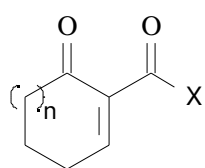
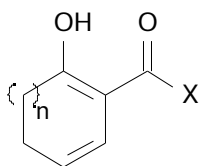


ÍNDICE DE FÓRMULAS



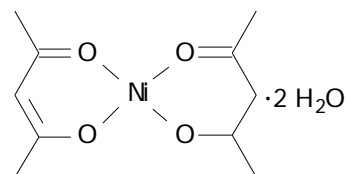
n = 1,2
X = OMe, OEt, Me

1

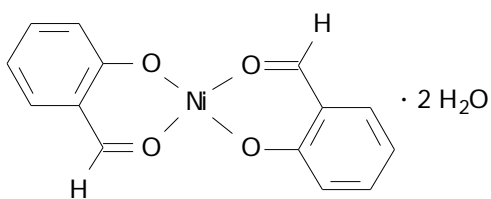


n = 1,2
X = OMe, OEt, Me

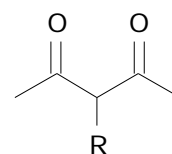
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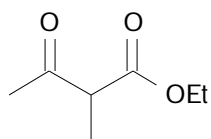
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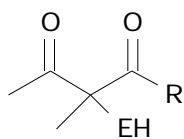
4



5a: R = H
5b: R = CH₃

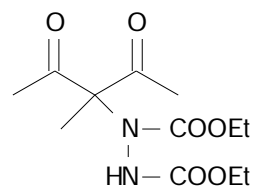


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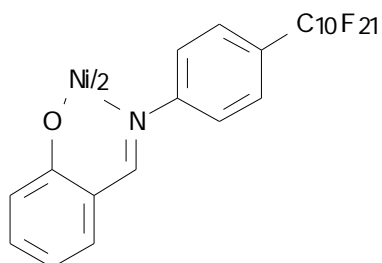


R = CH₃, OEt

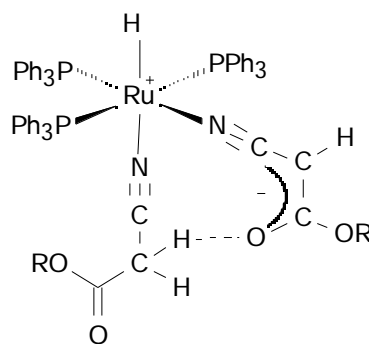
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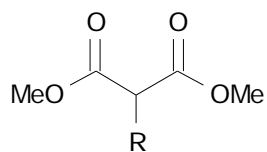
7a: R = H
7b: R = CH₃



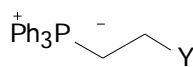
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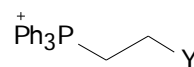
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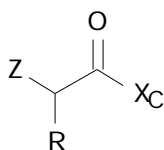
10a: R = H
10b: R = *n*Bu



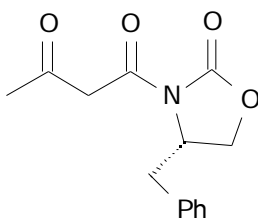
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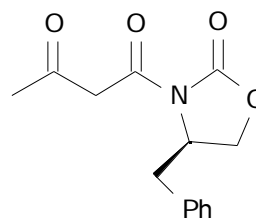
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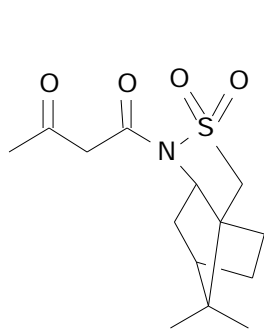
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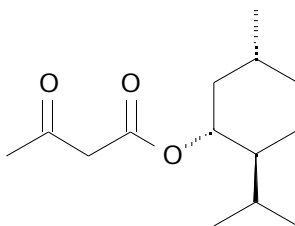
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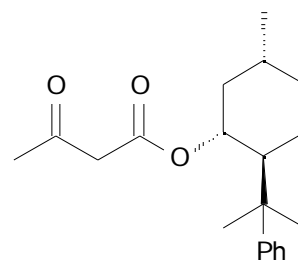
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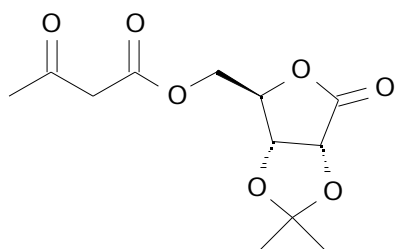
13b



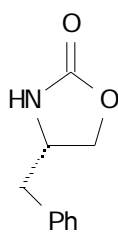
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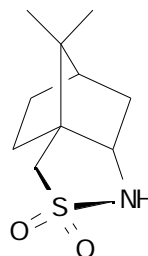
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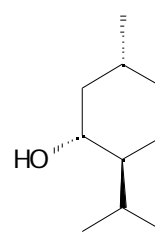
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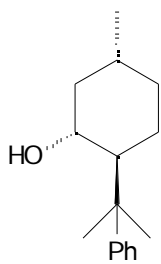
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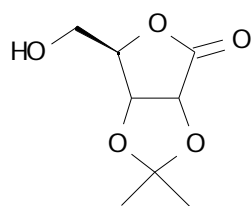
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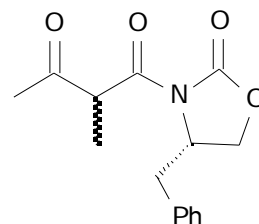
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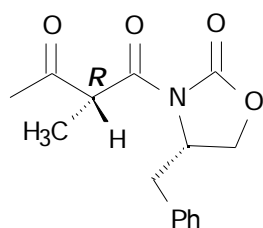
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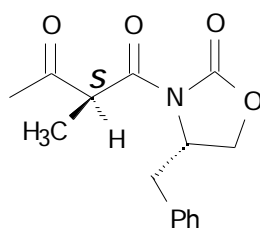
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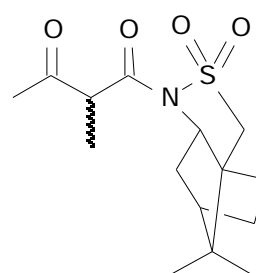
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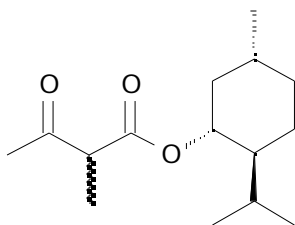
19a



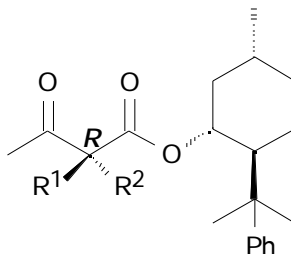
19b



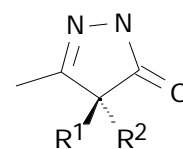
20



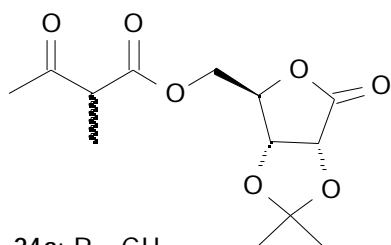
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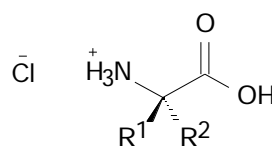
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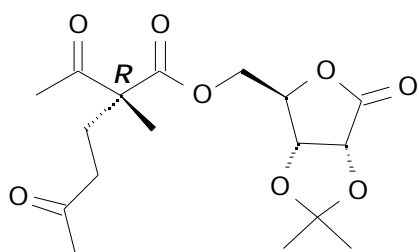
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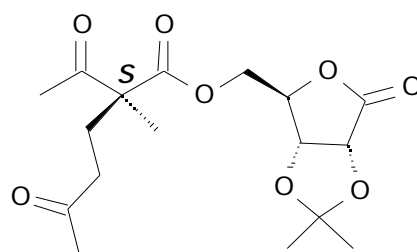
24a: R = CH₃
24b: R = nBu



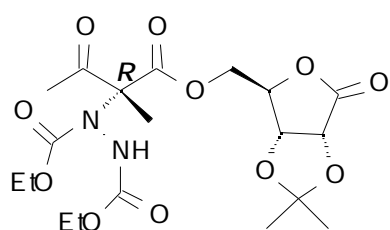
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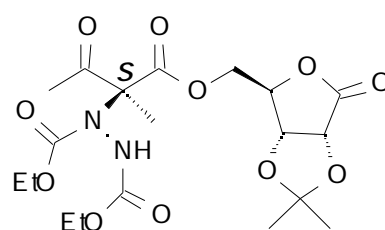
26a



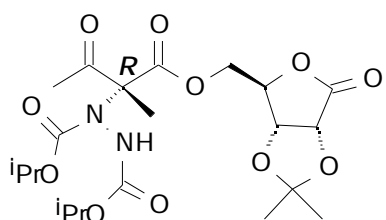
26b



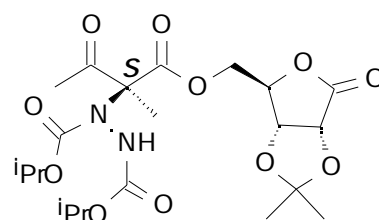
27a



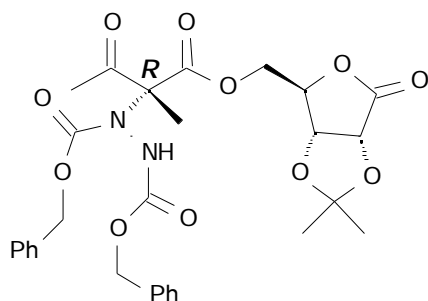
27b



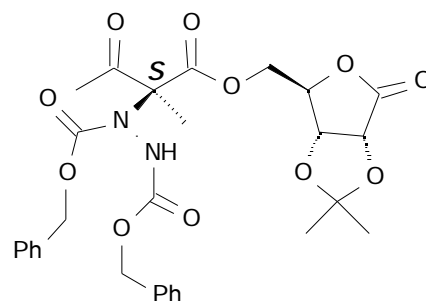
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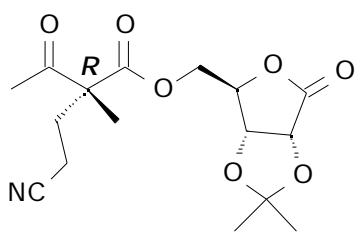
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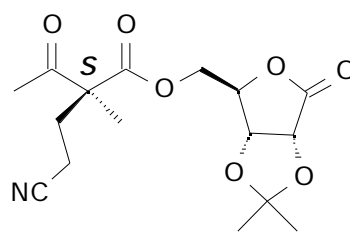
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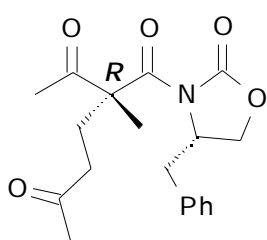
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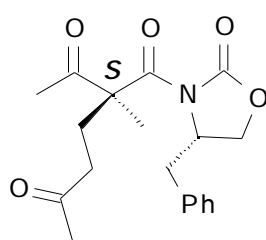
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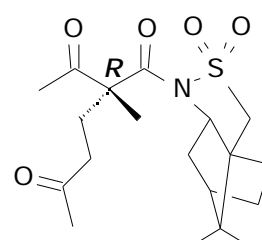
30b



