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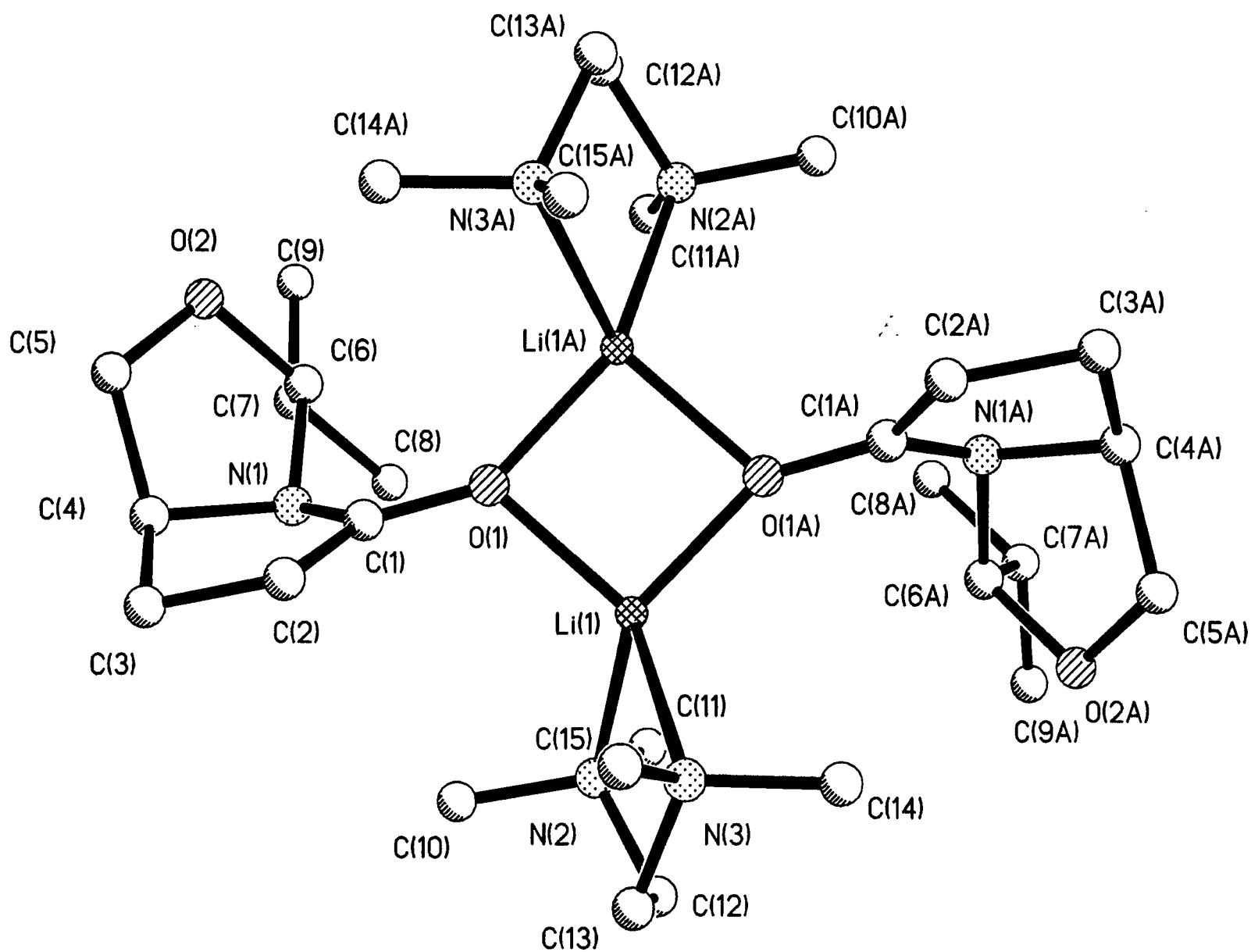
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Material for footnote:

X-ray diffraction data were recorded at approx. -35° C on a Siemens P4 diffractometer. The structure solved routinely with SHELX direct methods and was refined utilizing full matrix least squares on F^2 . Crystallographic parameters are summarized as follows: crystallization from ?? solution in the non-centrosymmetric, monoclinic space group C2 with unit cell parameters $a=18.849(4)$ Å, $b=8.893(3)$ Å, $c=11.076(3)$ Å and $\beta=105.54^\circ$. Of the 1330 reflections recorded, a total of 1260 independent reflections with $R_{int}=0.0146$ were utilized in refinement of 190 parameters. The final model resulted in the following statistical parameters: $GOOF=1.156$, $R(\text{all data}) 0.0485$ and $wR2(\text{all data}) 0.1382$.

Table 1. Crystal data and structure refinement for 1.

Identification code	csul
Empirical formula	$C_{15}H_{30}LiN_3O_2$
Formula weight	291.36
Temperature	293 (2) K
Wavelength	0.71073 Å
Crystal system	monoclinic
Space group	C2
Unit cell dimensions	$a = 18.849(4)$ Å $\alpha = 90^\circ$ $b = 8.893(3)$ Å $\beta = 105.54(3)^\circ$ $c = 11.076(3)$ Å $\gamma = 90^\circ$
Volume, Z	1788.7(9) Å ³ , 4
Density (calculated)	1.082 Mg/m ³
Absorption coefficient	0.071 mm ⁻¹
F(000)	640
Crystal size	? x ? x ? mm
θ range for data collection	2.24 to 22.53°
Limiting indices	$-20 \leq h \leq 19$, $0 \leq k \leq 9$, $0 \leq l \leq 11$
Reflections collected	1330
Independent reflections	1260 ($R_{int} = 0.0146$)
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	1260 / 1 / 190
Goodness-of-fit on F^2	1.156
Final R indices [$I > 2\sigma(I)$]	$R1 = 0.0438$, $wR2 = 0.1332$
R indices (all data)	$R1 = 0.0485$, $wR2 = 0.1382$
Absolute structure parameter	1(3)
Largest diff. peak and hole	0.172 and -0.192 eÅ ⁻³

Table 2. Atomic coordinates [$\times 10^4$] and equivalent isotropic displacement parameters [$\text{\AA}^2 \times 10^3$] for 1. $U(\text{eq})$ is defined as one third of the trace of the orthogonalized U_{ij} tensor.

	x	y	z	U(eq)
O(1)	578(1)	196(4)	6066(2)	31(1)
O(2)	1154(2)	-735(5)	9497(3)	45(1)
N(1)	1548(2)	-732(5)	7691(3)	30(1)
N(2)	1285(2)	-970(5)	3819(3)	35(1)
N(3)	725(2)	2000(5)	3044(4)	34(1)
C(1)	1206(2)	475(6)	6867(4)	30(1)
C(2)	1640(3)	1689(6)	7045(4)	39(1)
C(3)	2331(3)	1405(8)	8049(5)	52(2)
C(4)	2132(2)	8(7)	8703(4)	41(1)
C(5)	1742(2)	296(8)	9684(4)	47(1)
C(6)	1097(2)	-1529(6)	8349(4)	32(1)
C(7)	1321(3)	-3141(6)	8625(5)	44(1)
C(8)	1258(4)	-4006(8)	7415(6)	64(2)
C(9)	877(3)	-3901(8)	9389(6)	63(2)
C(10)	1969(3)	-996(9)	4834(5)	54(2)
C(11)	1046(3)	-2530(7)	3583(6)	56(2)
C(12)	1407(3)	-257(7)	2711(5)	48(2)
C(13)	1412(3)	1429(7)	2835(6)	48(1)
C(14)	134(3)	2021(7)	1871(5)	53(2)
C(15)	828(4)	3518(7)	3544(6)	60(2)
Li(1)	448(4)	361(9)	4291(6)	30(2)

Table 3. Bond lengths [Å] and angles [°] for 1.

O(1) - C(1)	1.300 (5)	O(1) - Li(1) #1	1.873 (7)
O(1) - Li(1)	1.920 (7)	O(2) - C(5)	1.411 (6)
O(2) - C(6)	1.434 (6)	N(1) - C(6)	1.445 (6)
N(1) - C(1)	1.443 (6)	N(1) - C(4)	1.497 (6)
N(2) - C(12)	1.453 (7)	N(2) - C(11)	1.460 (8)
N(2) - C(10)	1.466 (6)	N(2) - Li(1)	2.146 (8)
N(3) - C(15)	1.452 (7)	N(3) - C(13)	1.465 (7)
N(3) - C(14)	1.468 (6)	N(3) - Li(1)	2.166 (8)
C(1) - C(2)	1.337 (7)	C(2) - C(3)	1.490 (7)
C(3) - C(4)	1.534 (8)	C(4) - C(5)	1.488 (7)
C(6) - C(7)	1.503 (7)	C(7) - C(9)	1.501 (8)
C(7) - C(8)	1.523 (8)	C(12) - C(13)	1.505 (9)
Li(1) - O(1) #1	1.873 (7)	Li(1) - Li(1) #1	2.597 (13)
C(1) - O(1) - Li(1) #1	146.0 (3)	C(1) - O(1) - Li(1)	121.9 (3)
Li(1) #1 - O(1) - Li(1)	86.4 (3)	C(5) - O(2) - C(6)	108.6 (3)
C(6) - N(1) - C(1)	117.5 (3)	C(6) - N(1) - C(4)	104.6 (3)
C(1) - N(1) - C(4)	105.1 (4)	C(12) - N(2) - C(11)	112.0 (4)
C(12) - N(2) - C(10)	110.4 (4)	C(11) - N(2) - C(10)	106.8 (5)
C(12) - N(2) - Li(1)	104.9 (4)	C(11) - N(2) - Li(1)	110.8 (4)
C(10) - N(2) - Li(1)	112.0 (3)	C(15) - N(3) - C(13)	110.4 (5)
C(15) - N(3) - C(14)	108.5 (4)	C(13) - N(3) - C(14)	111.0 (4)
C(15) - N(3) - Li(1)	114.4 (4)	C(13) - N(3) - Li(1)	104.0 (4)
C(14) - N(3) - Li(1)	108.5 (4)	O(1) - C(1) - C(2)	131.6 (5)
O(1) - C(1) - N(1)	117.4 (4)	C(2) - C(1) - N(1)	110.9 (4)
C(1) - C(2) - C(3)	110.5 (5)	C(2) - C(3) - C(4)	102.4 (4)
N(1) - C(4) - C(5)	102.4 (3)	N(1) - C(4) - C(3)	103.1 (3)
C(5) - C(4) - C(3)	115.8 (5)	O(2) - C(5) - C(4)	107.7 (4)
O(2) - C(6) - N(1)	107.0 (4)	O(2) - C(6) - C(7)	109.8 (4)
N(1) - C(6) - C(7)	113.6 (4)	C(6) - C(7) - C(9)	112.1 (5)
C(6) - C(7) - C(8)	110.6 (4)	C(9) - C(7) - C(8)	110.2 (5)
N(2) - C(12) - C(13)	110.9 (5)	N(3) - C(13) - C(12)	112.1 (5)
O(1) #1 - Li(1) - O(1)	92.9 (3)	O(1) #1 - Li(1) - N(2)	133.7 (4)
O(1) - Li(1) - N(2)	107.9 (3)	O(1) #1 - Li(1) - N(3)	109.3 (3)
O(1) - Li(1) - N(3)	135.9 (4)	N(2) - Li(1) - N(3)	84.1 (3)
O(1) #1 - Li(1) - Li(1) #1	47.6 (2)	O(1) - Li(1) - Li(1) #1	46.0 (2)
N(2) - Li(1) - Li(1) #1	141.9 (3)	N(3) - Li(1) - Li(1) #1	133.8 (3)

Symmetry transformations used to generate equivalent atoms:

#1 -x,y,-z+1

Table 4. Anisotropic displacement parameters [$\text{\AA}^2 \times 10^3$] for 1.

The anisotropic displacement factor exponent takes the form:

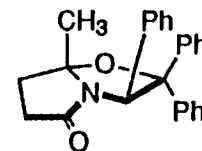
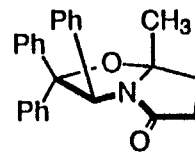
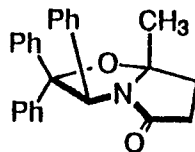
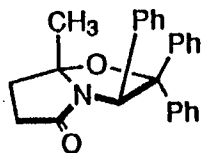
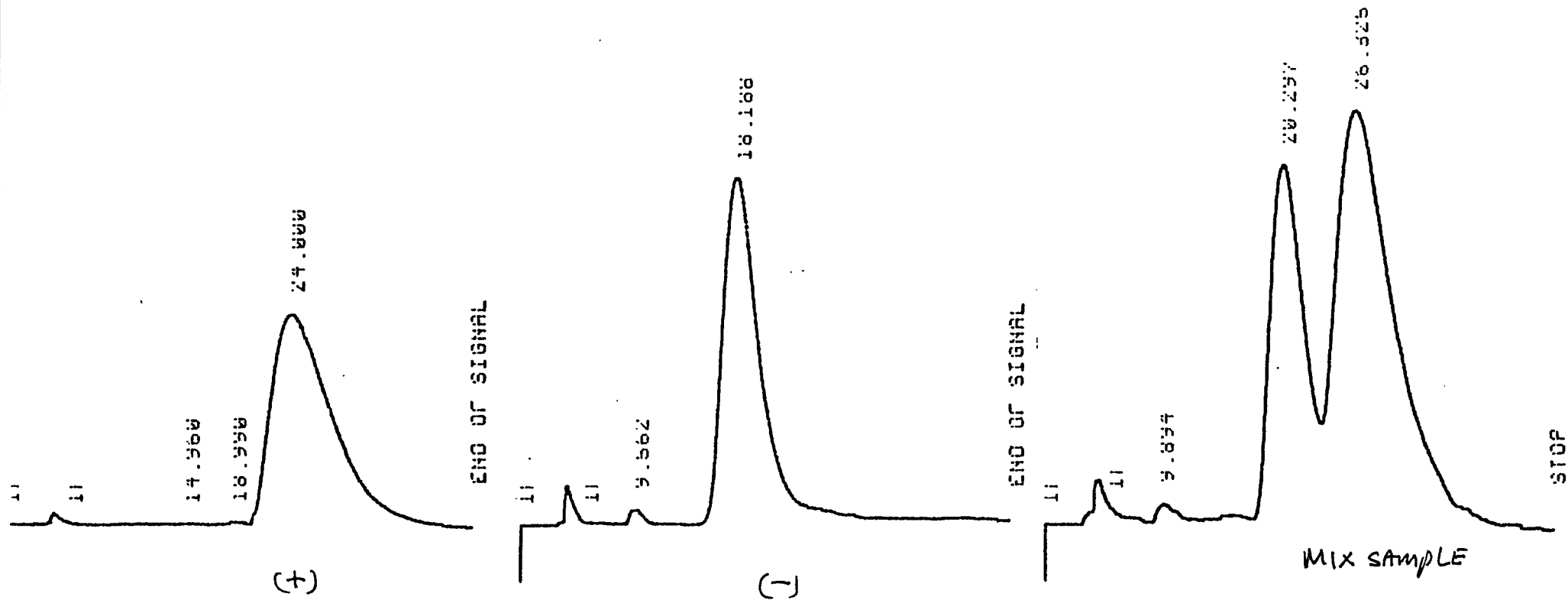
$$-2\pi^2 [(h a^*)^2 U_{11} + \dots + 2 h k a^* b^* U_{12}]$$

