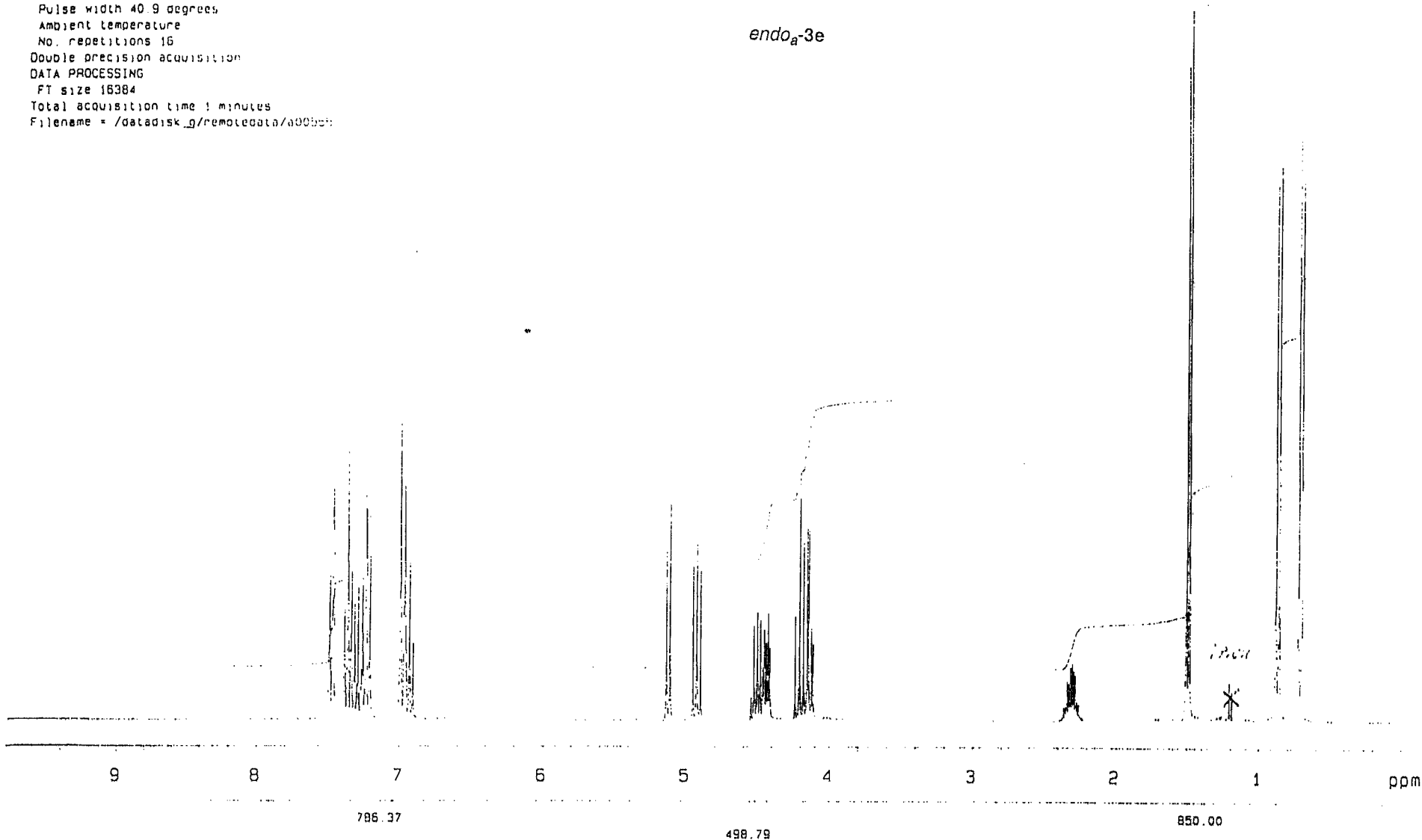
6355-7

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 Double precision acquisition
 DATA PROCESSING
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 Total acquisition time 1 minutes
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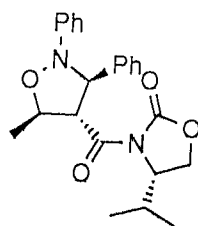