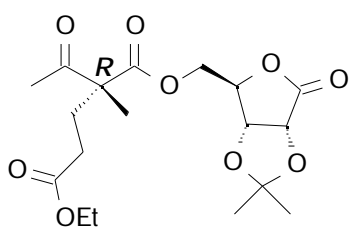
31a



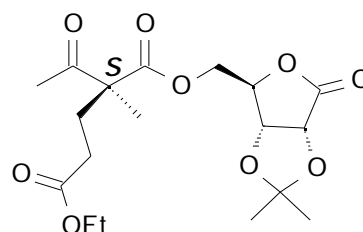
31b



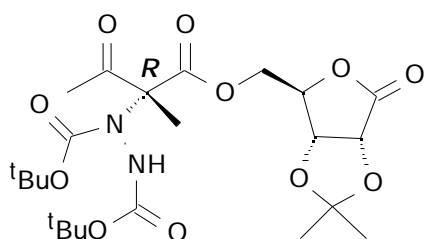
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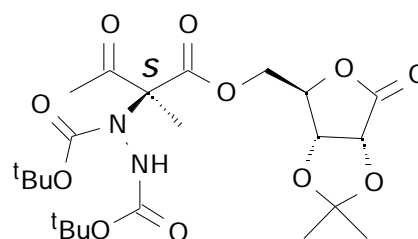
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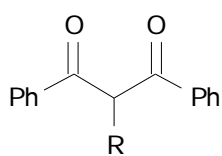
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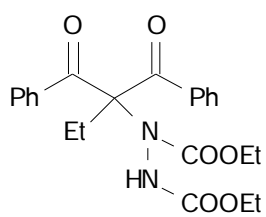
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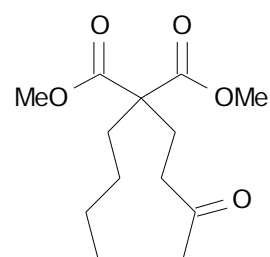
34b



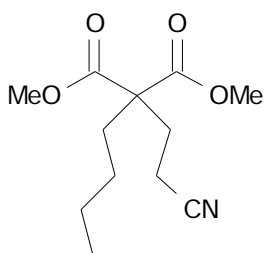
35a: R = Et
 35b: R = Me
 35c: R = nBu



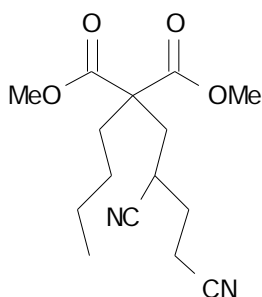
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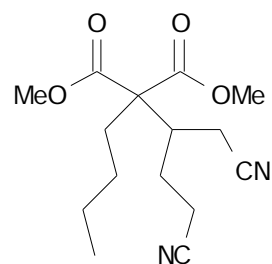
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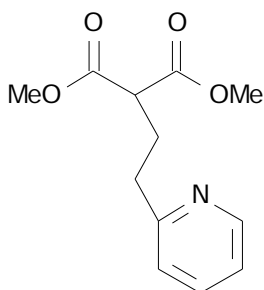
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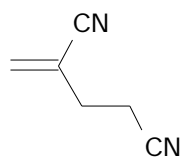
39a



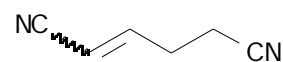
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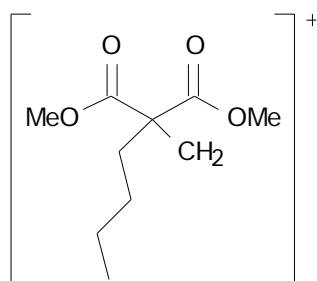
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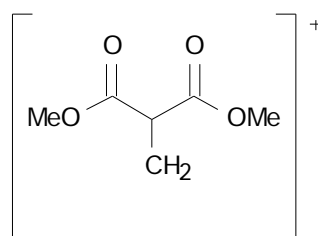
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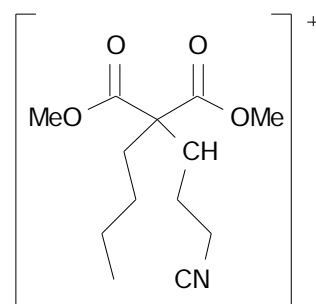
41b



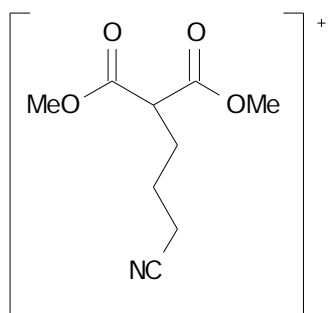
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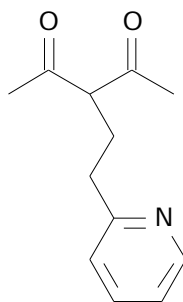
43



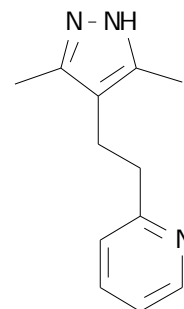
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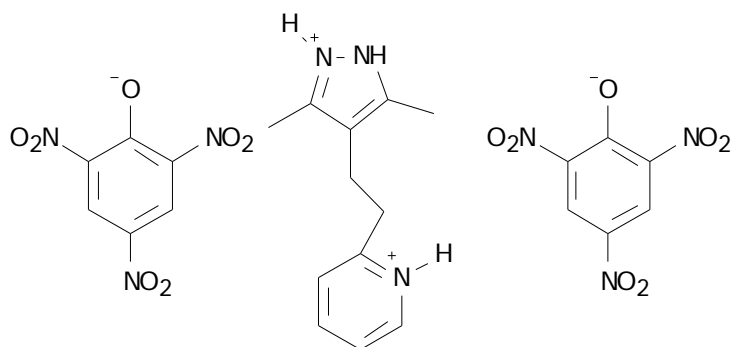
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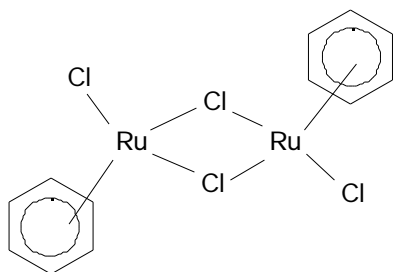
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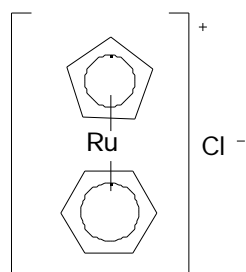
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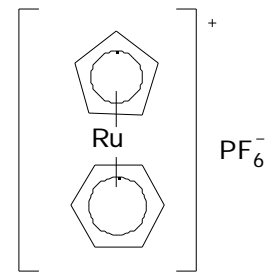
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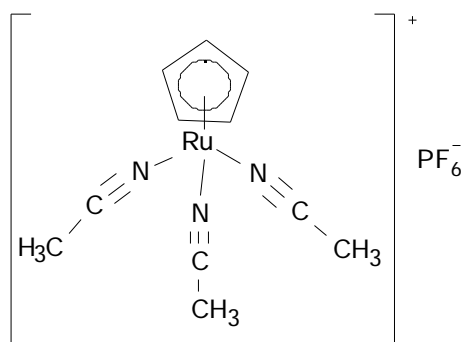
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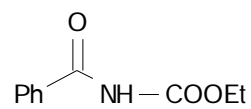
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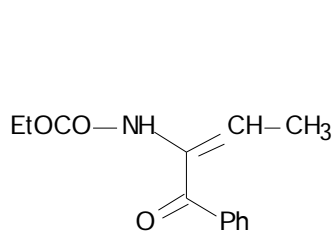
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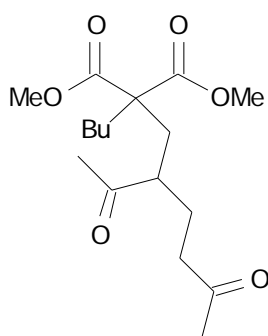
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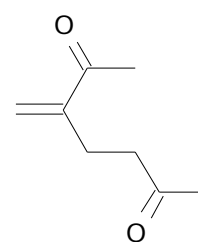
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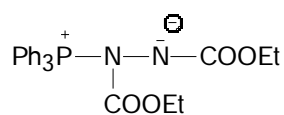
54



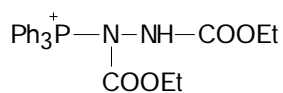
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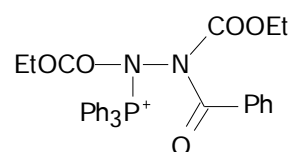
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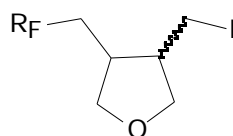
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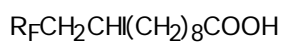
58