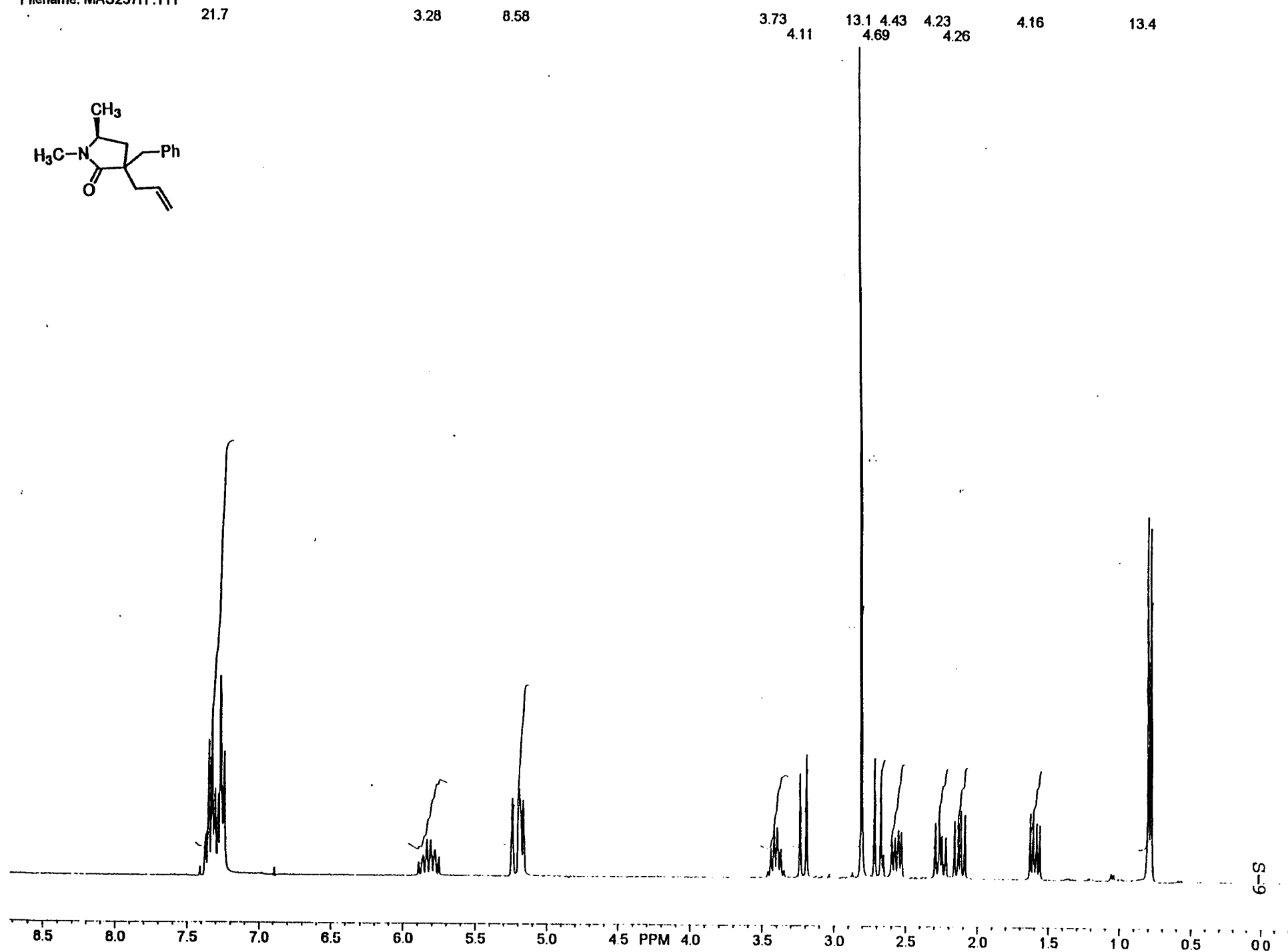
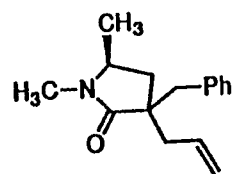
	U11	U22	U33	U23	U13	U12
O(1)	22(2)	48(2)	17(1)	-2(2)	-2(1)	2(2)
O(2)	39(2)	59(3)	39(2)	-6(2)	13(2)	-15(2)
N(1)	22(2)	48(3)	13(2)	3(2)	-3(2)	-3(2)
N(2)	36(2)	40(3)	31(2)	-4(2)	13(2)	4(2)
N(3)	34(2)	34(2)	33(2)	2(2)	6(2)	-2(2)
C(1)	31(2)	41(3)	19(2)	-1(2)	8(2)	1(2)
C(2)	47(3)	45(3)	24(2)	1(2)	8(2)	-10(3)
C(3)	48(3)	74(4)	30(3)	-1(3)	5(2)	-29(3)
C(4)	25(2)	67(4)	25(2)	6(3)	-3(2)	-11(3)
C(5)	36(3)	63(4)	35(3)	2(3)	-1(2)	-18(3)
C(6)	23(2)	43(3)	29(2)	1(2)	2(2)	-4(2)
C(7)	35(3)	46(3)	44(3)	13(3)	0(2)	0(2)
C(8)	81(4)	44(4)	62(4)	-3(3)	10(3)	5(3)
C(9)	46(3)	55(4)	77(4)	27(3)	-3(3)	-9(3)
C(10)	40(3)	76(4)	45(3)	-1(3)	8(2)	15(3)
C(11)	49(4)	50(4)	74(4)	1(3)	24(3)	3(3)
C(12)	55(3)	57(4)	41(3)	4(3)	27(3)	12(3)
C(13)	47(3)	52(4)	53(3)	12(3)	26(3)	0(3)
C(14)	51(3)	65(4)	36(3)	13(3)	2(3)	-5(3)
C(15)	66(4)	45(4)	62(4)	0(3)	7(3)	6(3)
Li(1)	27(3)	33(4)	29(4)	1(4)	6(3)	2(4)

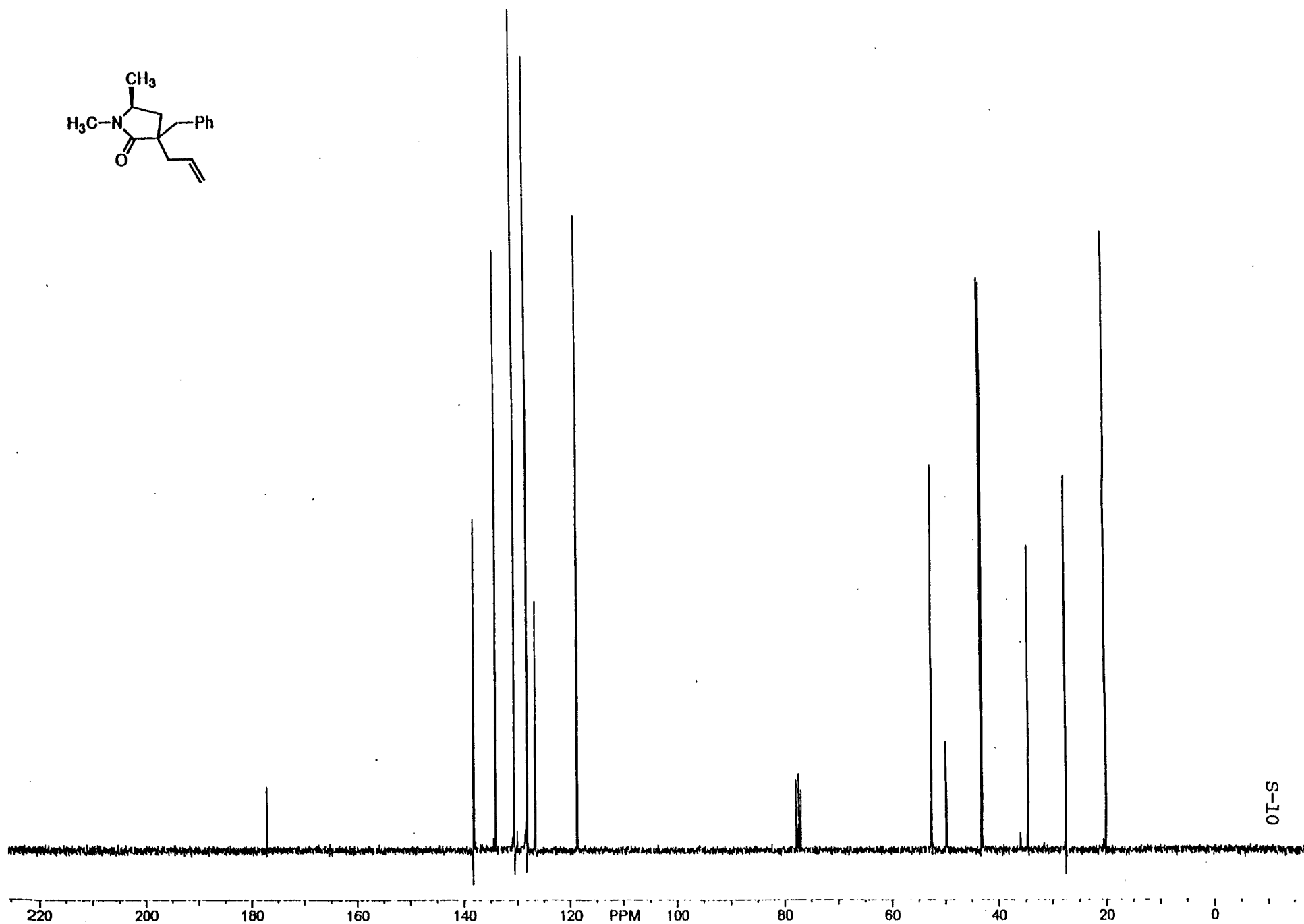
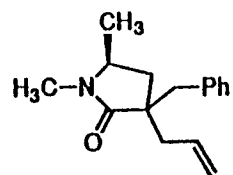
Table 5. Hydrogen coordinates ($\times 10^4$) and isotropic displacement parameters ($\text{\AA}^2 \times 10^3$) for 1.

	x	y	z	U(eq)
H(2)	1526(3)	2586(6)	6604(4)	44
H(3A)	2452(3)	2249(8)	8622(5)	67
H(3B)	2741(3)	1207(8)	7699(5)	67
H(4)	2559(2)	-653(7)	9011(4)	53
H(5A)	2077(2)	161(8)	10511(4)	61
H(5B)	1557(2)	1319(8)	9618(4)	61
H(6)	584(2)	-1500(6)	7843(4)	45
H(7)	1839(3)	-3155(6)	9111(5)	52
H(8A)	1402(4)	-5032(8)	7608(6)	80
H(8B)	1574(4)	-3556(8)	6965(6)	80
H(8C)	757(4)	-3975(8)	6908(6)	80
H(9A)	1036(3)	-4925(8)	9544(6)	80
H(9B)	366(3)	-3880(8)	8939(6)	80
H(9C)	946(3)	-3384(8)	10173(6)	80
H(10A)	1881(3)	-1471(9)	5558(5)	75
H(10B)	2137(3)	15(9)	5040(5)	75
H(10C)	2338(3)	-1548(9)	4568(5)	75
H(11A)	971(3)	-2960(7)	4335(6)	73
H(11B)	1416(3)	-3093(7)	3329(6)	73
H(11C)	593(3)	-2562(7)	2931(6)	73
H(12A)	1021(3)	-555(7)	1980(5)	63
H(12B)	1874(3)	-590(7)	2595(5)	63
H(13A)	1821(3)	1727(7)	3531(6)	59
H(13B)	1484(3)	1876(7)	2079(6)	59
H(14A)	59(3)	1024(7)	1529(5)	70
H(14B)	268(3)	2681(7)	1282(5)	70
H(14C)	-313(3)	2373(7)	2035(5)	70
H(15A)	374(4)	3876(7)	3675(6)	73
H(15B)	975(4)	4164(7)	2960(6)	73
H(15C)	1203(4)	3516(7)	4326(6)	73

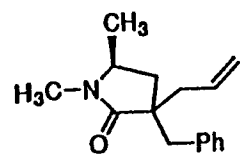
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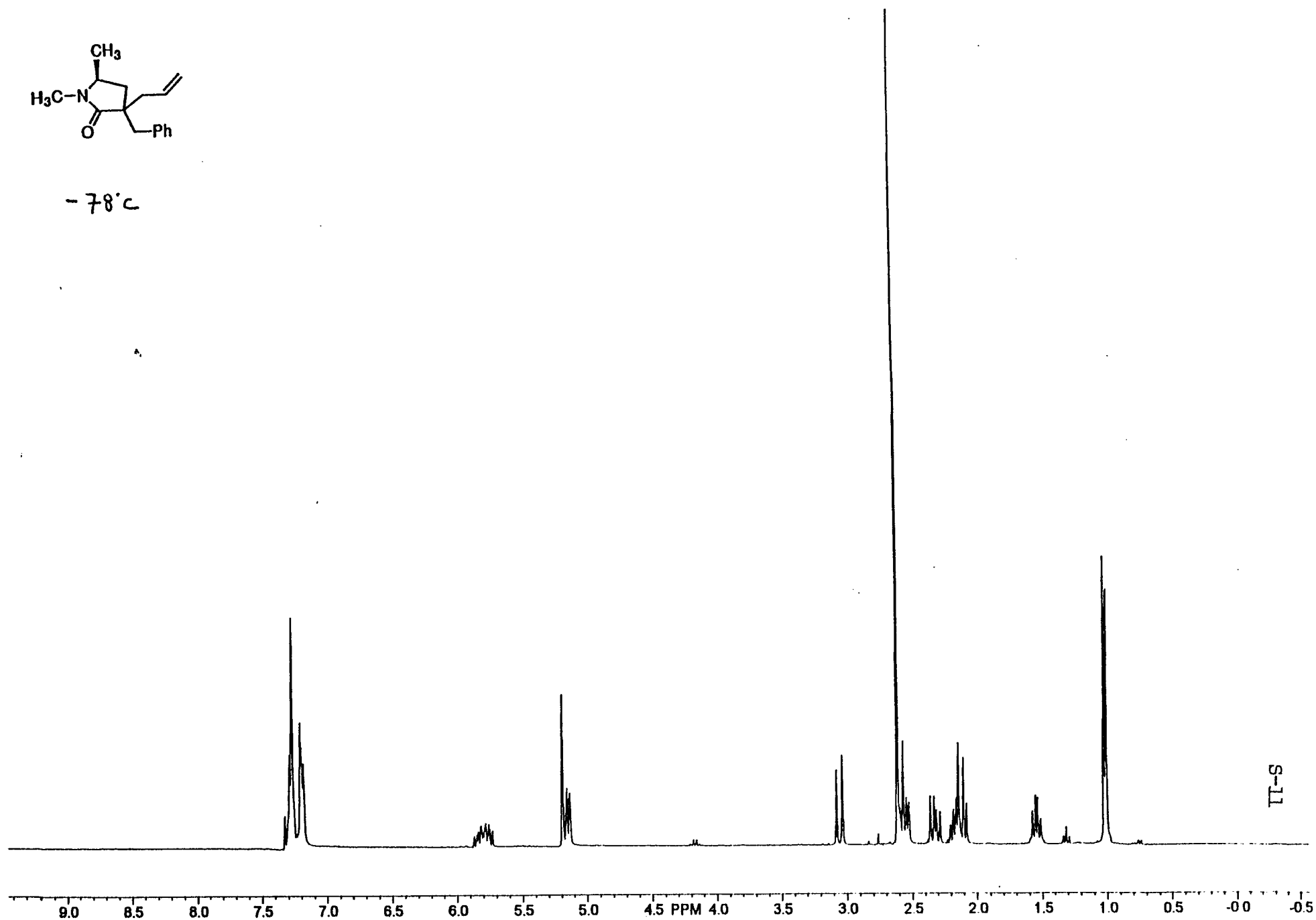