endo_a-3e

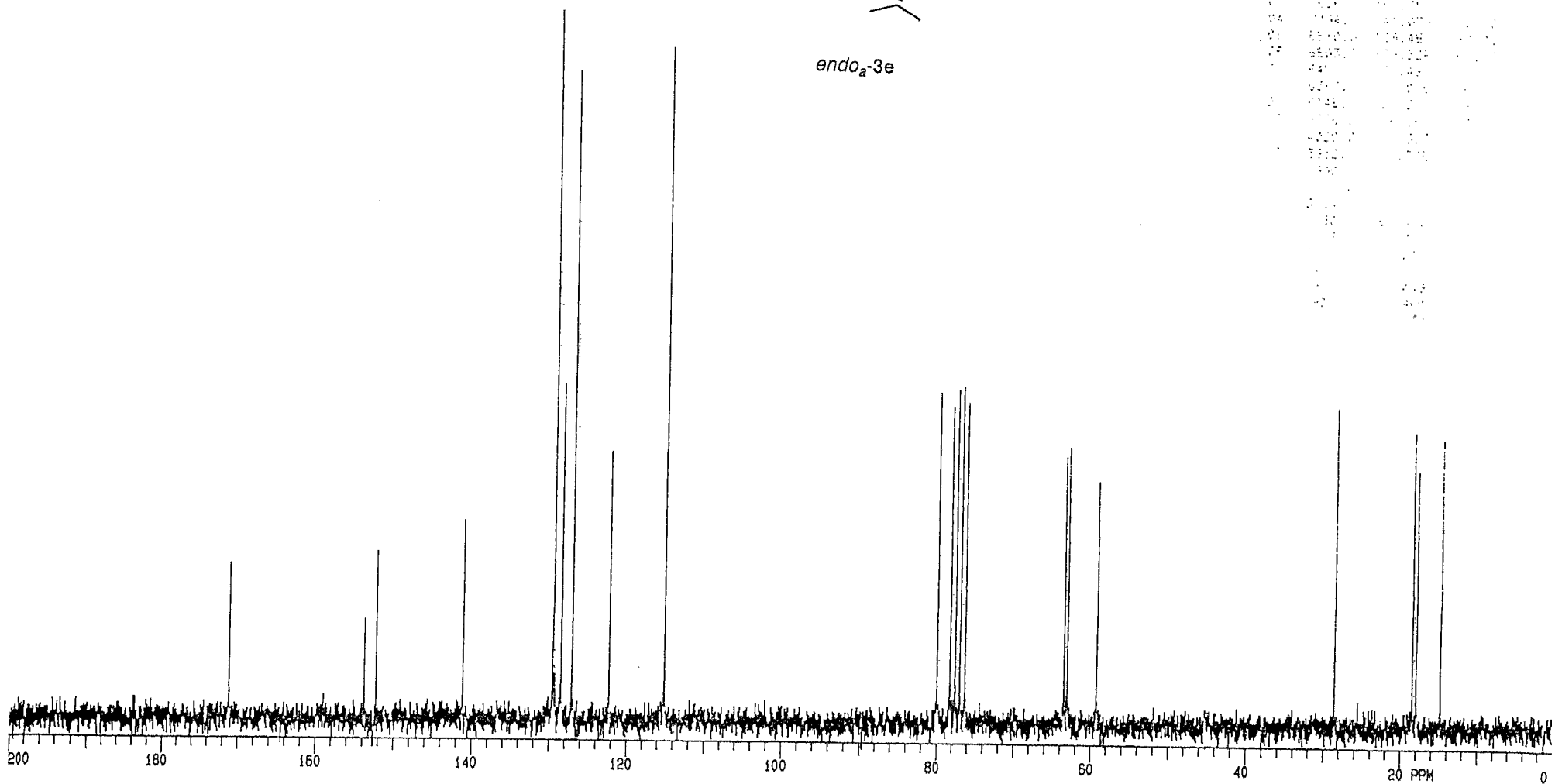
11 1 Hz/mm



61 355-8

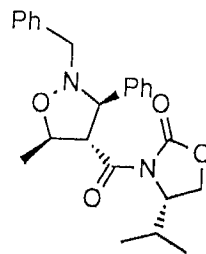


endo_a-3e

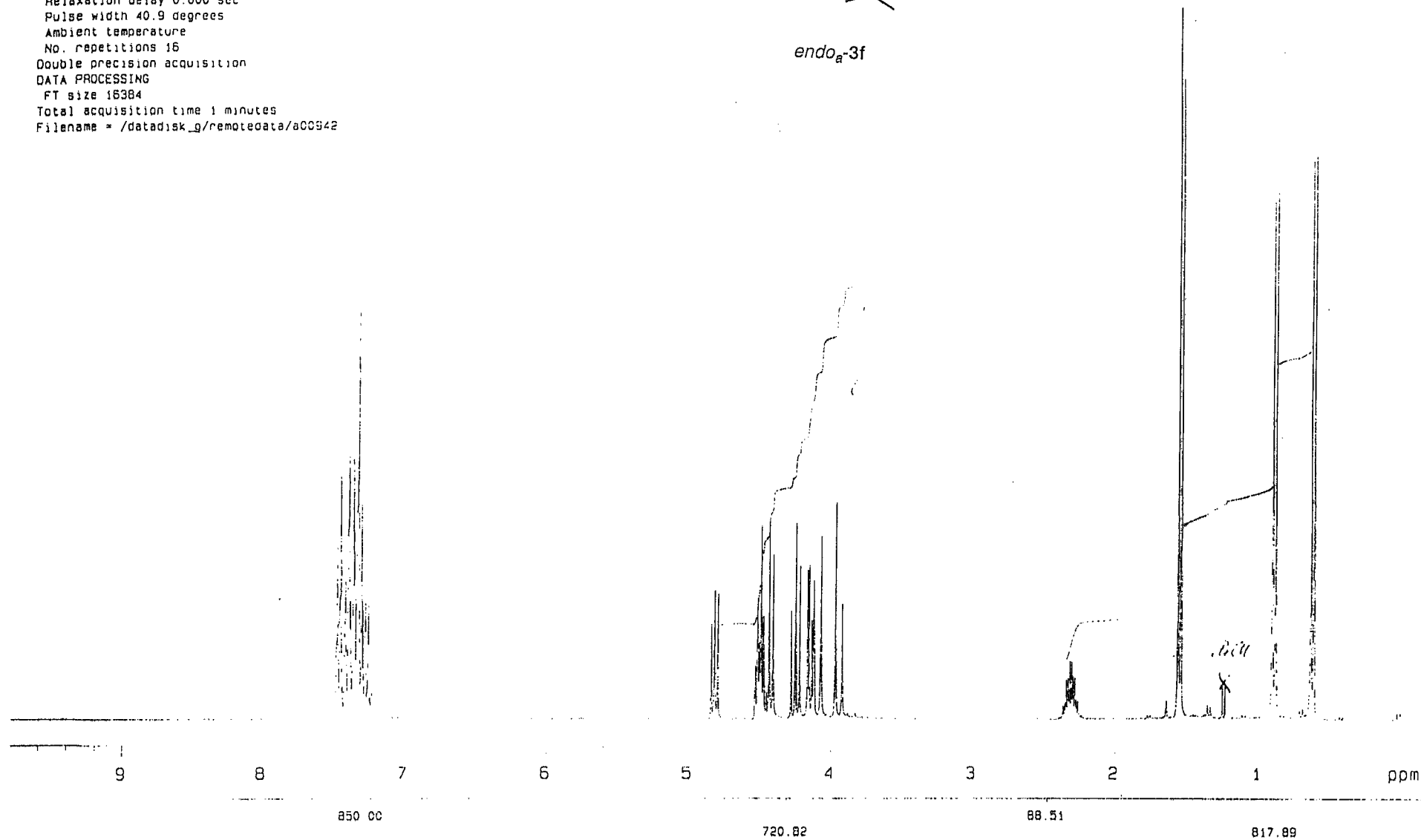


67355-9
4

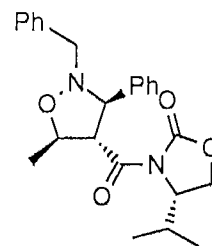