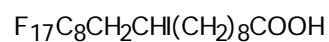
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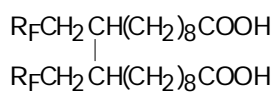
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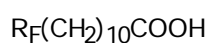
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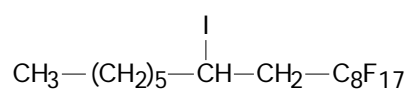
61a



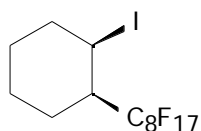
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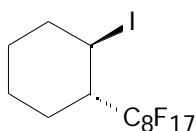
63



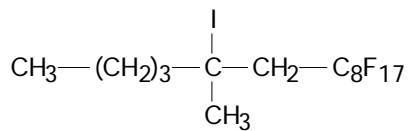
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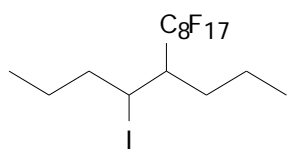
65a



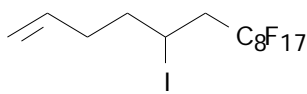
65b



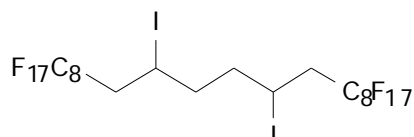
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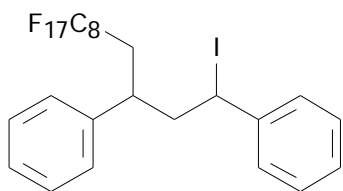
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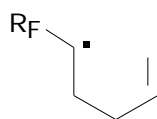
68



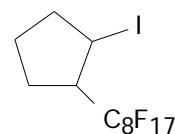
69



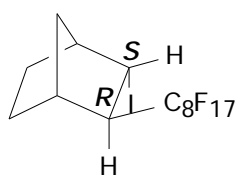
70



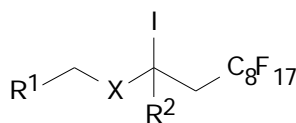
71



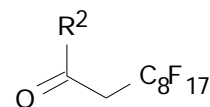
72



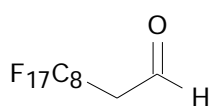
73



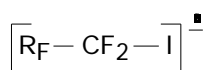
74



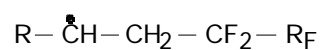
75



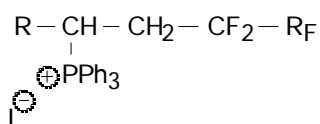
75a



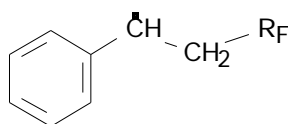
76



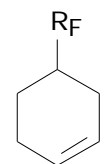
77



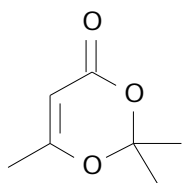
78



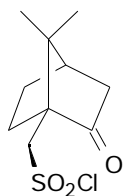
79



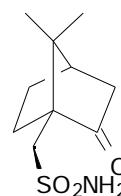
80



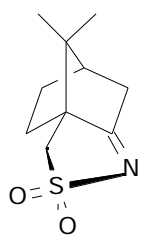
81



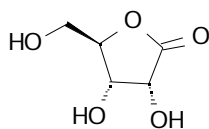
82



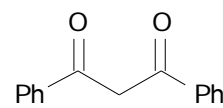
83



84



85



86

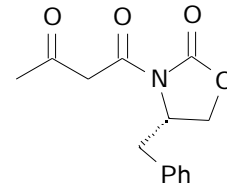
COL·LECCIÓ D'ESPECTRES

ÍNDIX D'ESPECTRES

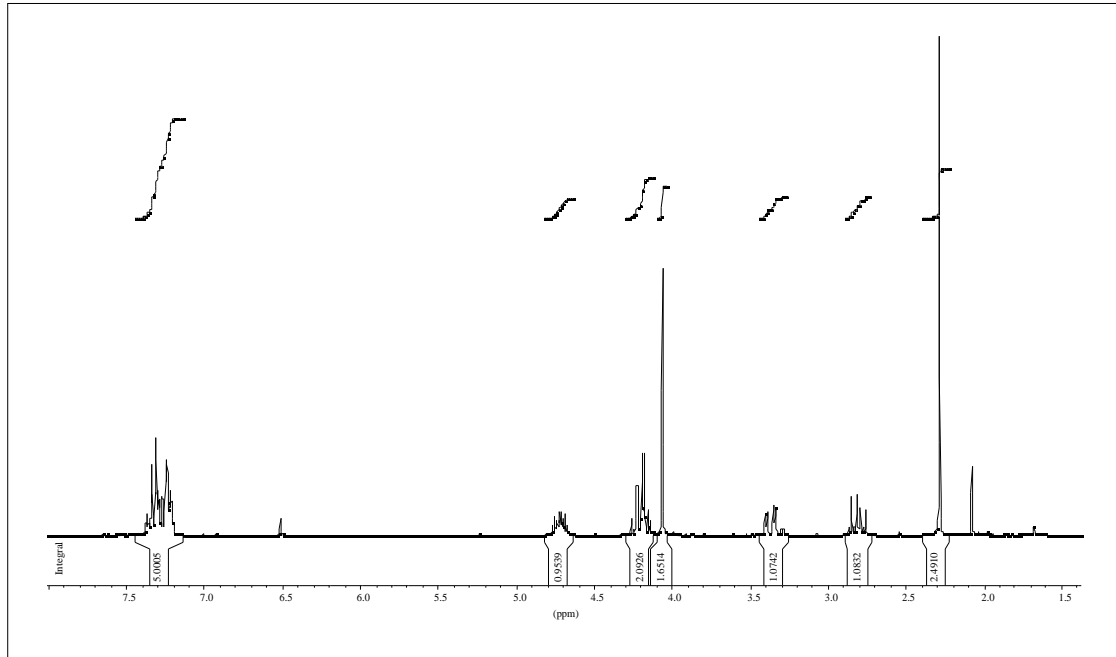
(4 <i>S</i>)- <i>N</i> -Acetoacetil-4-benziloxazolidin-2-ona, 13a	199
(4 <i>S</i>)- <i>N</i> -Benzil- <i>N</i> -((2 <i>R</i>)-2-metil-1,3-dioxobutil)oxazolidin-2-ona, 19a	201
(4 <i>S</i>)- <i>N</i> -Benzil-3-(2-acetil-2-metil-1,5-dioxohexil)oxazolidin-2-ona, diastereo- isòmer majoritari, 31	203
(+)-(1 <i>S</i>)-10-Camforsulfonilamida, 83 i (-)-(camforsulfonil)imina, 84	205
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(-)-10,2-Bornanosultama, 15	208
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(2 <i>R</i>)- <i>N</i> -(2-Metil-1,3-dioxobutil)bornano-10,2-sultama, 20	212
(2 <i>R</i>)- <i>N</i> -((2 <i>R</i>)-2-Acetil-2-metil-1,5-dioxohexil)bornano-10,2-sultama, 32	214
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2-Acetil-2-metil-5-oxohexanoats de 2,3- <i>O</i> -isopropiliden- -D-ribonolactona, mescla de diastereoisòmers, 26	228
2-(2-Cianoetil)-2-metil-3-oxobutanoat de 2,3- <i>O</i> -isopropiliden- -D-ribonolacto- na, 1r diastereoisòmer eluït, 30	230
2-(2-Cianoetil)-2-metil-3-oxobutanoat de 2,3- <i>O</i> -isopropiliden- -D-ribonolactona, 2n diastereoisòmer eluït, 30	232
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2-Acetil-4-etoxicarbonil-2-metilbutanoat de 2,3- <i>O</i> -isopropiliden- -D- ribonolactona, diastereoisòmer majoritari, 33	236
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2-(<i>N,N'</i> -bis(Isopropiloxicarbonil)hidrazino)-2-metil-3-oxobutanoat de 2,3- <i>O</i> - isopropiliden- -D-ribonolactona, diastereoisòmer majoritari, 28	240
2-(<i>N,N'</i> -bis(Benziloxicarbonil)hidrazino)-2-metil-3-oxobutanoat de 2,3- <i>O</i> - isopropiliden- -D-ribonolactona, diastereoisòmer majoritari, 29	242
2-(<i>N,N'</i> -bis(<i>t</i> Butoxicarbonil)hidrazino)-2-metil-3-oxobutanoat de 2,3- <i>O</i> - isopropiliden- -D-ribonolactona, 34	244
2-Etil-1,3-difenil-1,3-propanodiona, 35a	246
2-(<i>N,N'</i> -bis(Etoxicarbonil)hidrazino)-2-etil-1,3-difenil-1,3-propanodiona, 36	248
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<i>rel</i> -(2R,3S)-2-(1,1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8-Heptadecafluorooctil)-3-iodobiciclo[2.2.1]heptà, 73	282

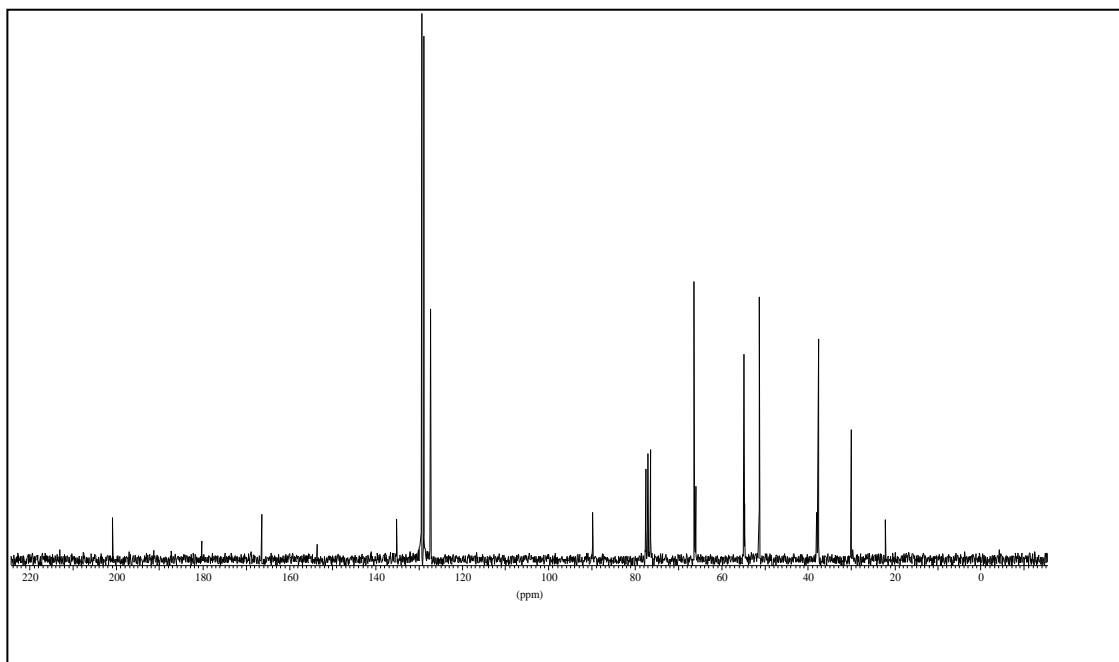
(4S)-N-Acetoacetyl-4-benziloxazolidin-2-ona, 13a.