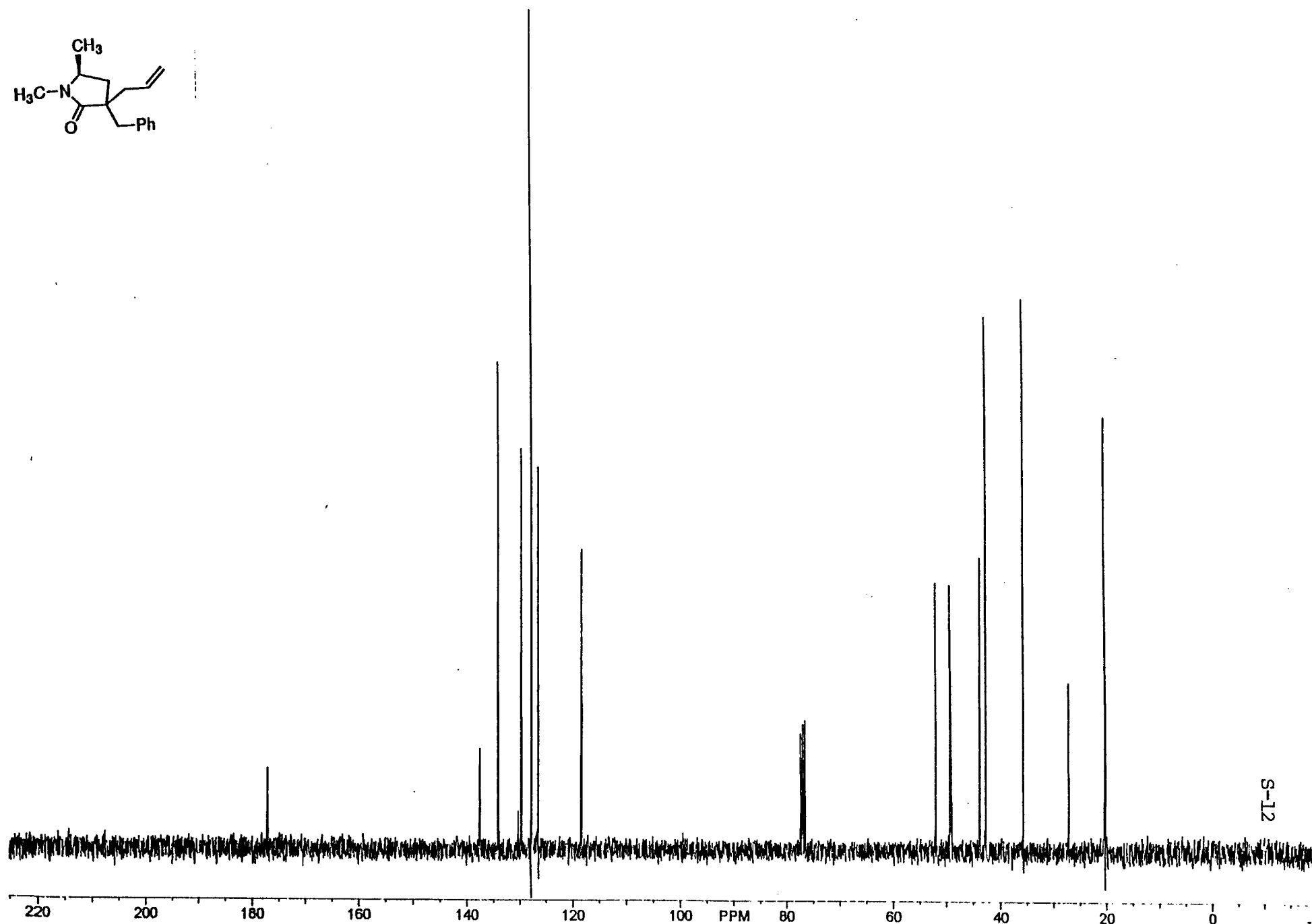
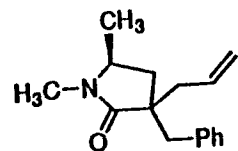
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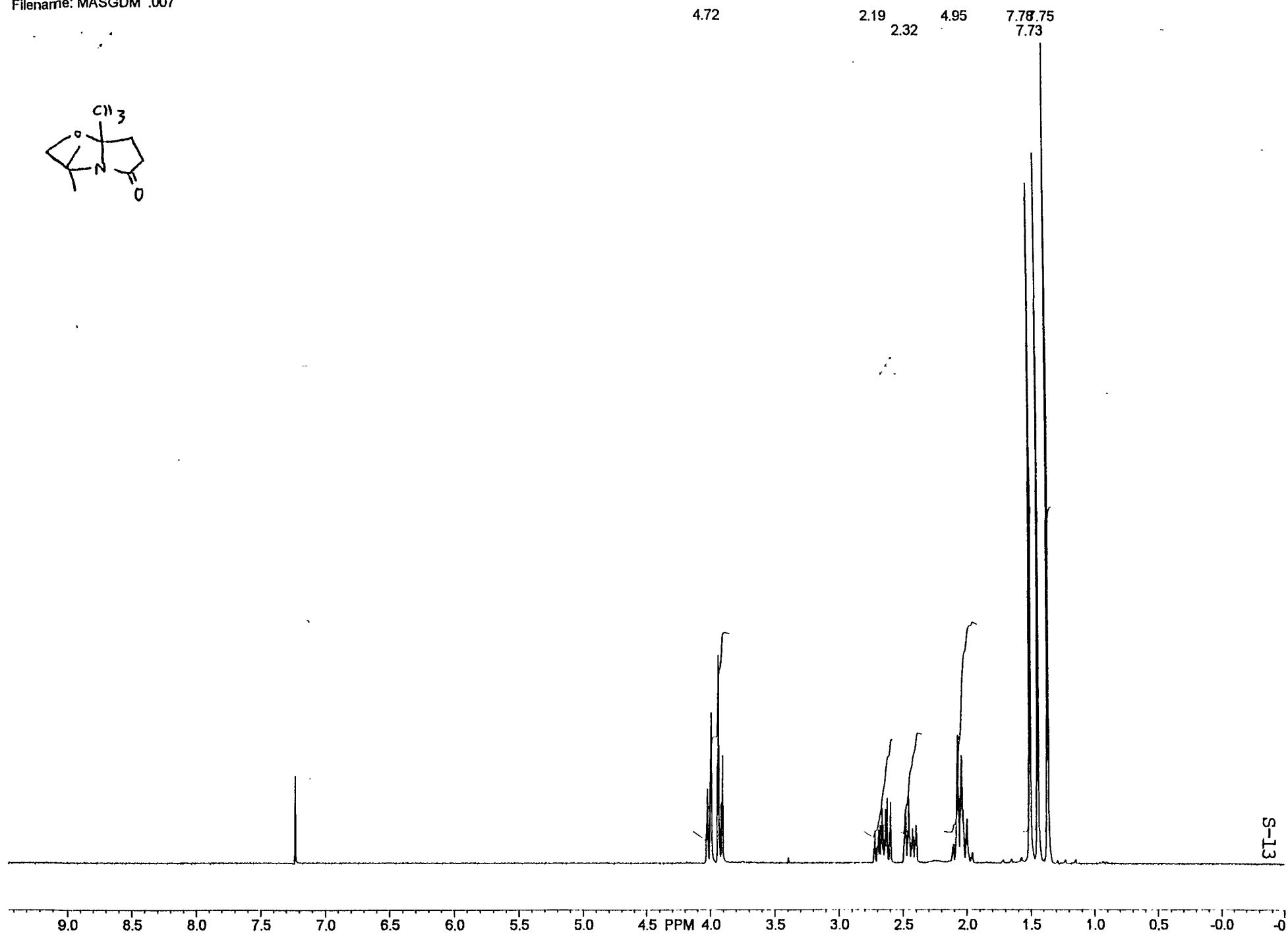
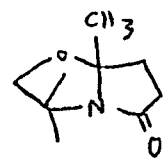


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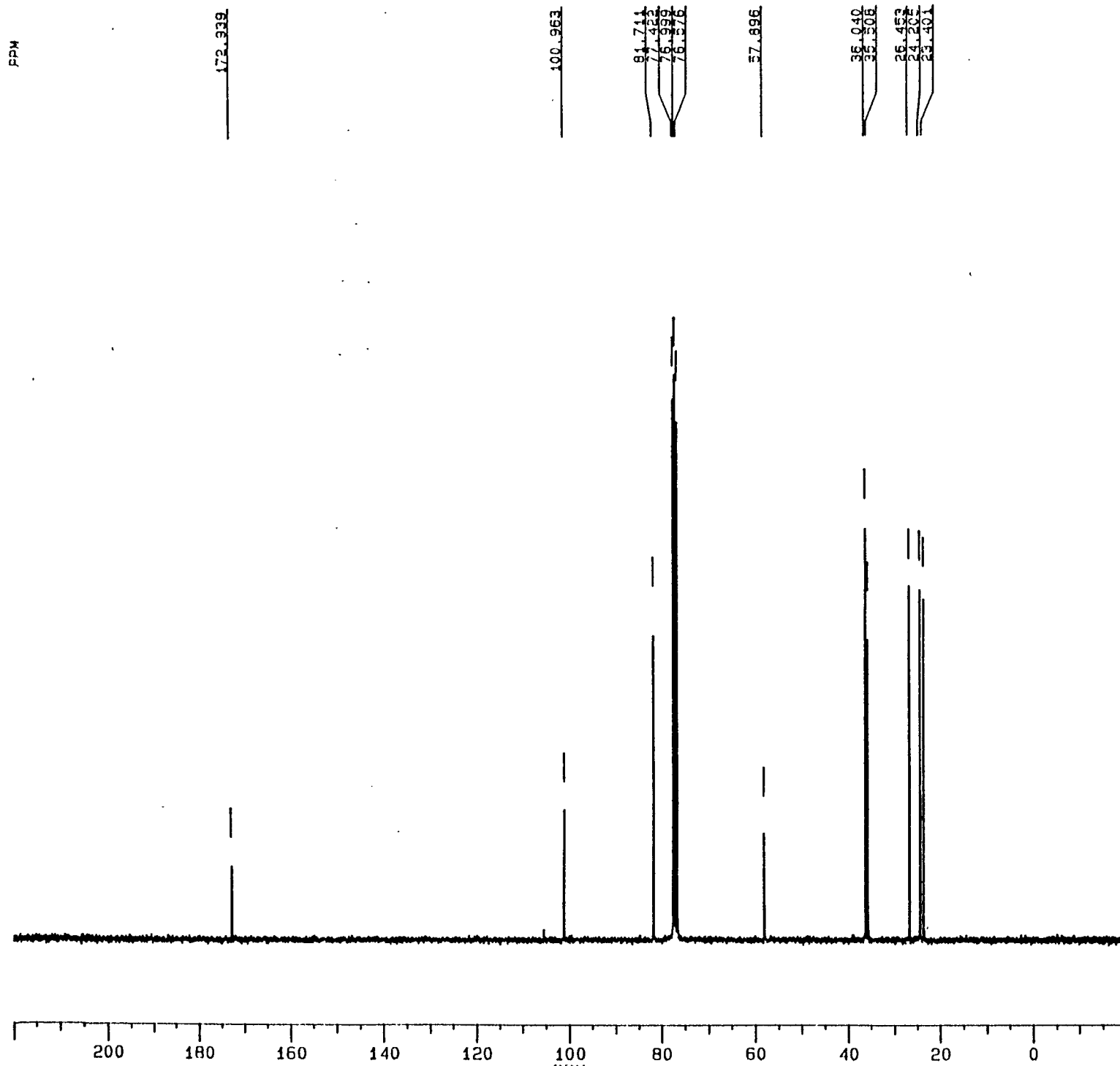