KG SK2308
 KRYSTALLER
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 Spectral width 4500.5 Hz
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 Relaxation delay 0.000 sec
 Pulse width 40.9 degrees
 Ambient temperature
 No. repetitions 16
 Double precision acquisition
 DATA PROCESSING
 FT size 16384
 Total acquisition time 1 minutes
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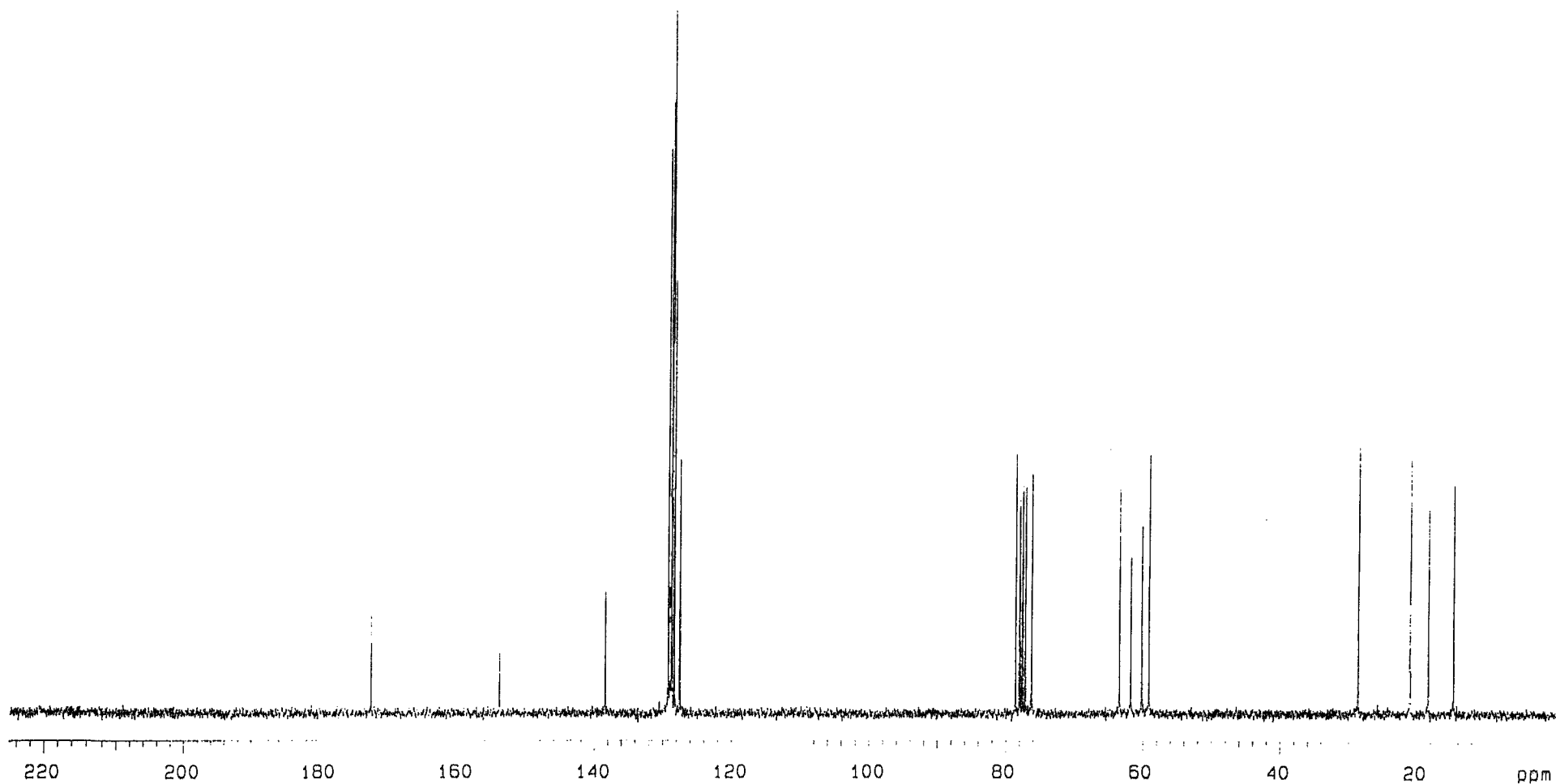
endo_a-3f