^1H -RMN (250 MHz, CDCl_3) δ (ppm)



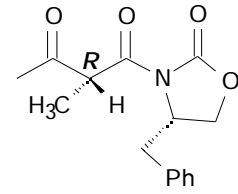
^{13}C -RMN (62.9 MHz, CDCl_3) δ (ppm)



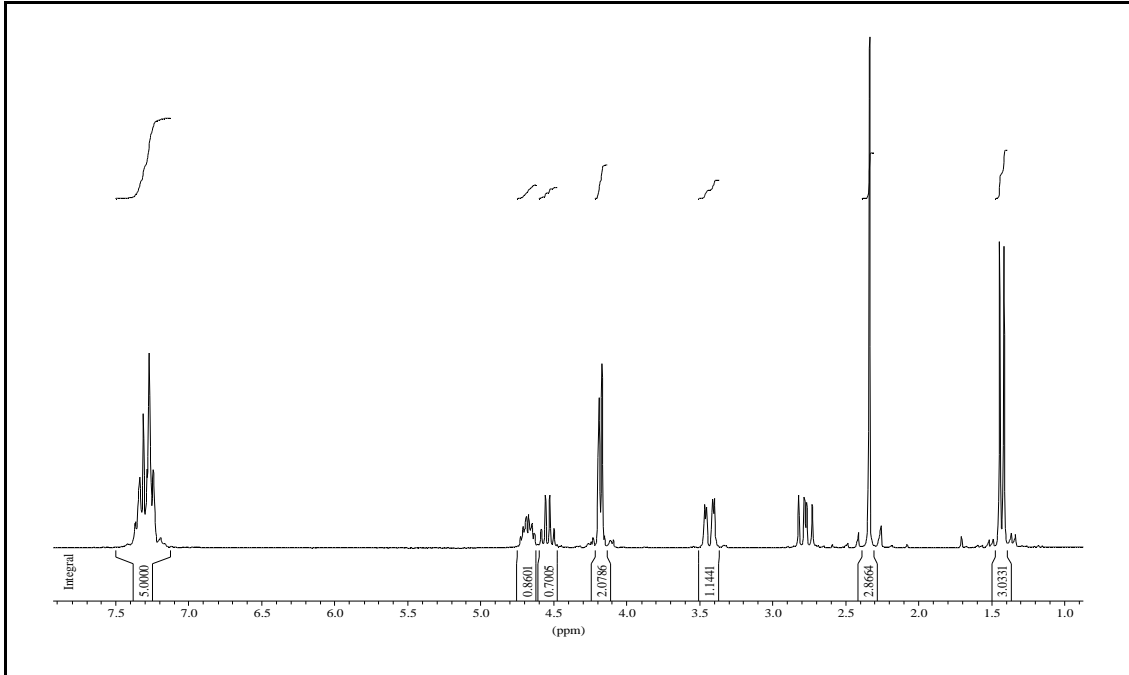
IR (KBr) $\nu(\text{cm}^{-1})$



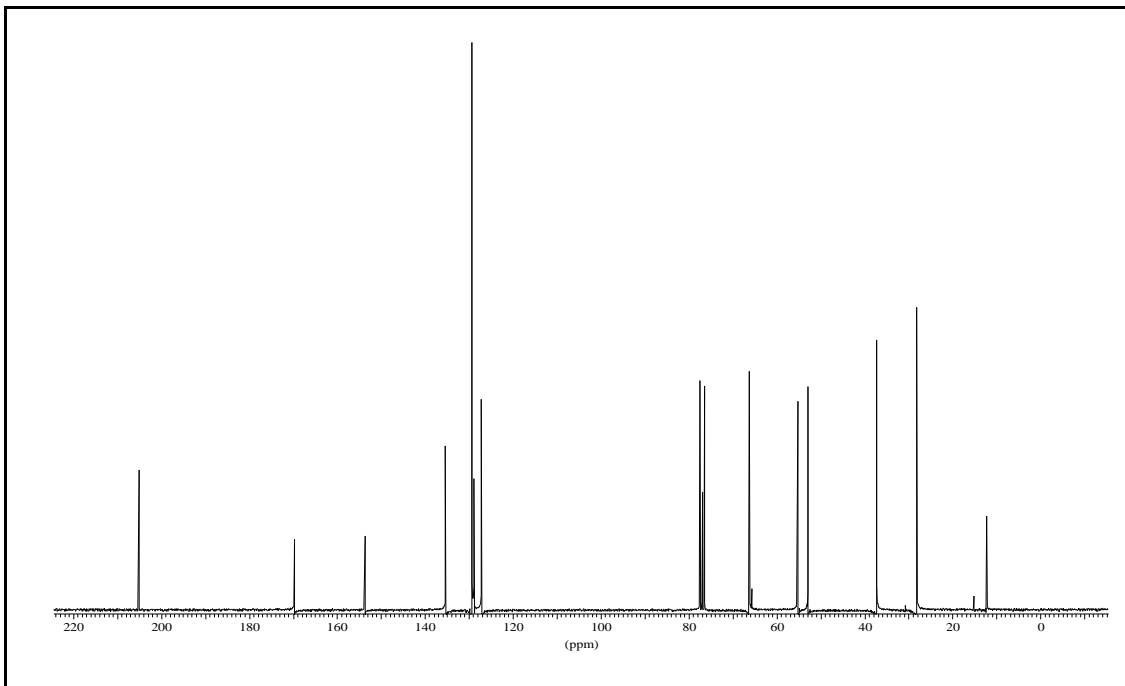
(4*S*)-4-Benzil-*N*-((2*R*)-2-metil-1,3-dioxobutil)oxazolidin-2-ona, **19a**.



^1H -RMN (250 MHz, CDCl_3) δ (ppm)



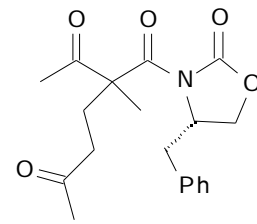
^{13}C -RMN (62.9 MHz, CDCl_3) δ (ppm)



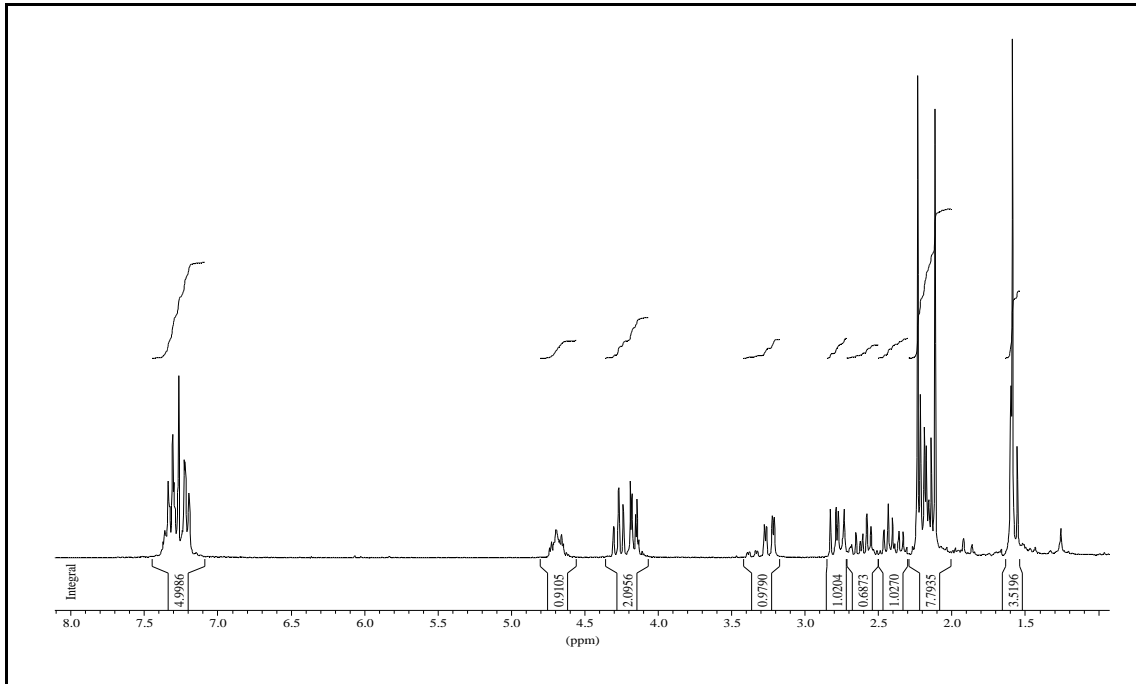
IR (KBr) ν (cm^{-1})