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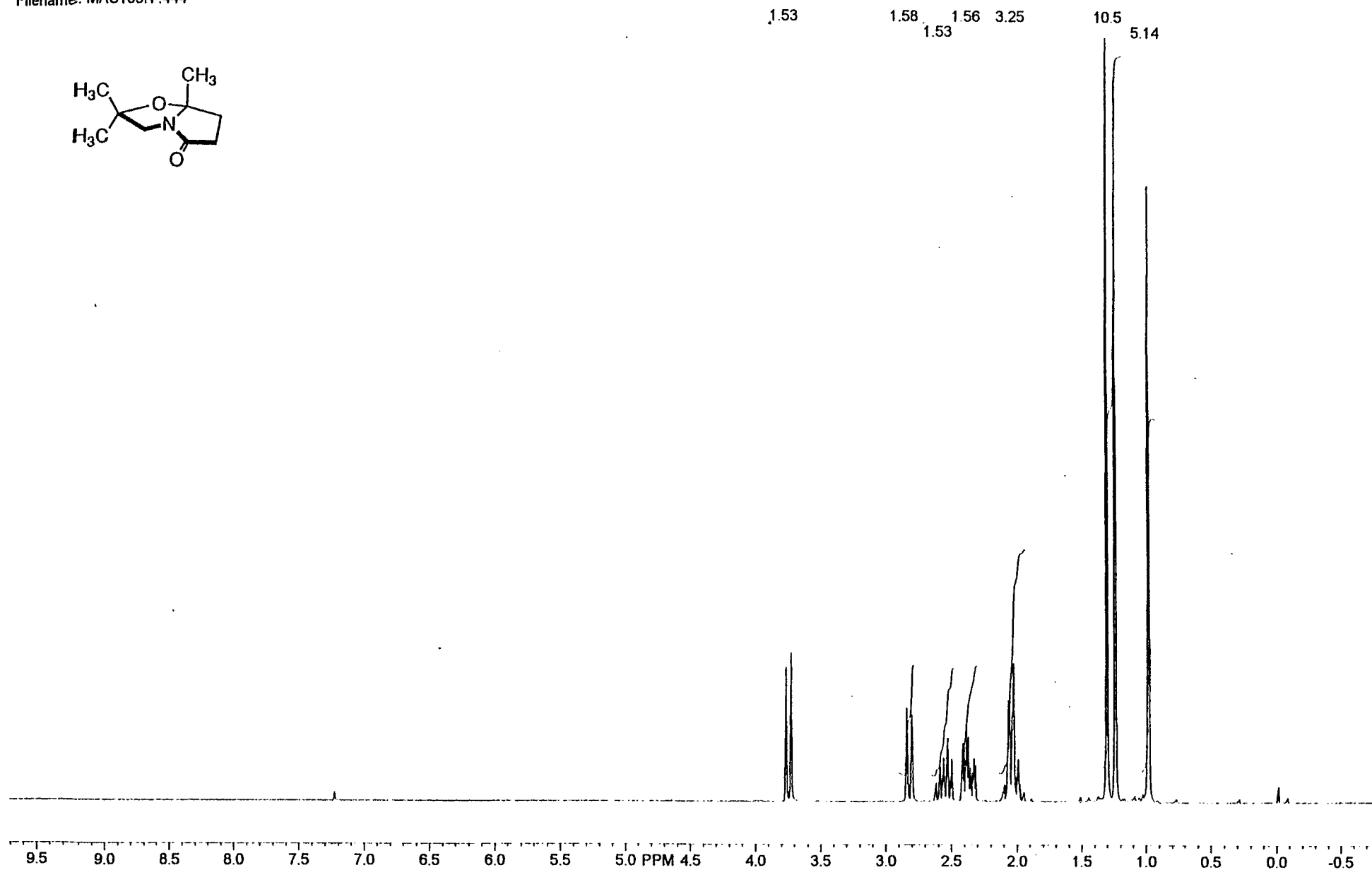
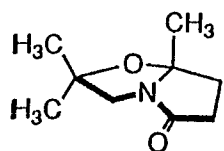
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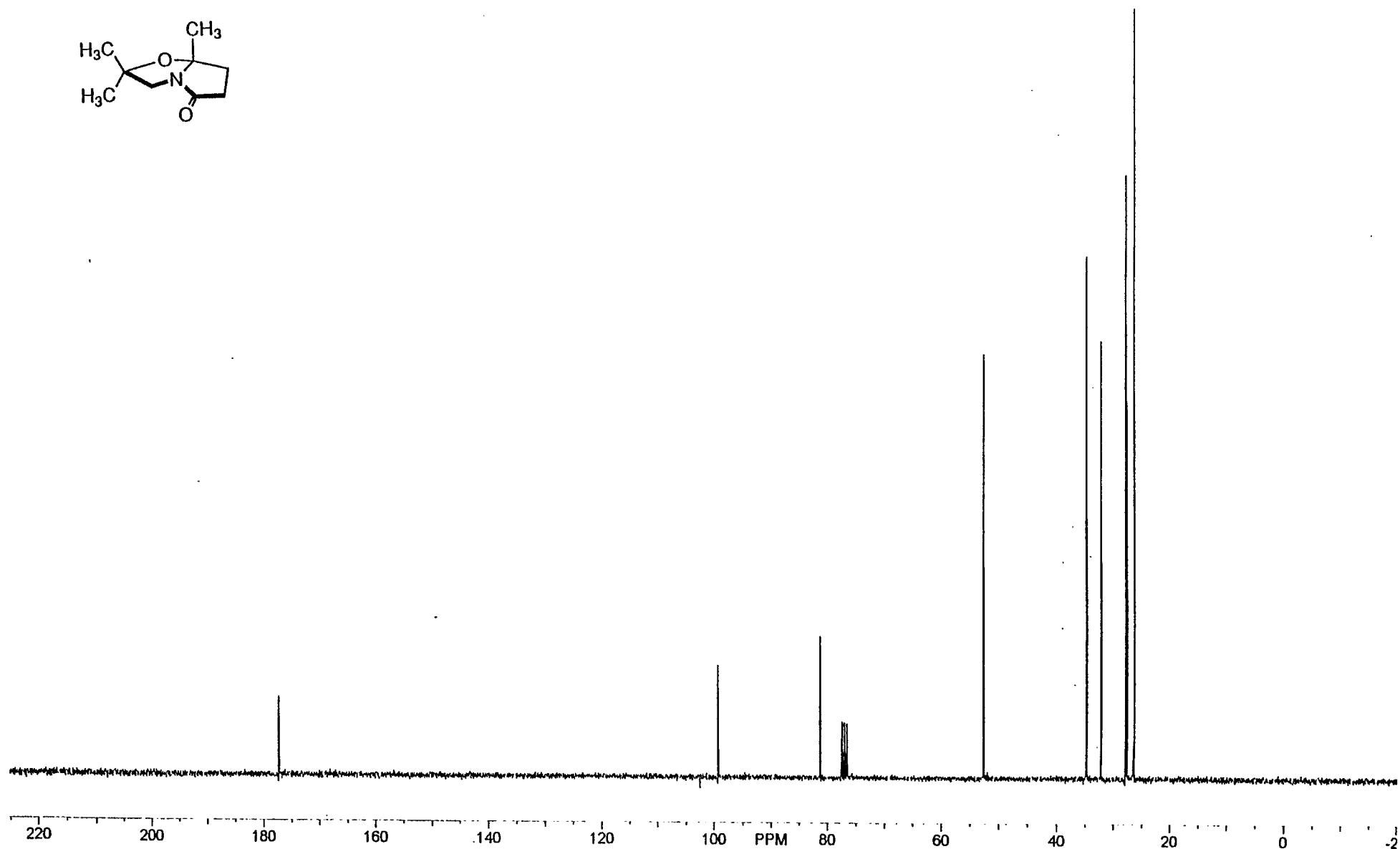
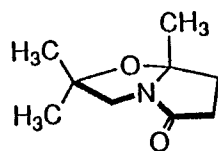
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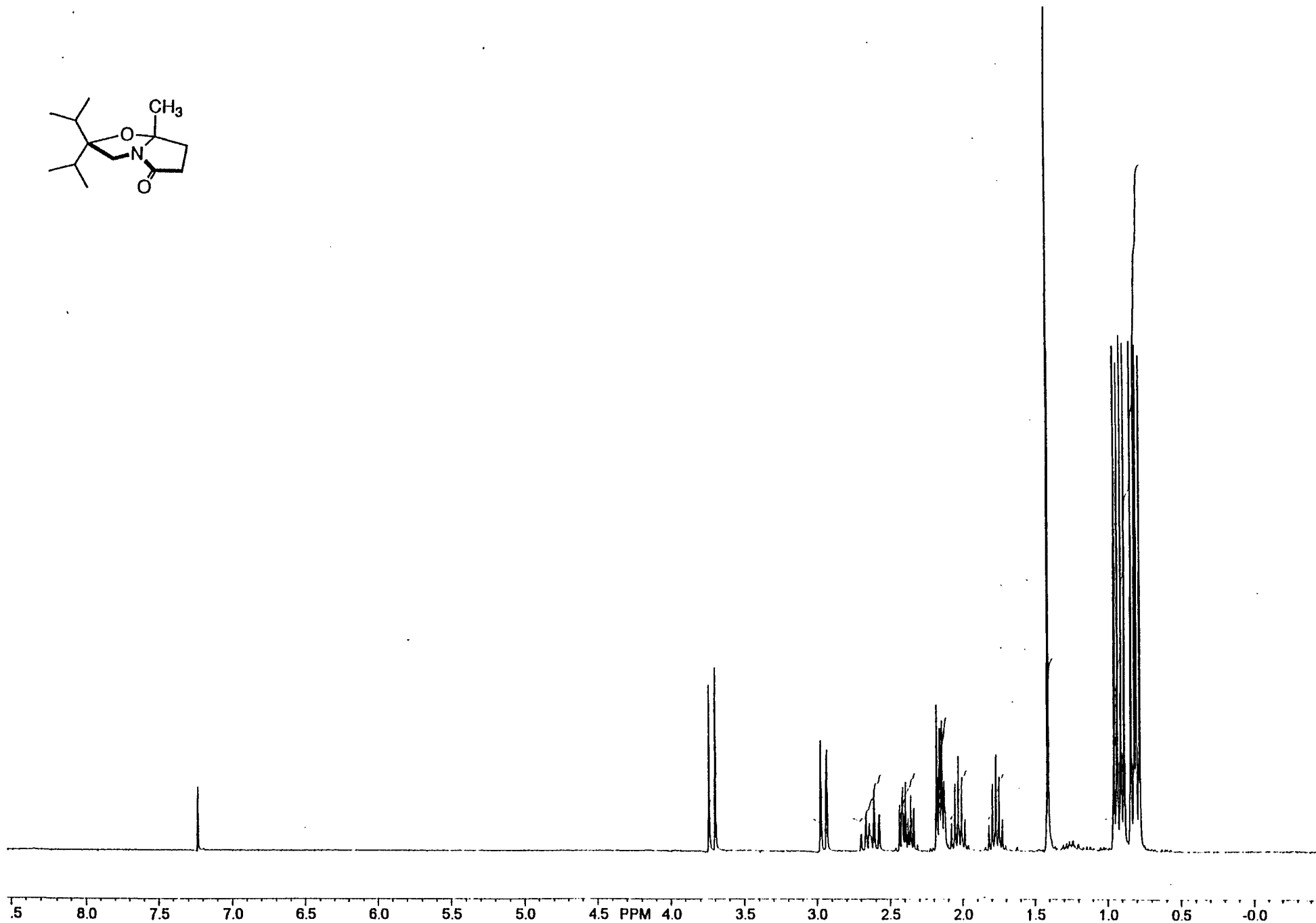
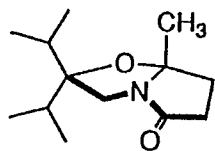
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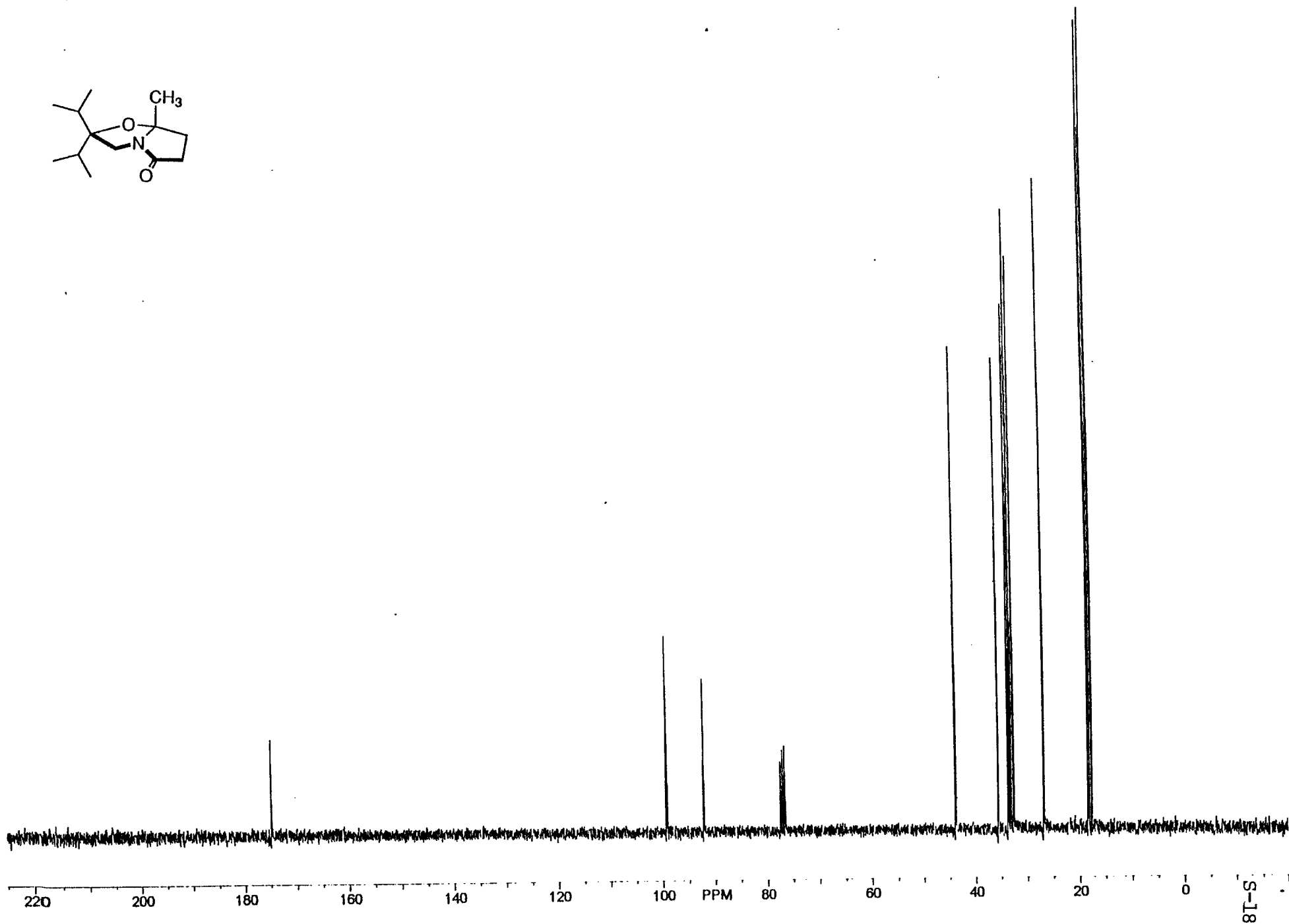
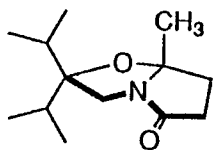


