

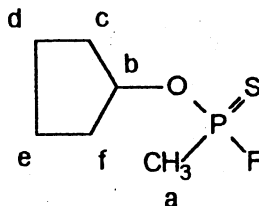
31P-NMR p1122c de-n
cyclopentylthiophosarin in ca 0.7ml CDCl3
214195126.006 Jrn.342;146/200

Solvent: CDCl3
Temp. 30.0 C / 303.1 K
User: pm1
File: p1122c
VXR-400S "palvvr"

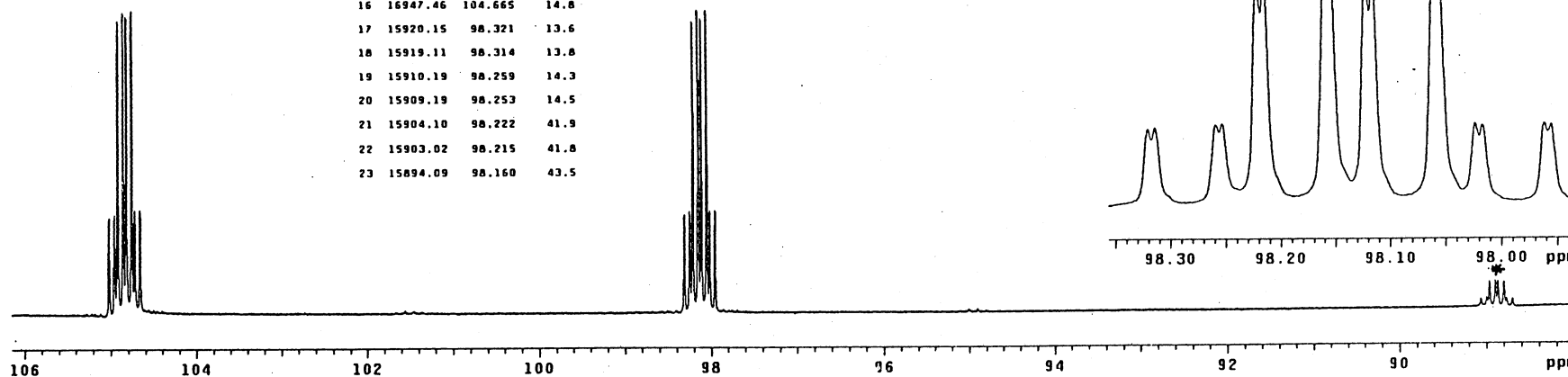
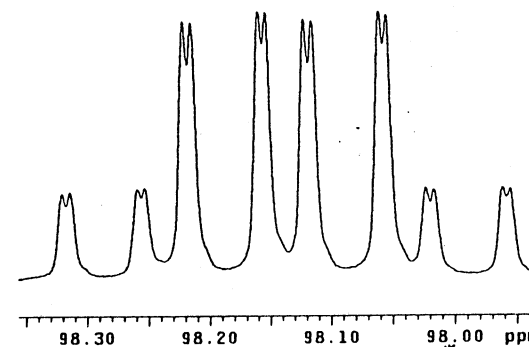
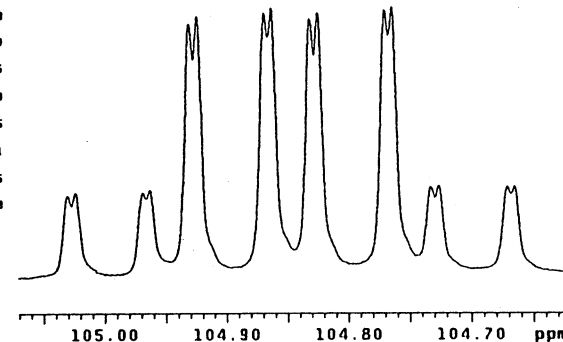
PULSE SEQUENCE
Relax. delay 1.000 sec
Pulse 50.0 degrees
Acq. time 5.545 sec
Width 2954.6 Hz
48 repetitions
OBSERVE P31, 161.9047057 MHz
DATA PROCESSING
Line broadening 0.1 Hz
FT size 131072
Total time 5 minutes

SPECTRAL LINES for th-12.0

nr	Hz	ppm	intensity
1	17006.65	105.031	13.2
2	17005.57	105.024	13.7
3	16996.60	104.969	13.7
4	16995.65	104.963	14.2
5	16990.56	104.932	40.9
6	16989.48	104.925	42.2
7	16980.55	104.870	42.8
8	16979.56	104.864	43.5
9	16974.46	104.832	41.8
10	16973.38	104.825	42.8
11	16964.50	104.771	43.2
12	16963.51	104.764	43.7
13	16958.41	104.733	14.7
14	16957.33	104.726	14.8
15	16948.40	104.671	14.7
16	16947.46	104.665	14.8
17	15920.15	98.321	13.6
18	15919.11	98.314	13.6
19	15910.19	98.259	14.3
20	15909.19	98.253	14.5
21	15904.10	98.222	41.9
22	15903.02	98.215	41.8
23	15894.09	98.160	43.5



nr	Hz	ppm	intensity
24	15893.10	98.154	43.4
25	15888.00	98.122	42.3
26	15886.92	98.116	42.0
27	15878.04	98.061	43.5
28	15877.05	98.055	43.0
29	15871.91	98.023	14.5
30	15870.92	98.017	14.1
31	15861.94	97.961	14.5
32	15860.95	97.955	14.3



Cyclopentyl methylthiophosphonofluoridate
CAS 4241-35-4

Nucleus : ³¹P
Frequency : 161.9 MHz
Concentration : ca. 154 mg/0.7 ml CDCl₃
Reference H₃PO₄ external. Res. : 2.4 Hz (104.9 ppm)
Instrument : Varian VXR 400S

Temperature : 30 °C
Spectral width : 2954.6 Hz
Data point (FID) : 32 K
Pulse angle : 10.4 μs (60°)
Number of pulses : 48
Repetition time : 6.5 s
Line broadening : 0.1 Hz
Data points (spec) : 128 K

P : 101.4 ppm
J(aP) : 16.1 Hz
J(PF) : 1086.5 Hz
J(bP) : 10.0 Hz
J(cP) : 1.0 Hz