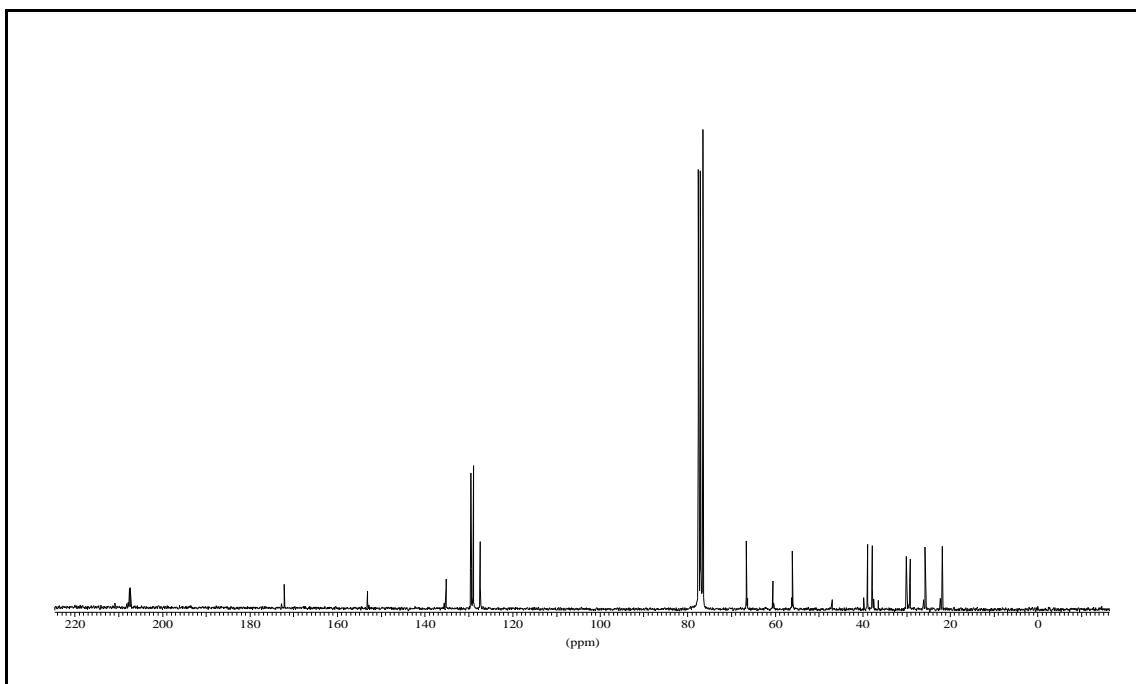
(4*S*)-*N*-Benzil-3-(2-acetil-2-metil-1,5-dioxohexil)oxazolidin-2-ona,
diastereoisòmer majoritari, 31.



$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)

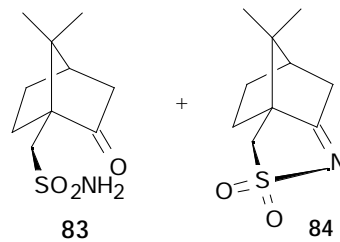


IR (film) ν (cm^{-1})

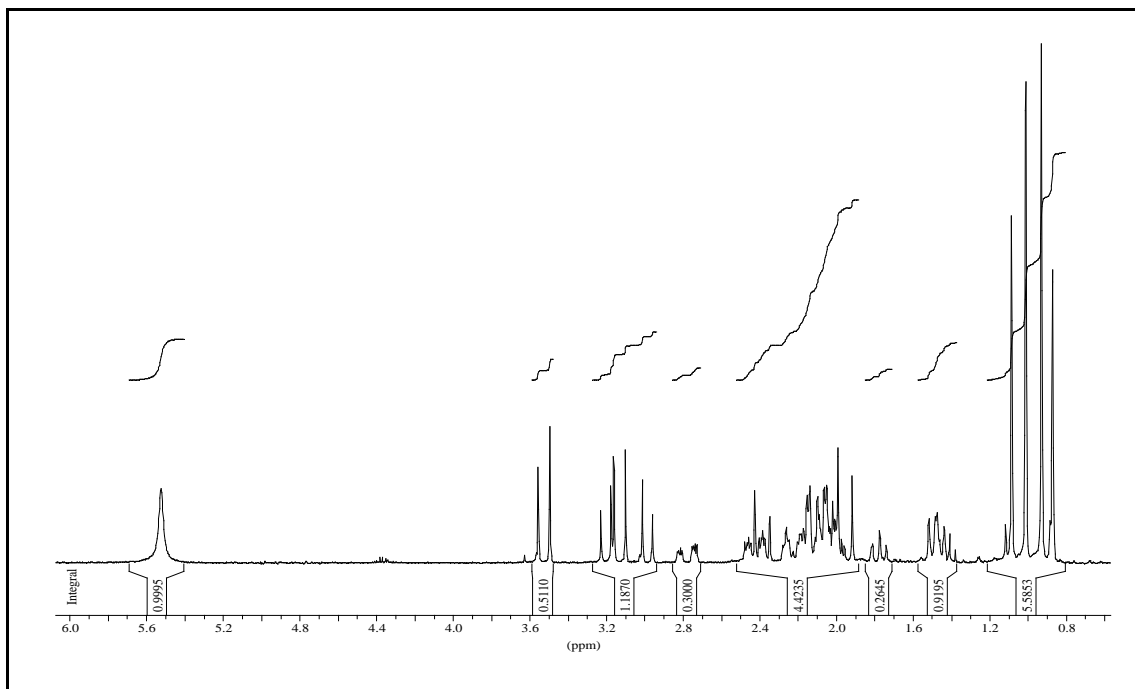


(+)-(1S)-10-Camforsulfonilamida, **83**

(-)-(Camforsulfonil)imina, **84**



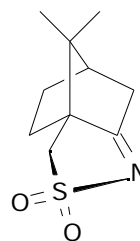
$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



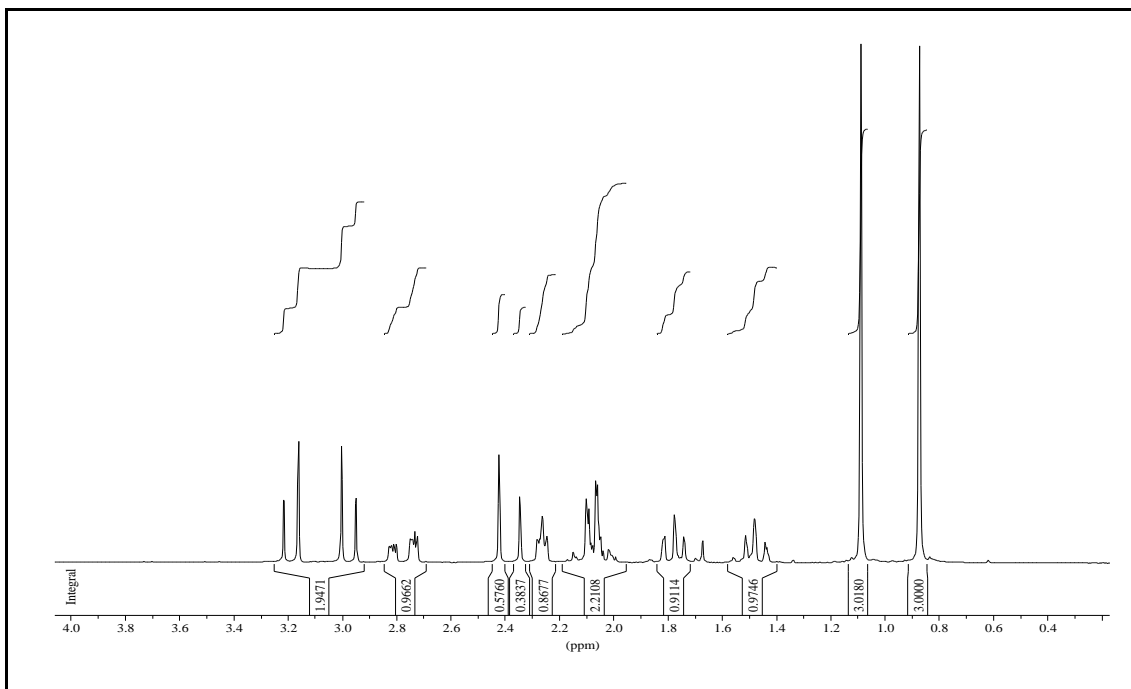
IR (KBr) ν (cm^{-1})