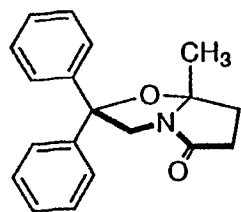
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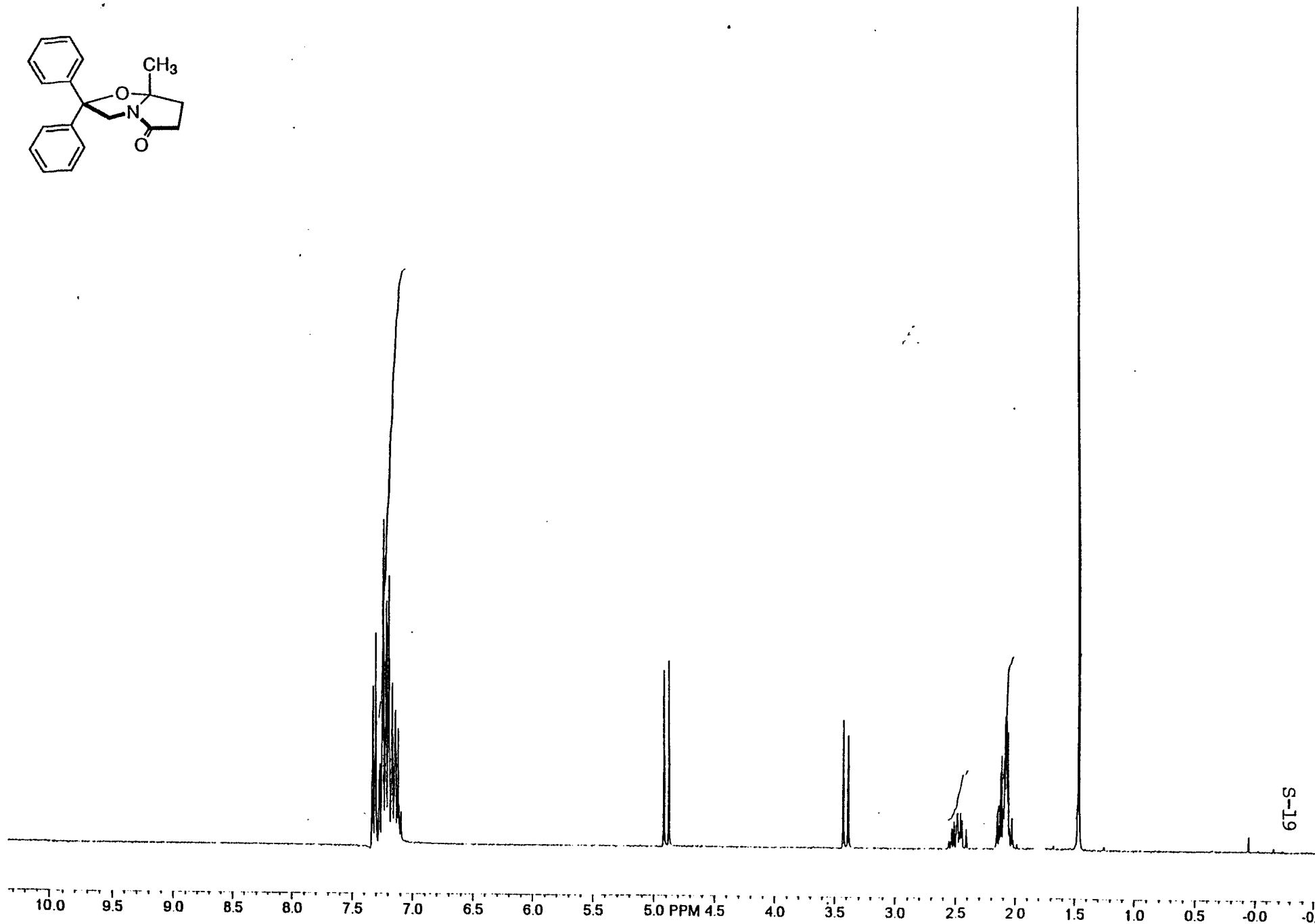
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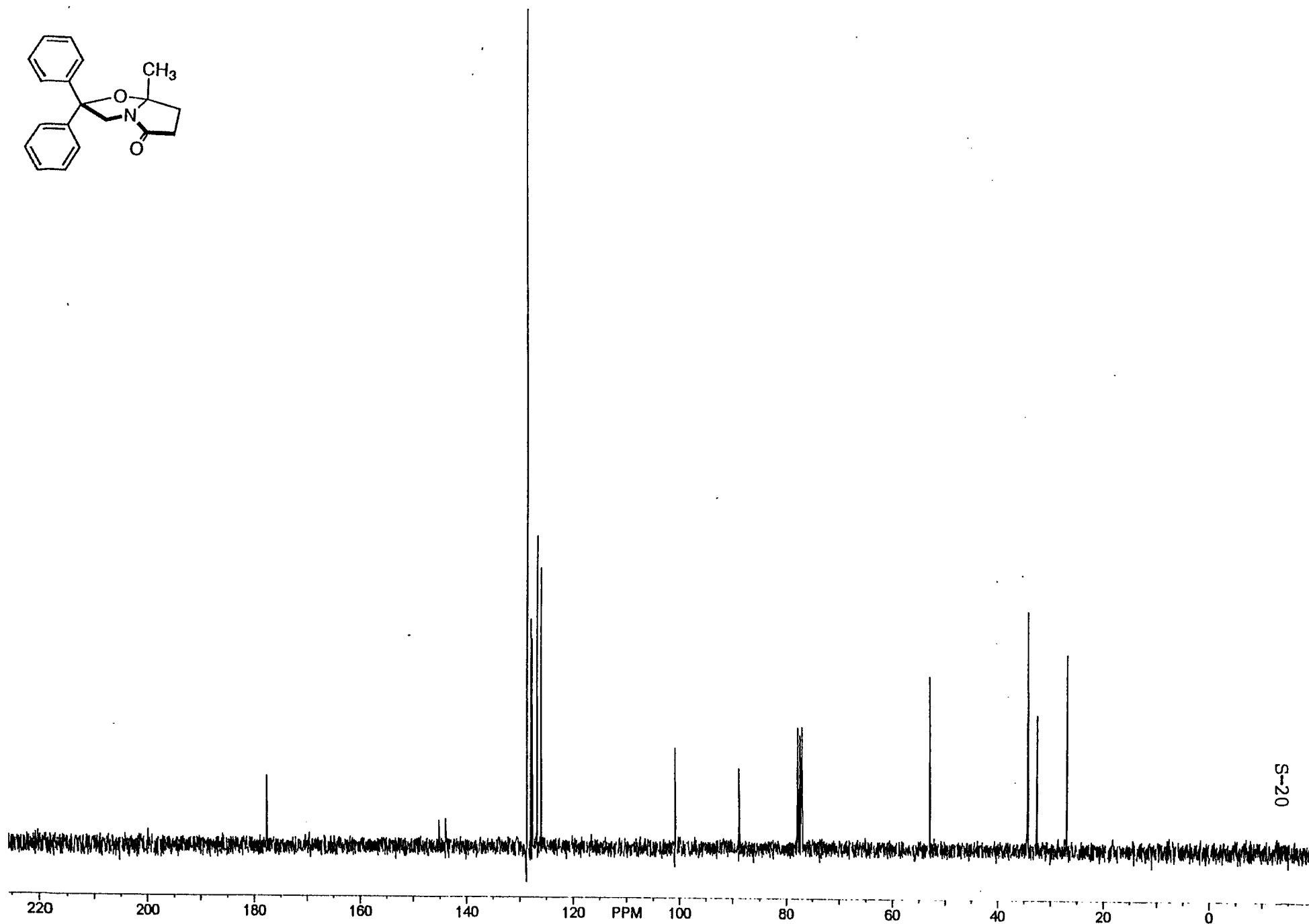
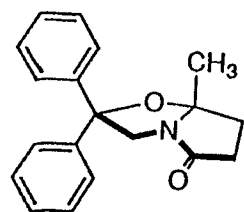
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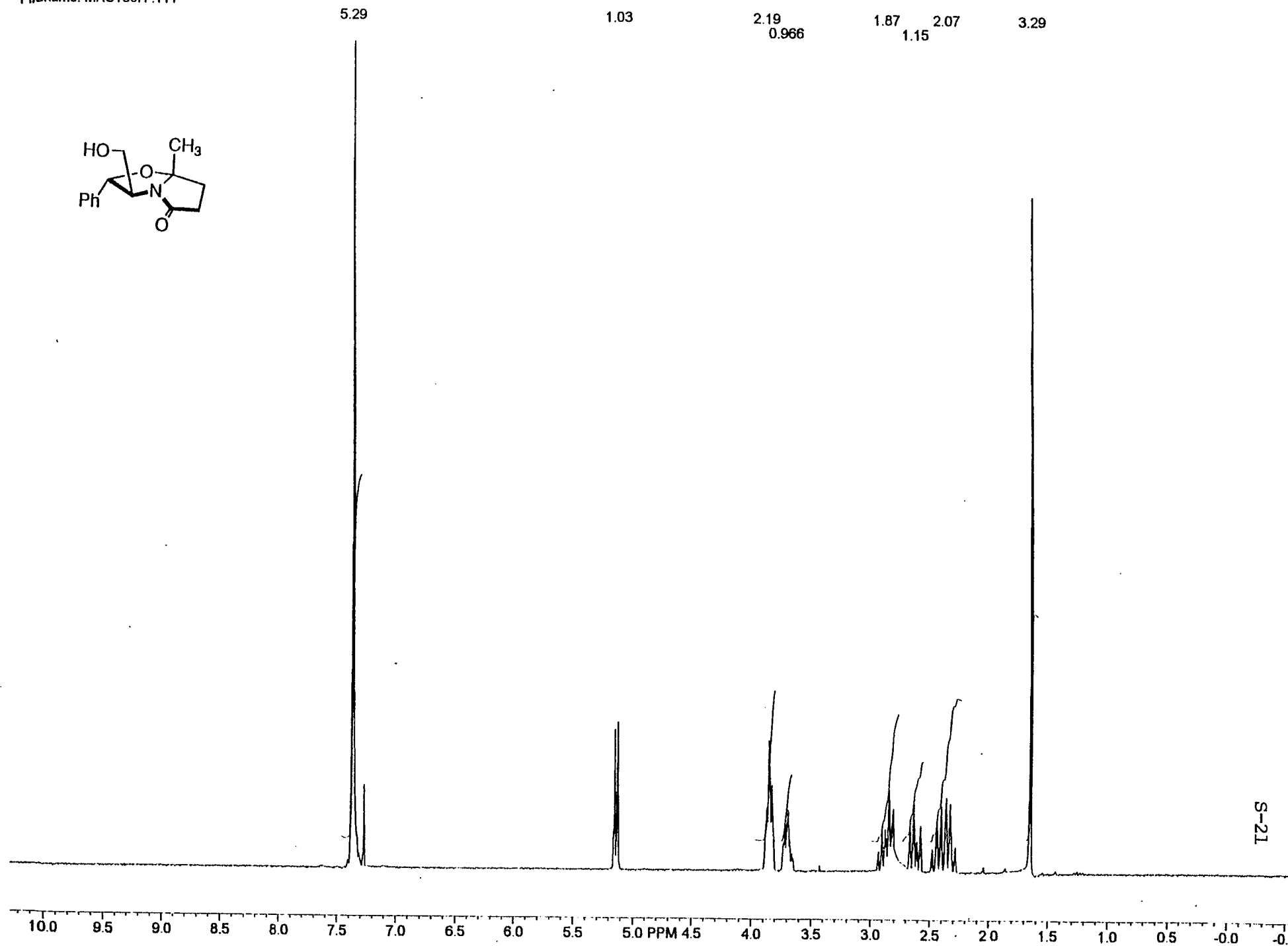
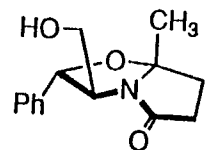
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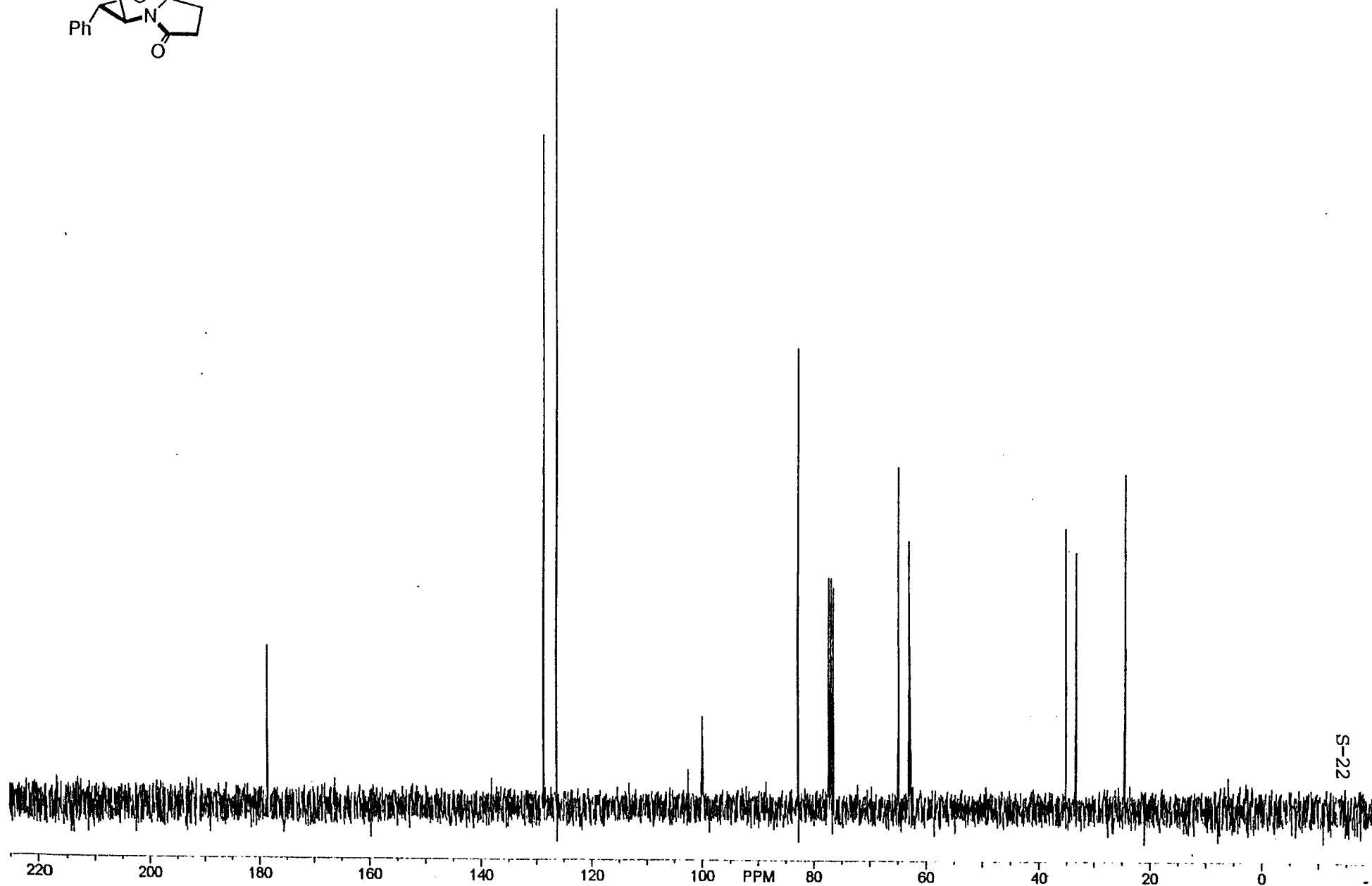
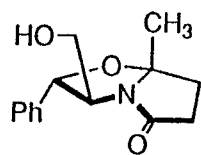
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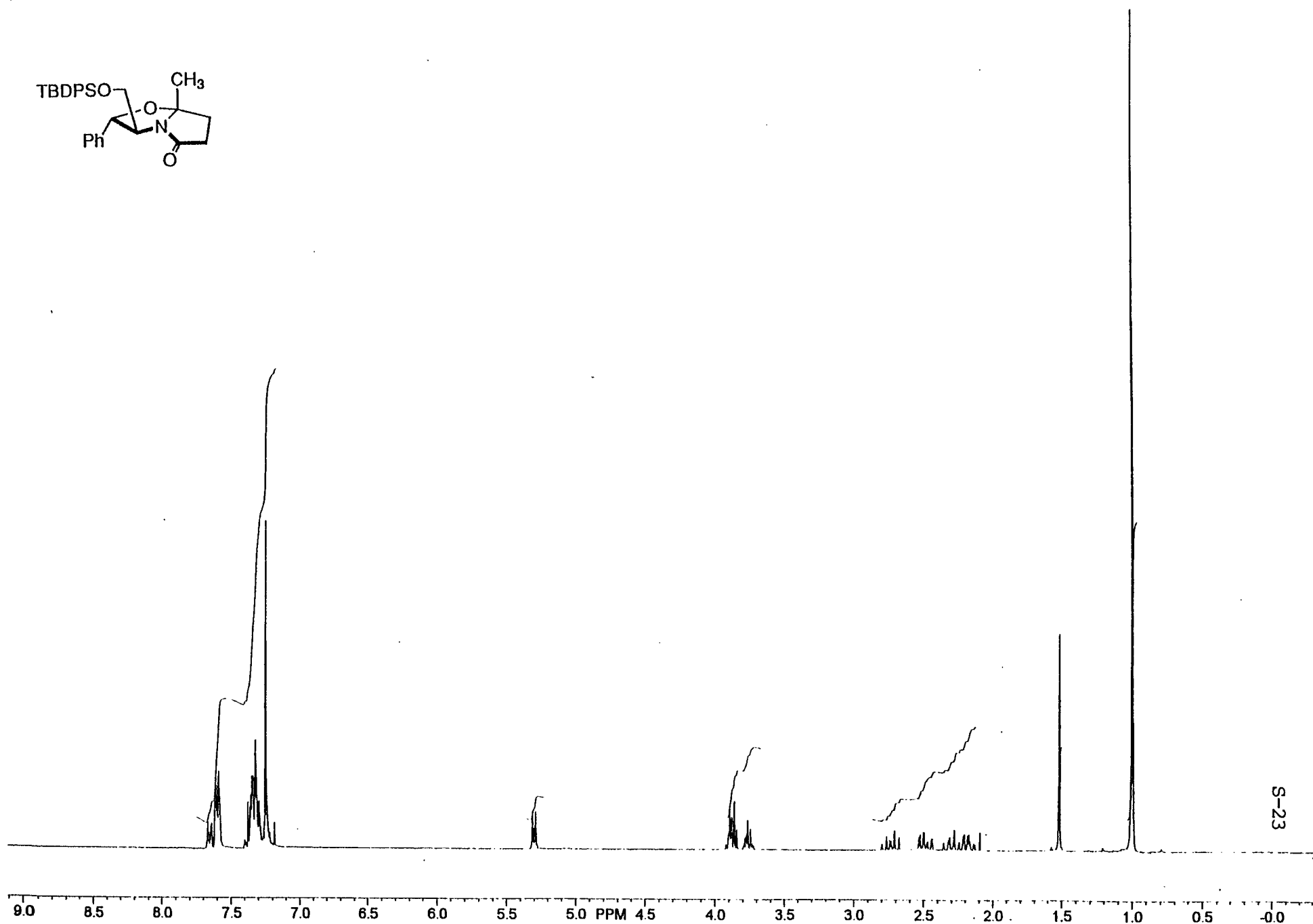
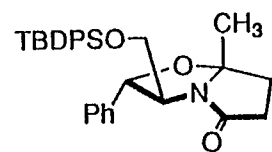
0.381