67 355-10



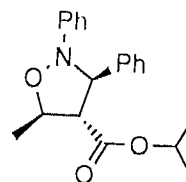
endo_a-3f



KG SK2308
KRYSTALLER

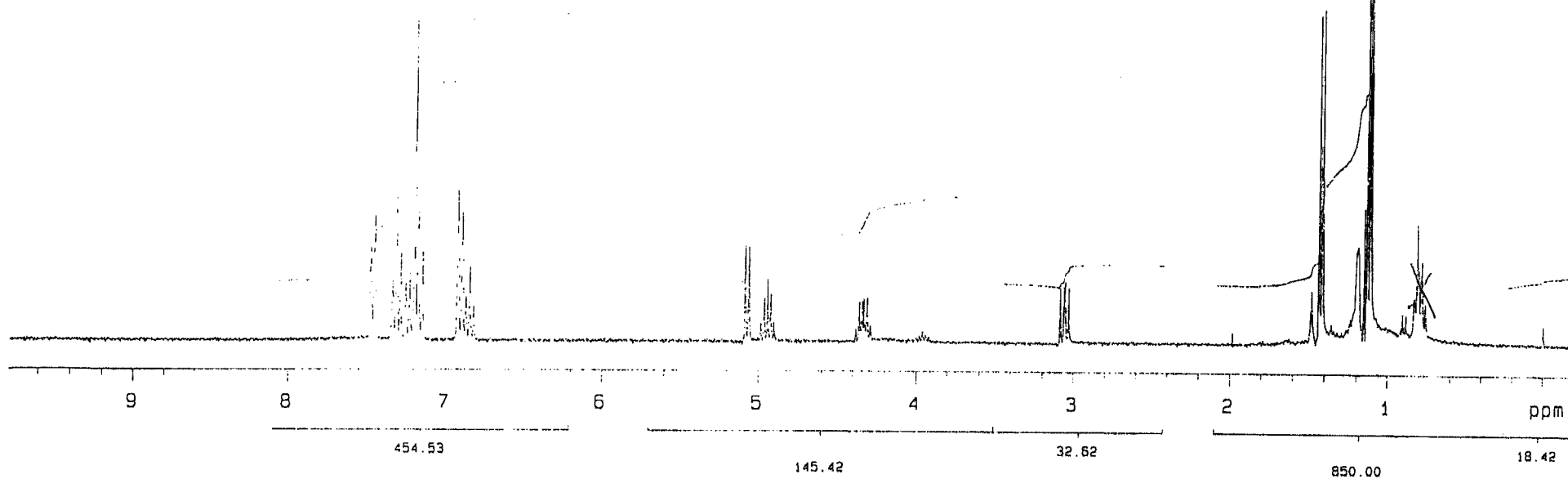
61 355-1

KG SK273 PL
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Double precision acquisition
DATA PROCESSING
FT size 16384
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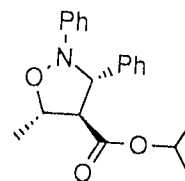
(+)-10

11 1 Hz/mm



6355-12

KG SK271
 PL
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 Relaxation delay 0.000 sec
 Pulse width 40.9 degrees
 Ambient temperature
 No. repetitions 16
 Double precision acquisition
 DATA PROCESSING
 FT size 16384
 Total acquisition time 1 minutes
 Filename = /datadisk_g/remotedata/a01499



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