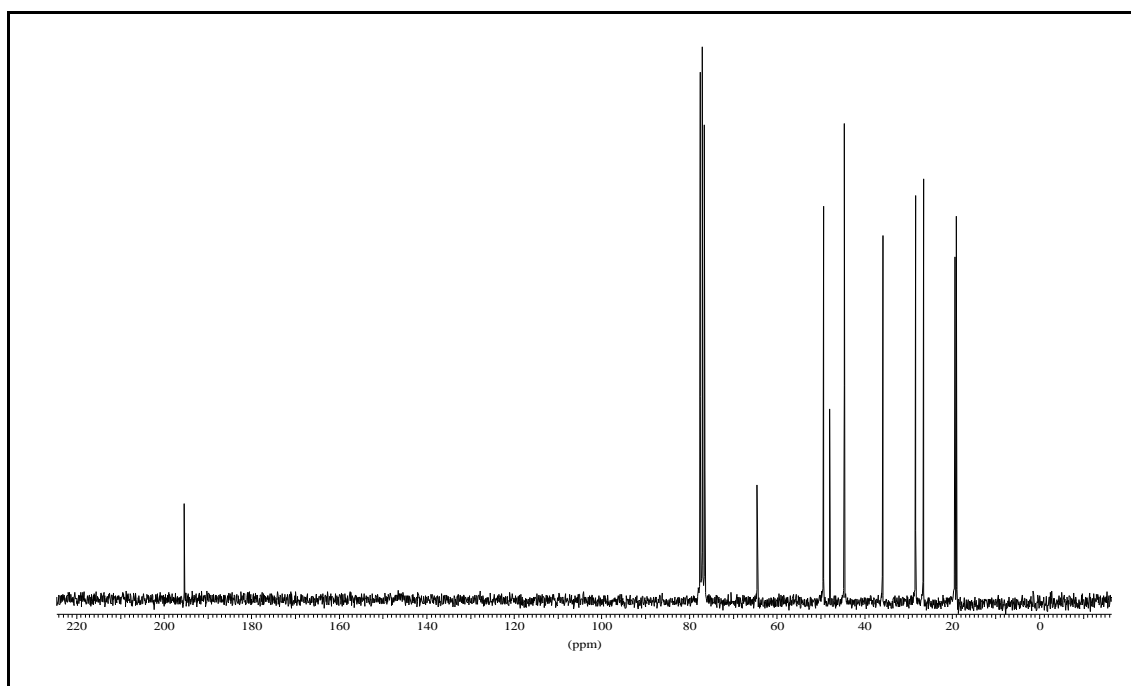
(-)-(Camforsulfonil)imina, **84**



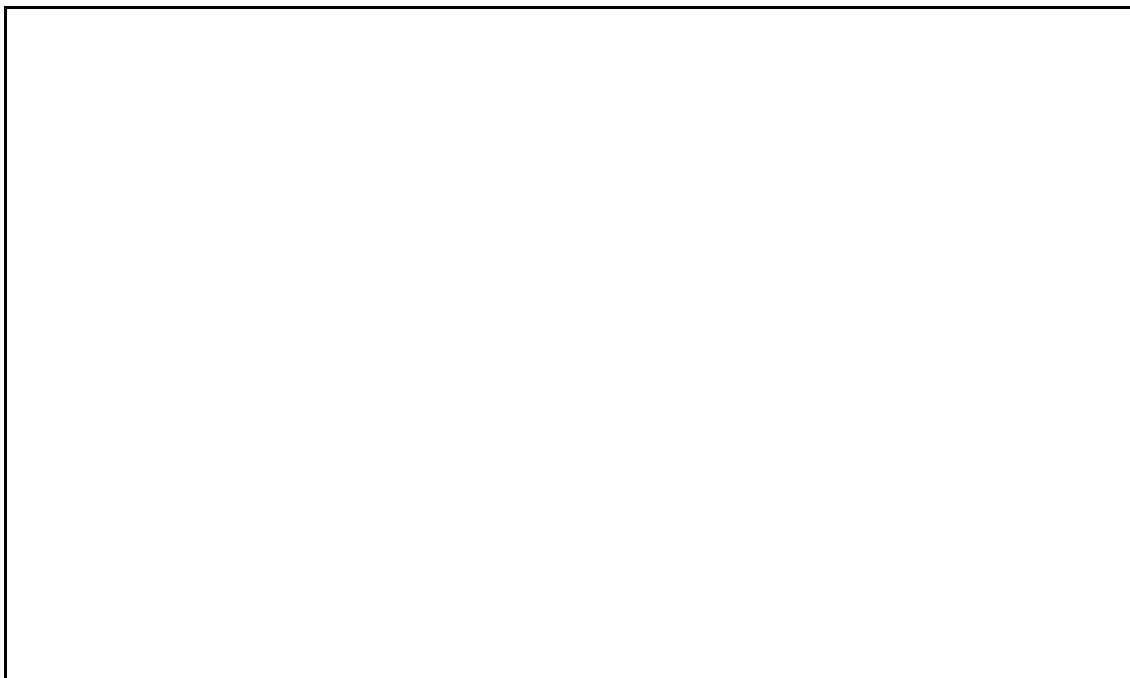
$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



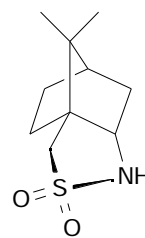
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



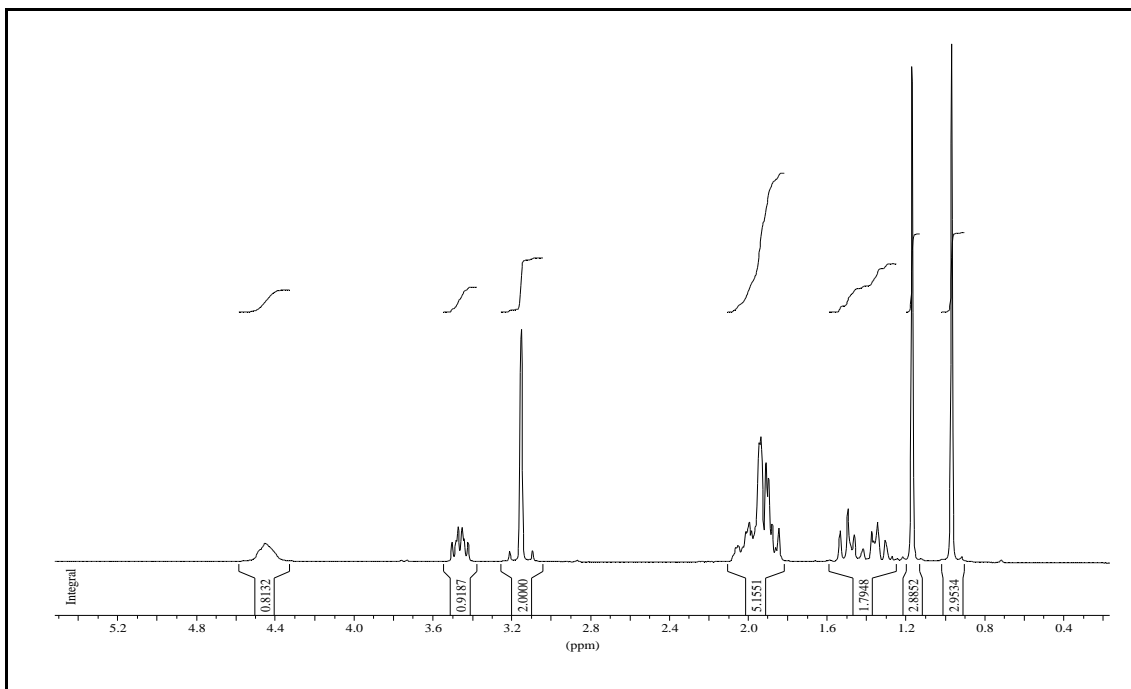
IR (KBr) ν (cm^{-1})



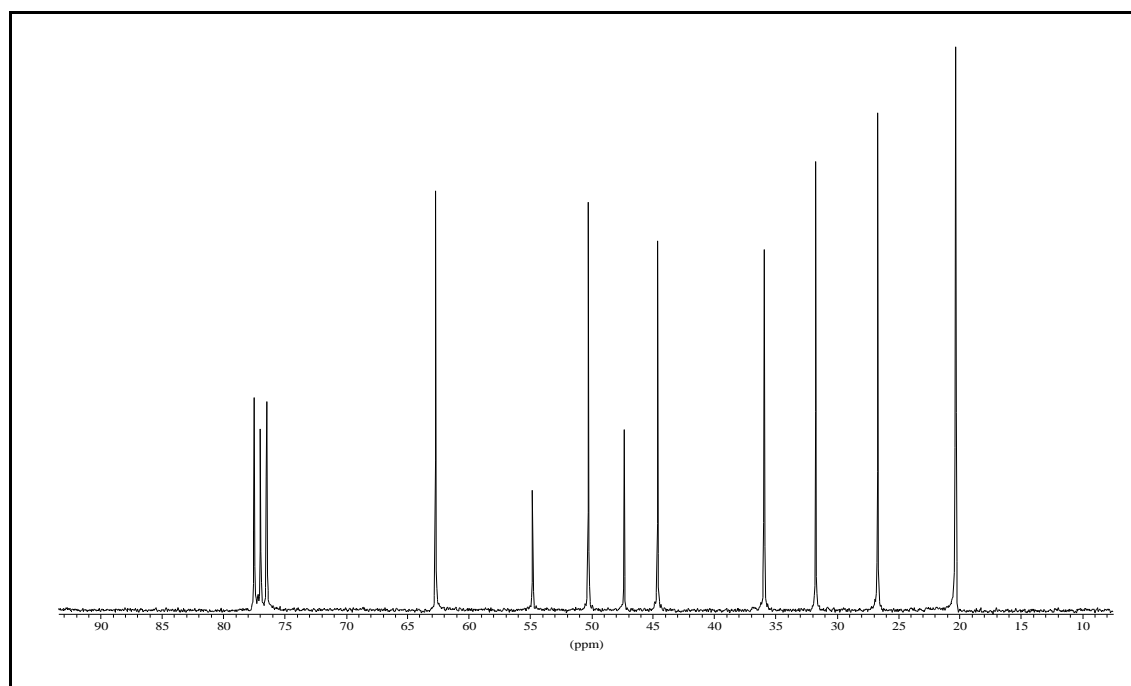
(-)-10,2-Bornanosultama, 15



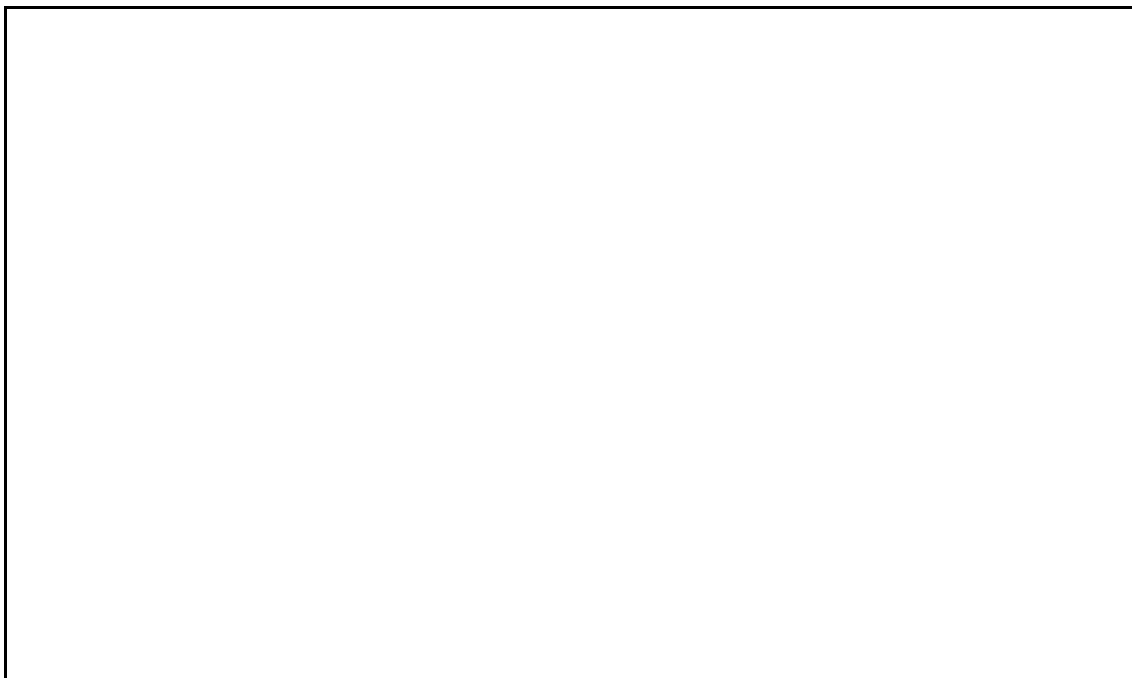
^1H -RMN (250 MHz, CDCl_3) δ (ppm)