1.31

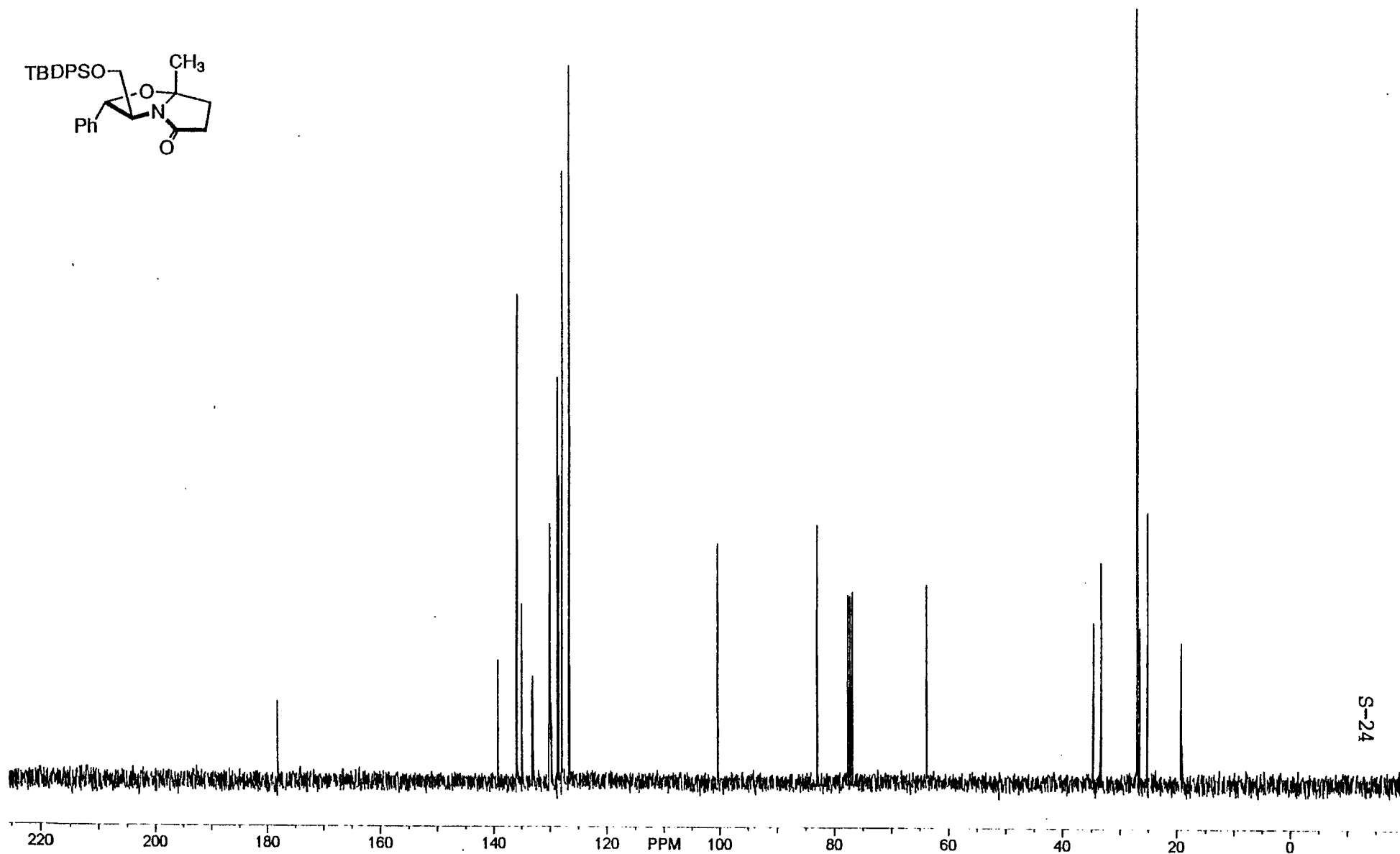
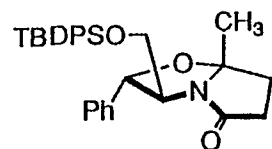
1.73

1.41

5.53



Filename: MAS120C .555



S-24

Filename: MAS167H .333

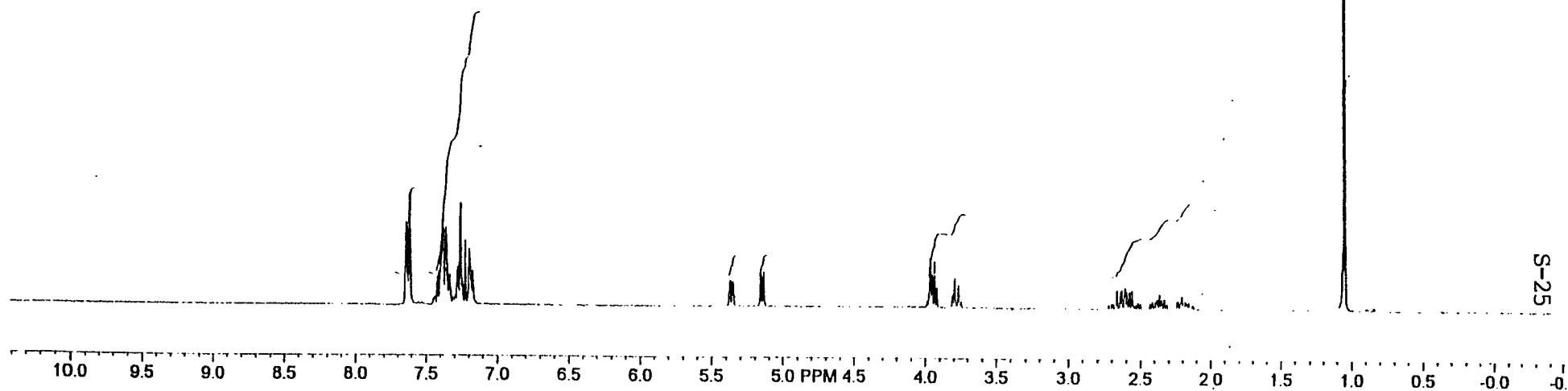
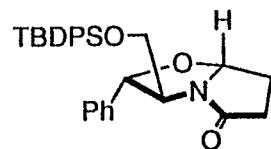
4.87
14.9

1.09
1.11

3.53

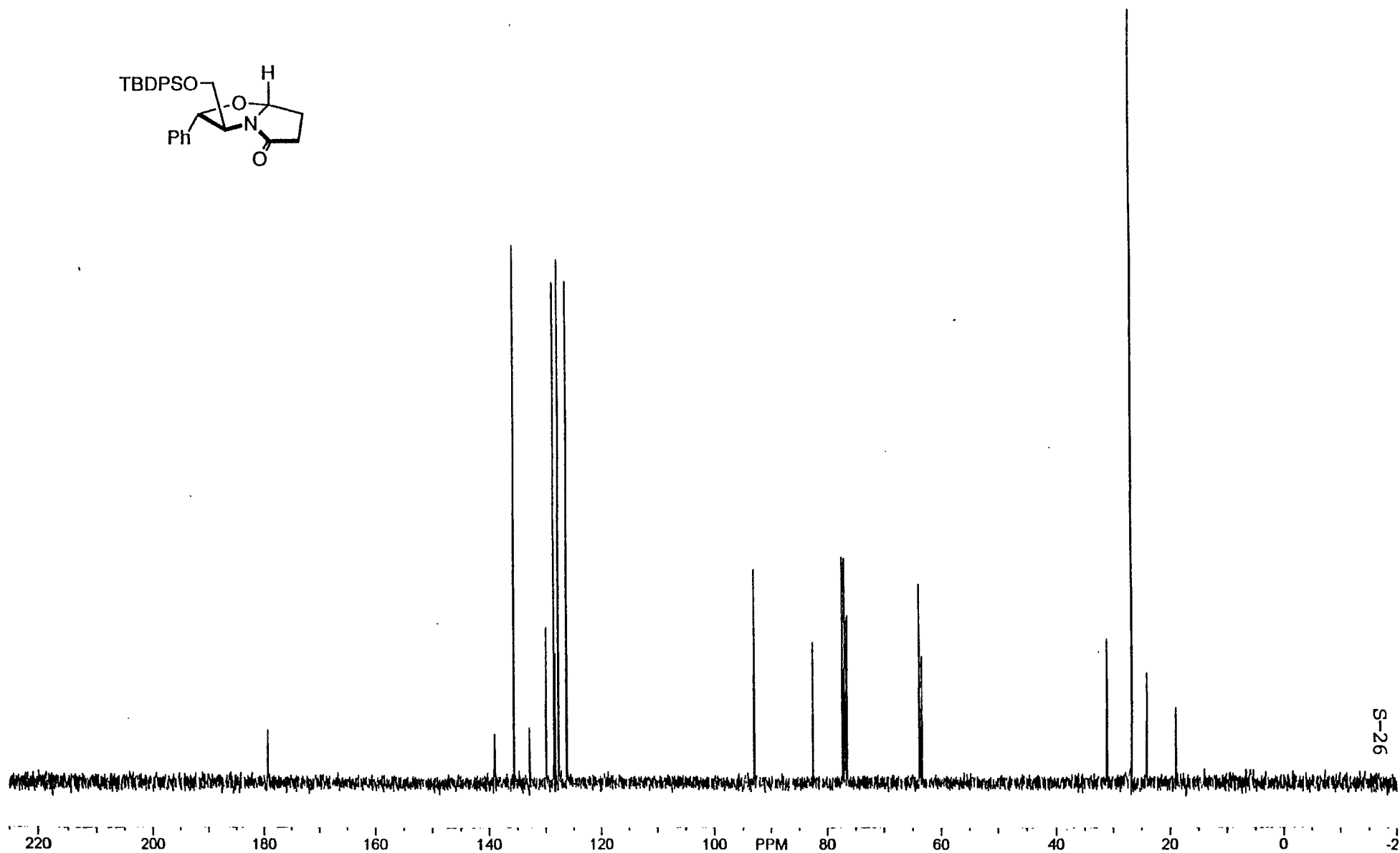
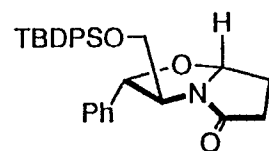
4.28