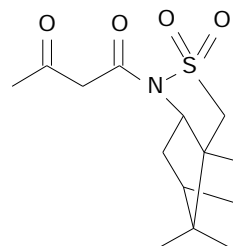
^{13}C -RMN (62.9 MHz, CDCl_3) δ (ppm)



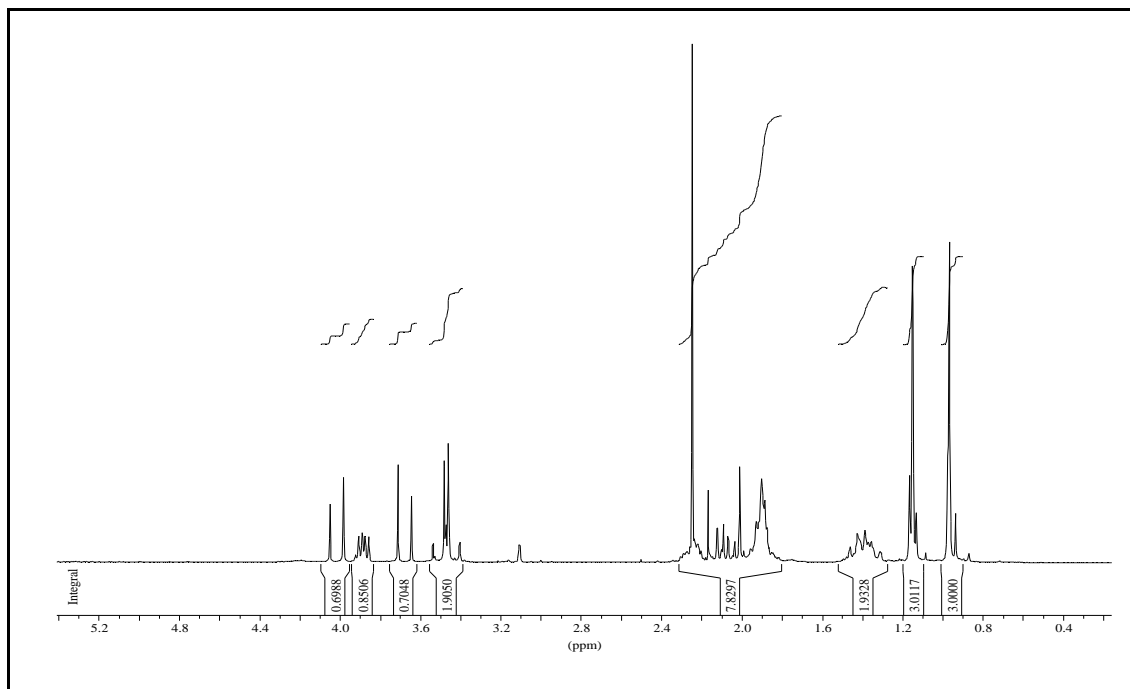
IR (KBr) ν (cm^{-1})



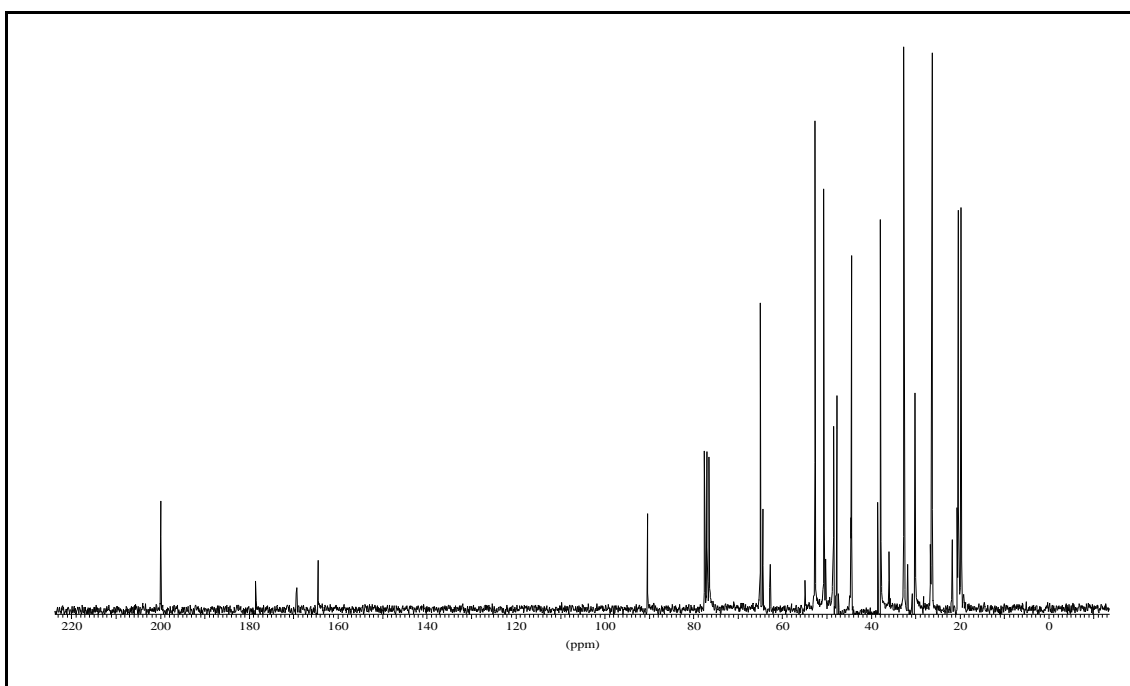
(2*R*)-*N*-(3-Oxobutanoil)bornano-10,2-sultama, **13b**.



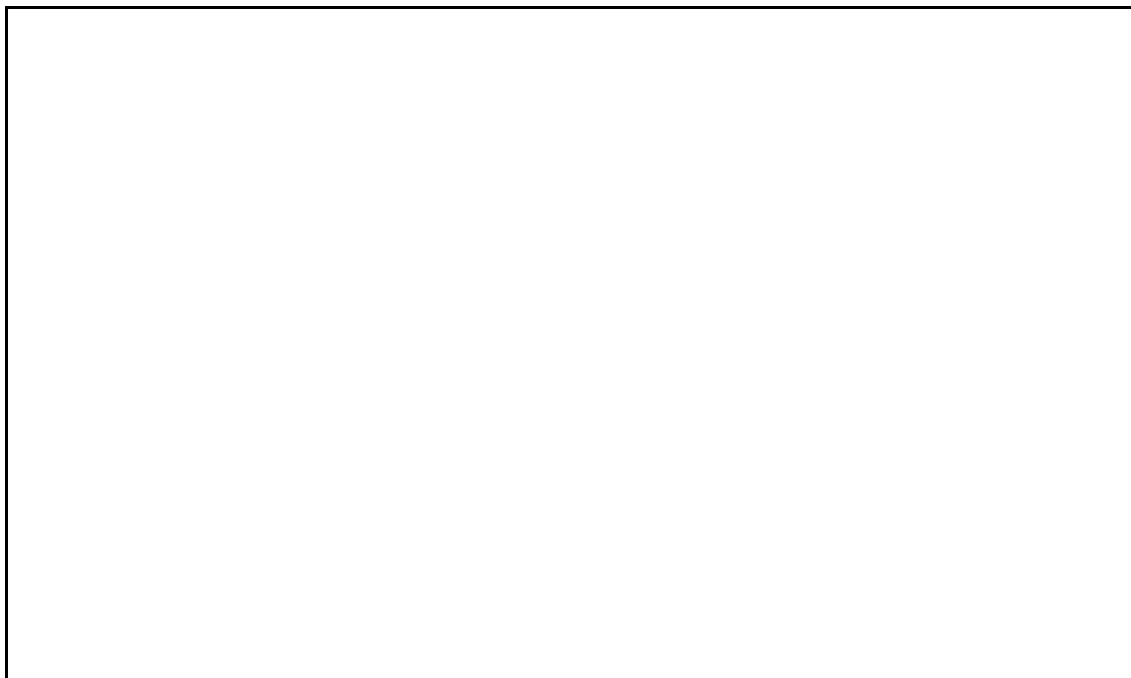
^1H -RMN (250 MHz, CDCl_3) δ (ppm)



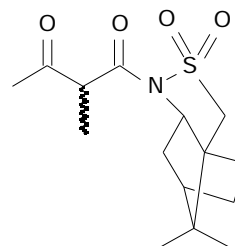
^{13}C -RMN (62.9 MHz, CDCl_3) δ (ppm)