11.7

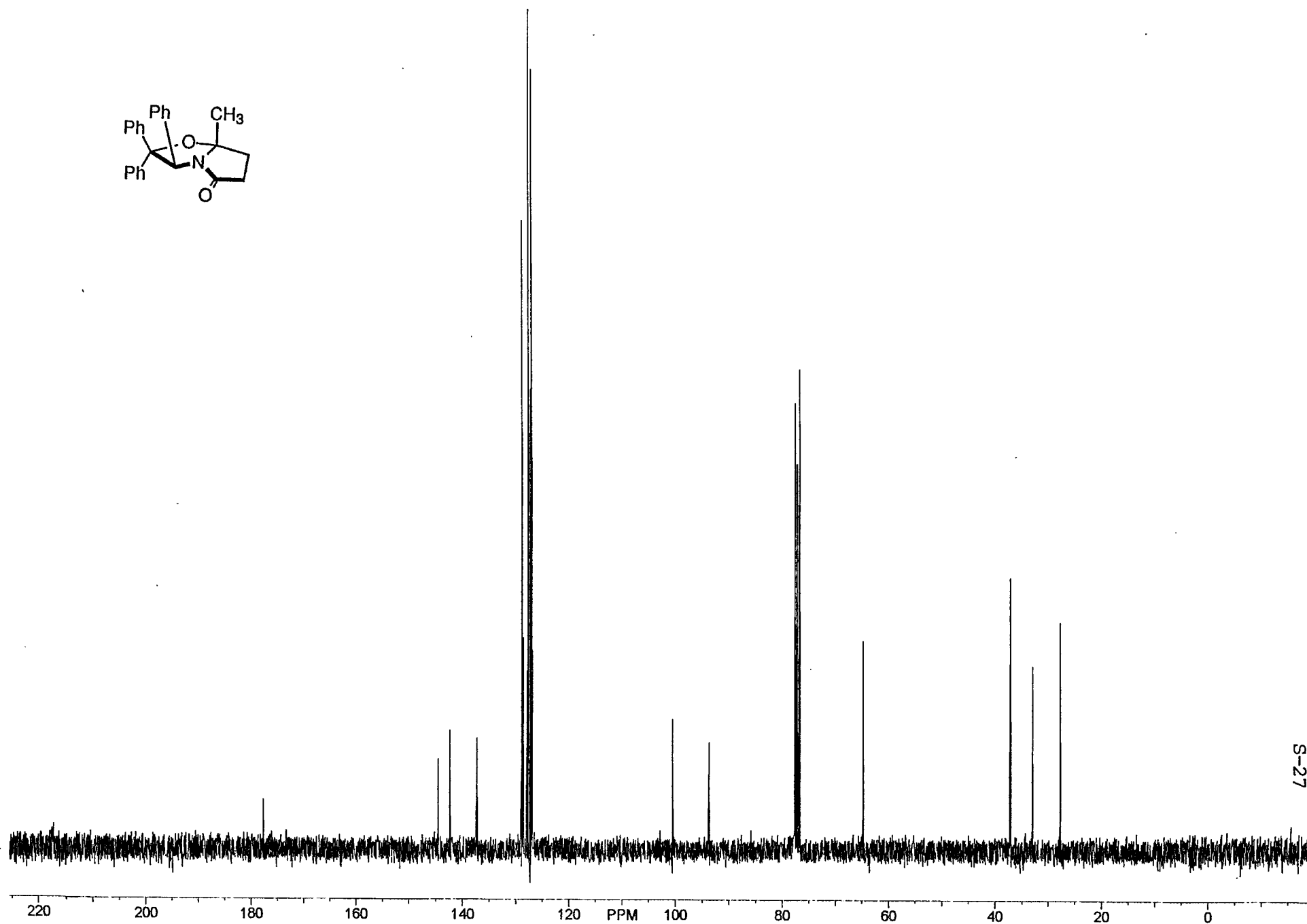
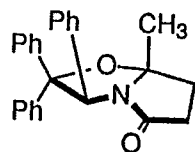


S-25

Filename: MAS167C .999



S-26



4.78 7.91

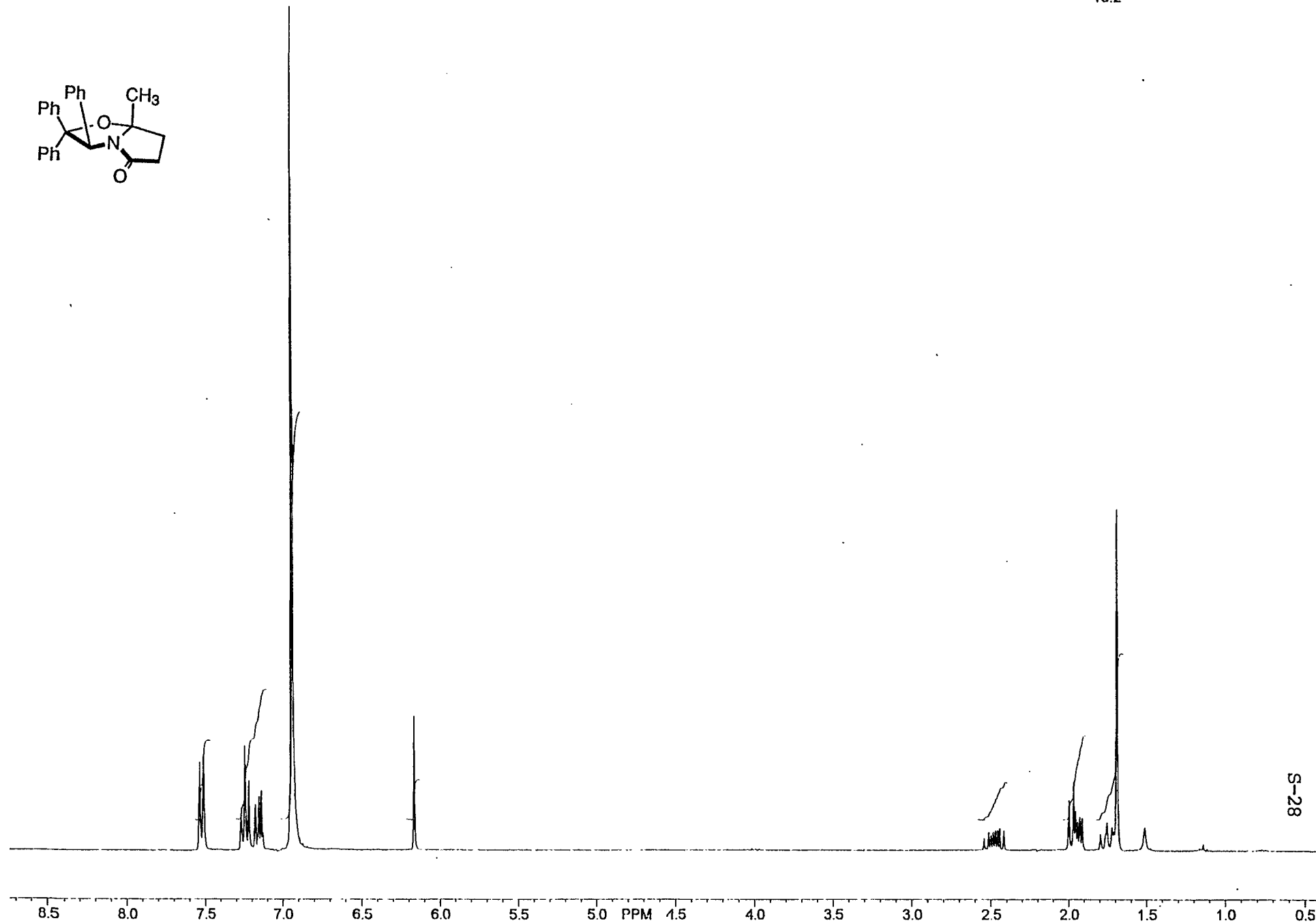
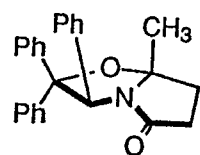
25

2.39

2.24

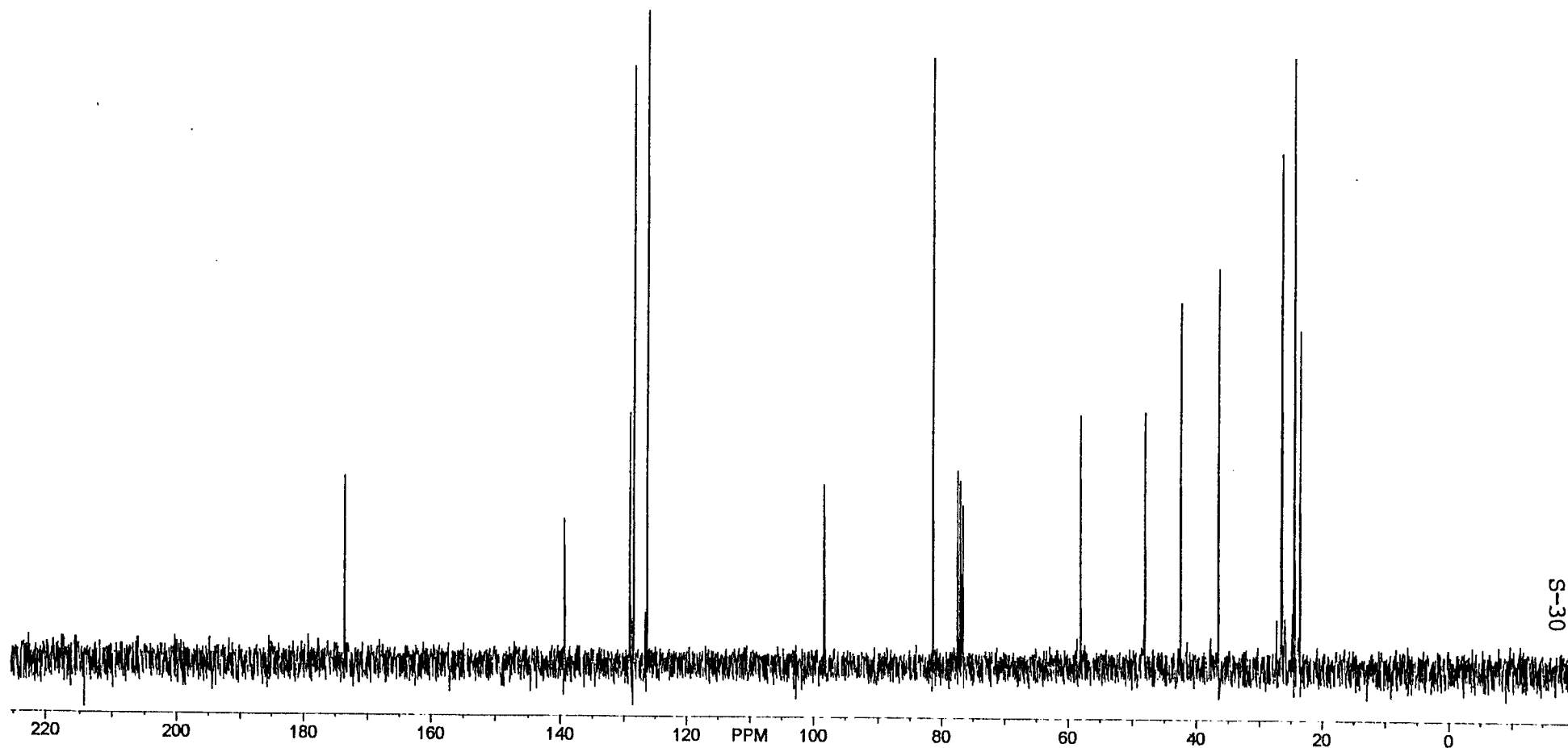
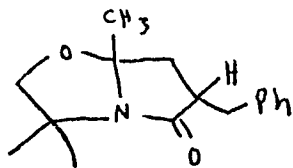
5.15

10.2



CC1(C)CC2(C)C(C1)N(C2)C(=C)C3=CC=CC=C3

Filename: MAS116C .777



S-30

4.1

0.563

1.41

0.69

1.46

0.718

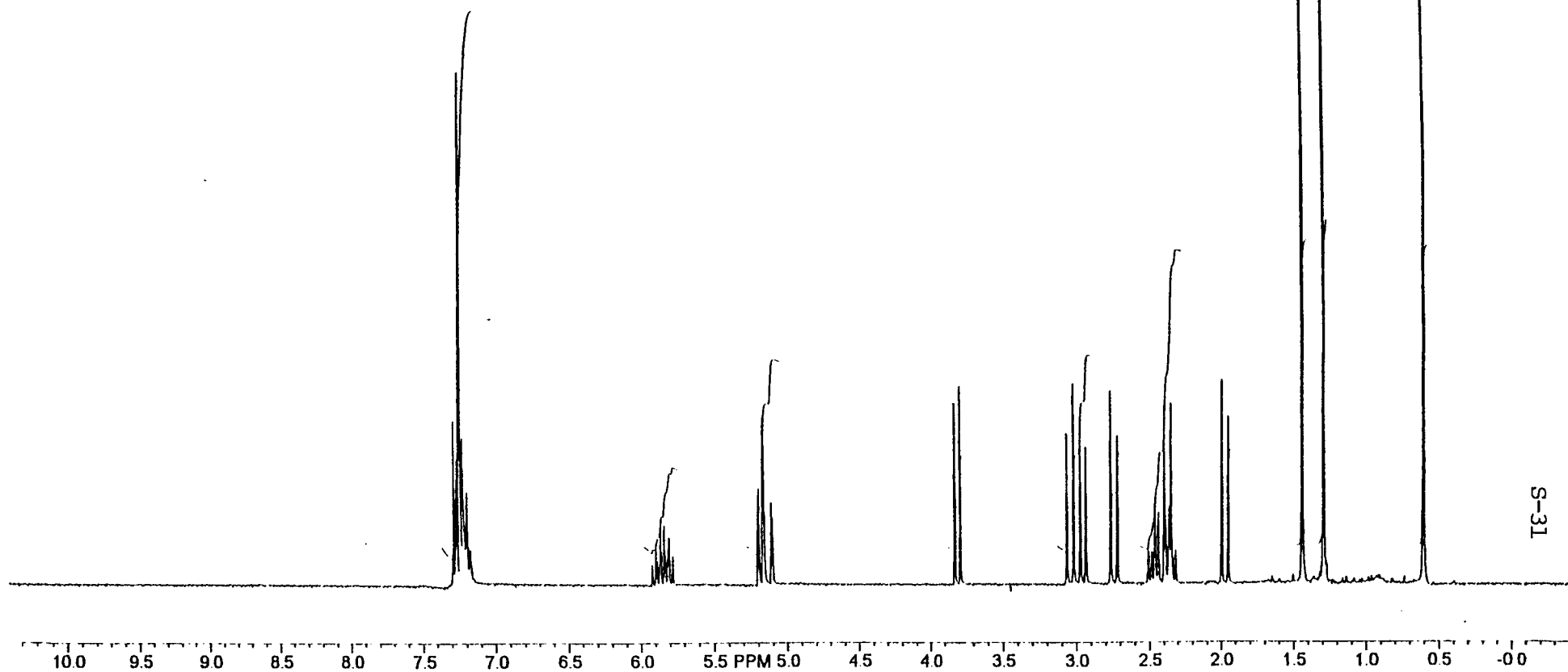
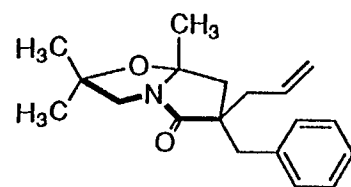
2.26

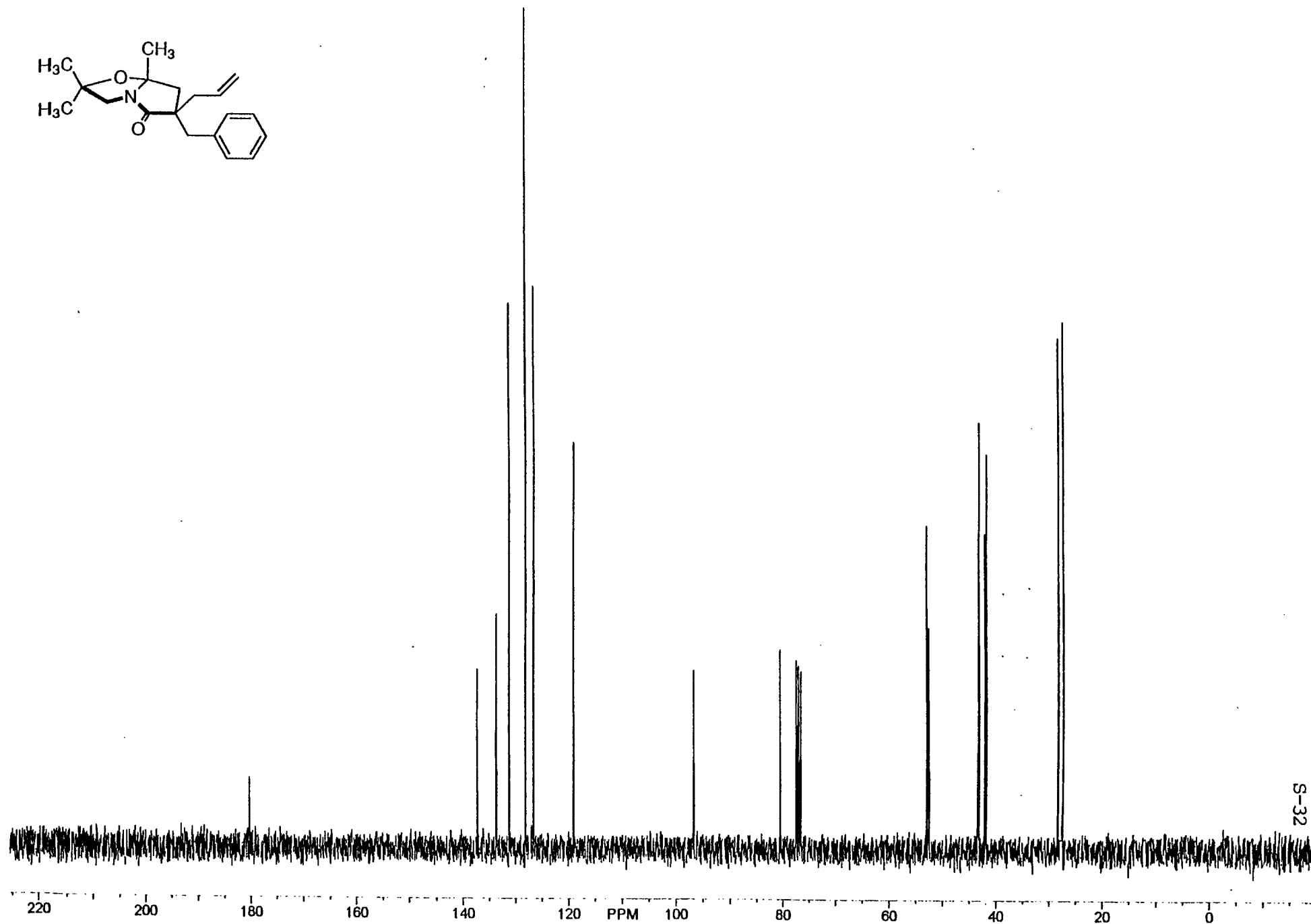
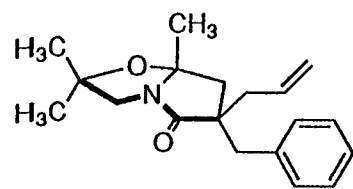
0.726

2.35

2.51

2.29





2.96

0.538

2.26

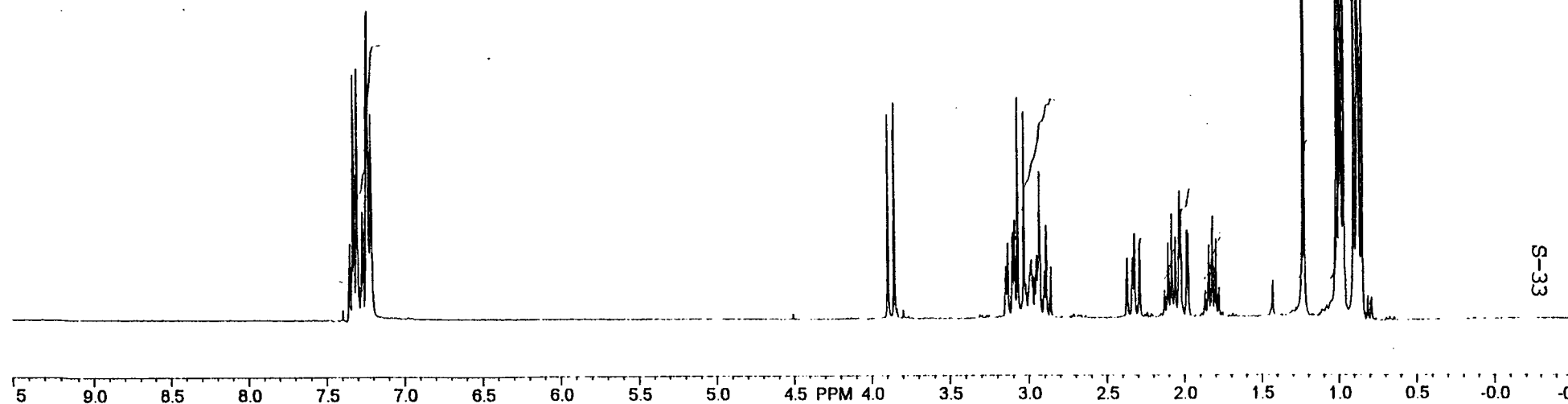
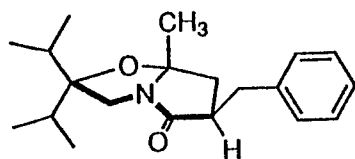
0.517

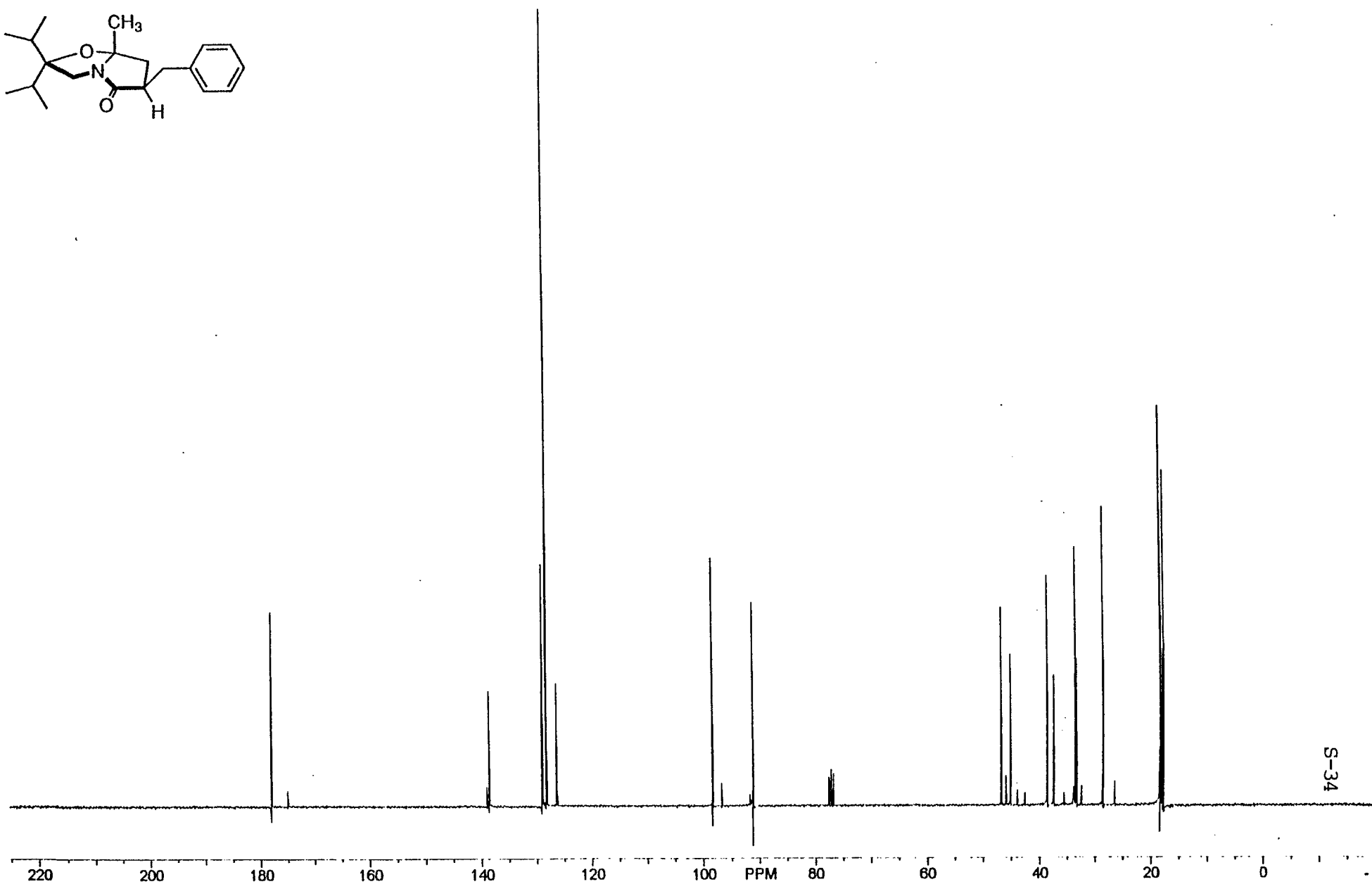
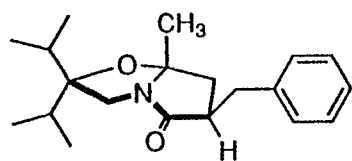
1.14

0.526

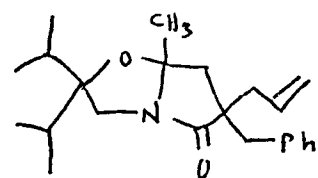
1.76

7.39





Filename: MAS160H .999



3.21

0.402

1.13

0.554

1.17

0.558

1.17

0.577

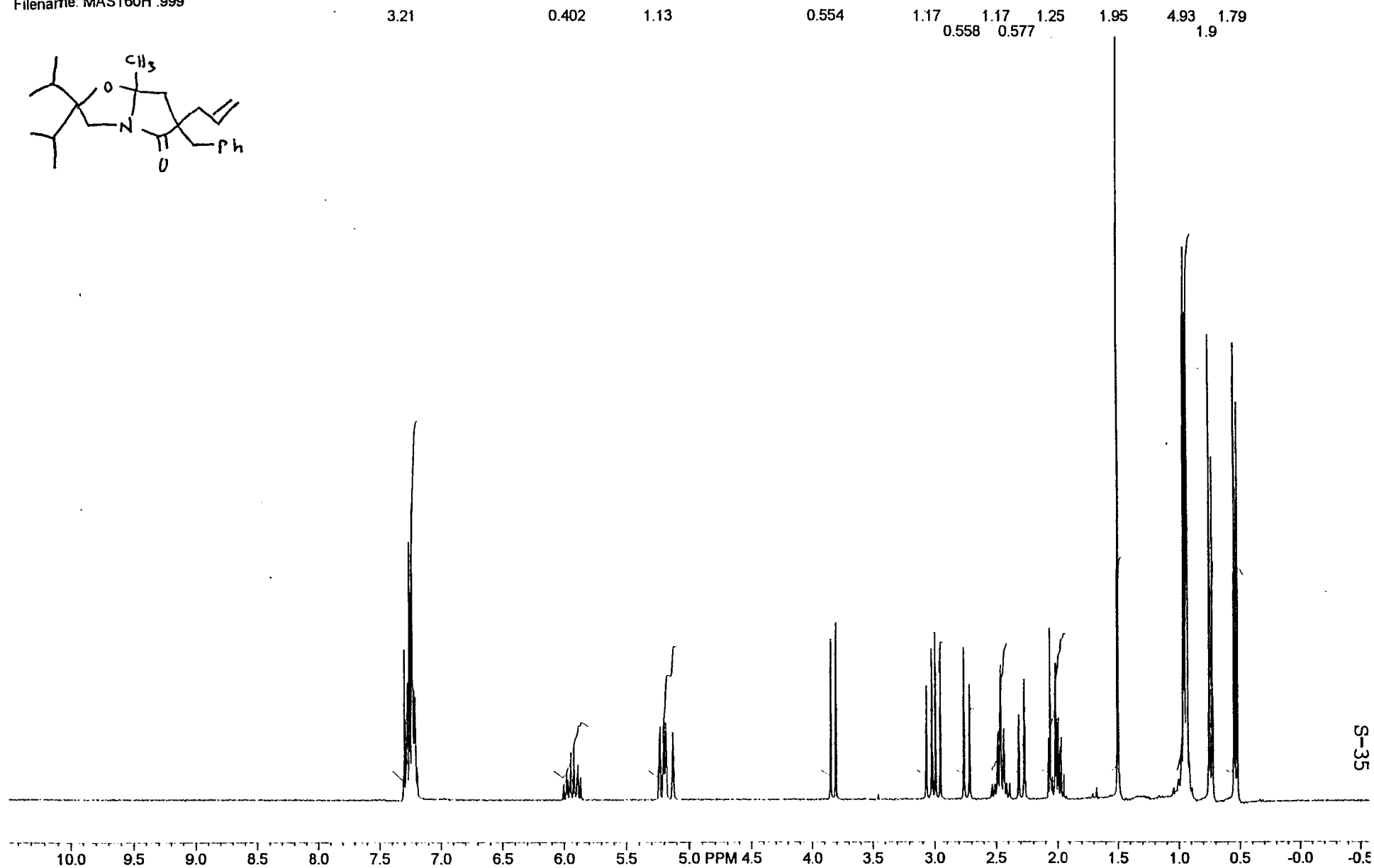
1.25

1.95

4.93

1.9

1.79



S-35

S-36