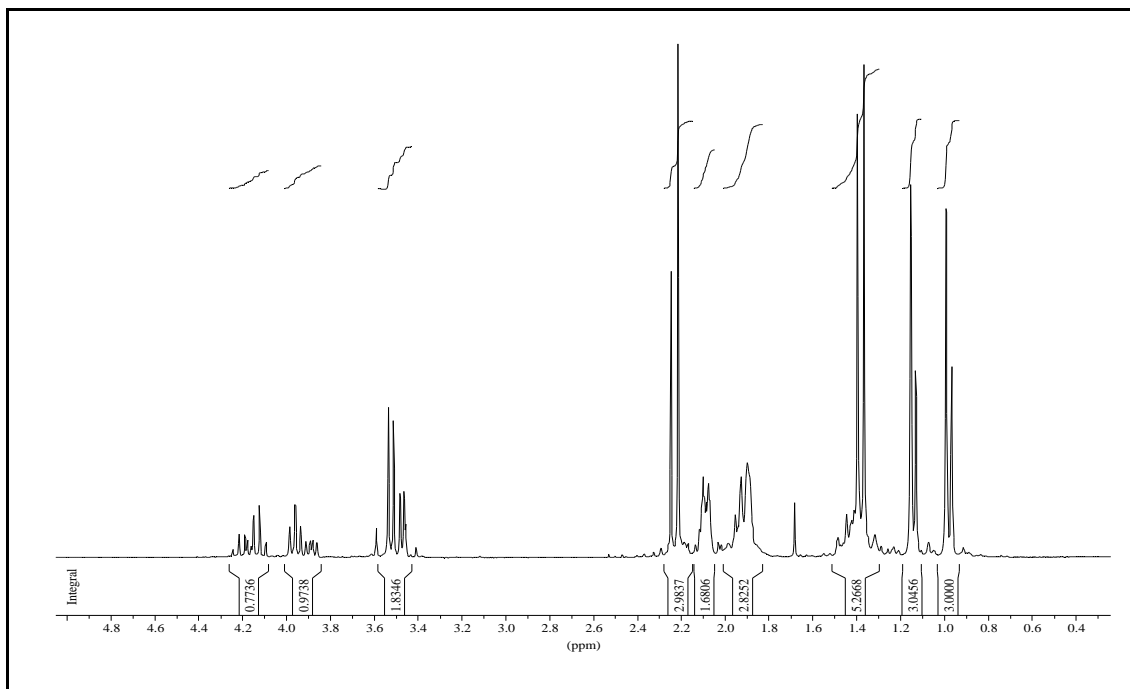
IR (KBr) ν (cm^{-1})



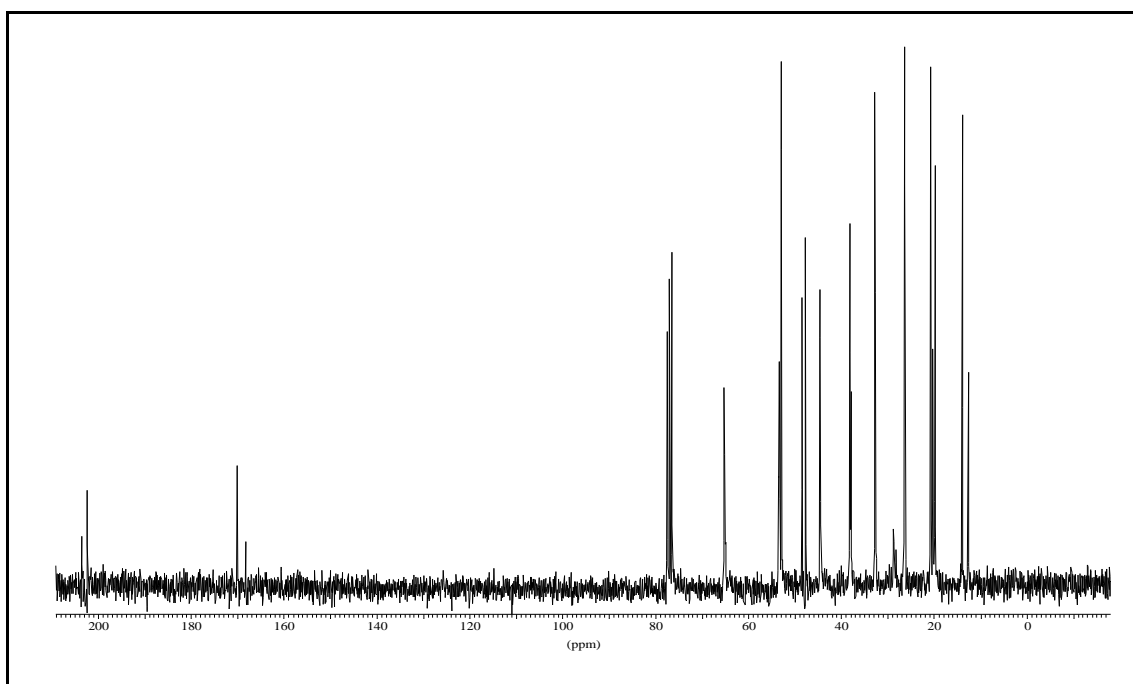
(2*R*)-*N*-(2-Metil-1,3-dioxobutil)bornano-10,2-sultama, 20



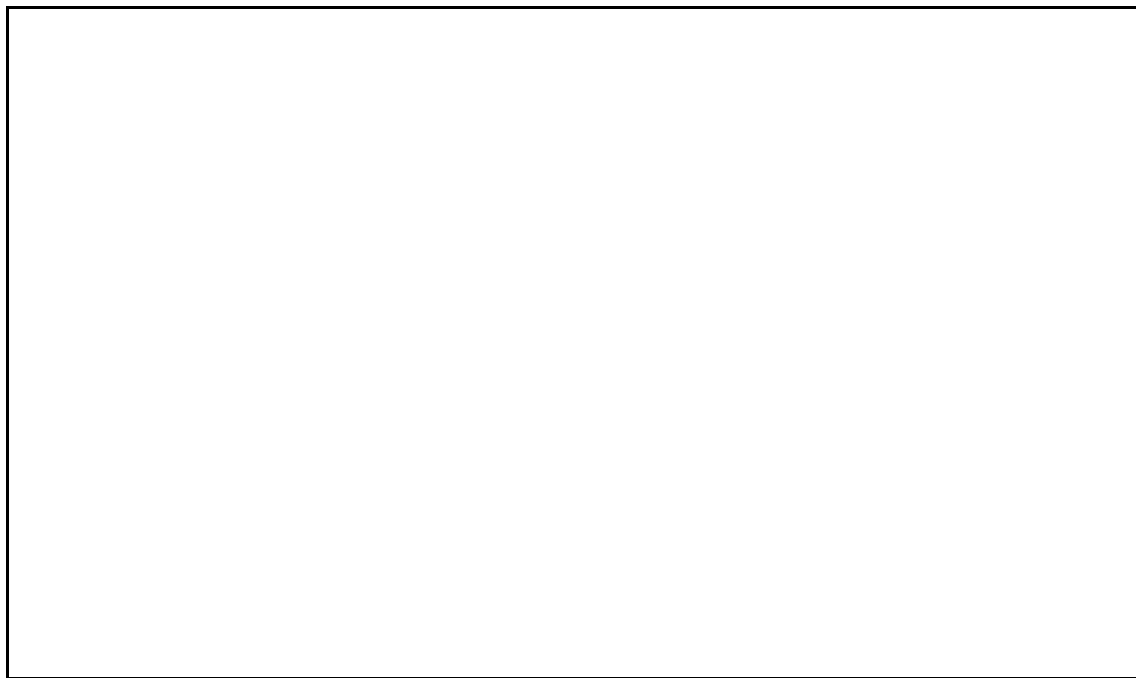
$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



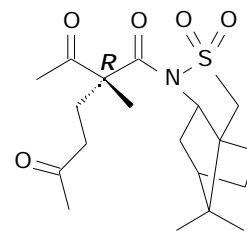
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3)



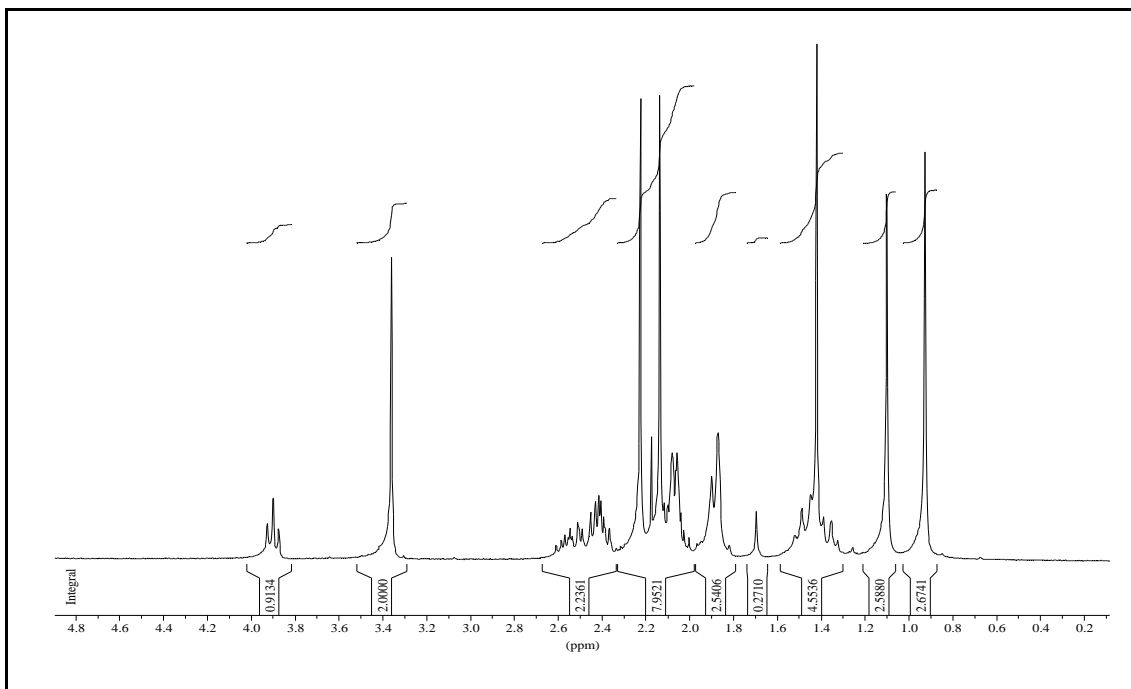
IR (KBr) ν (cm^{-1})



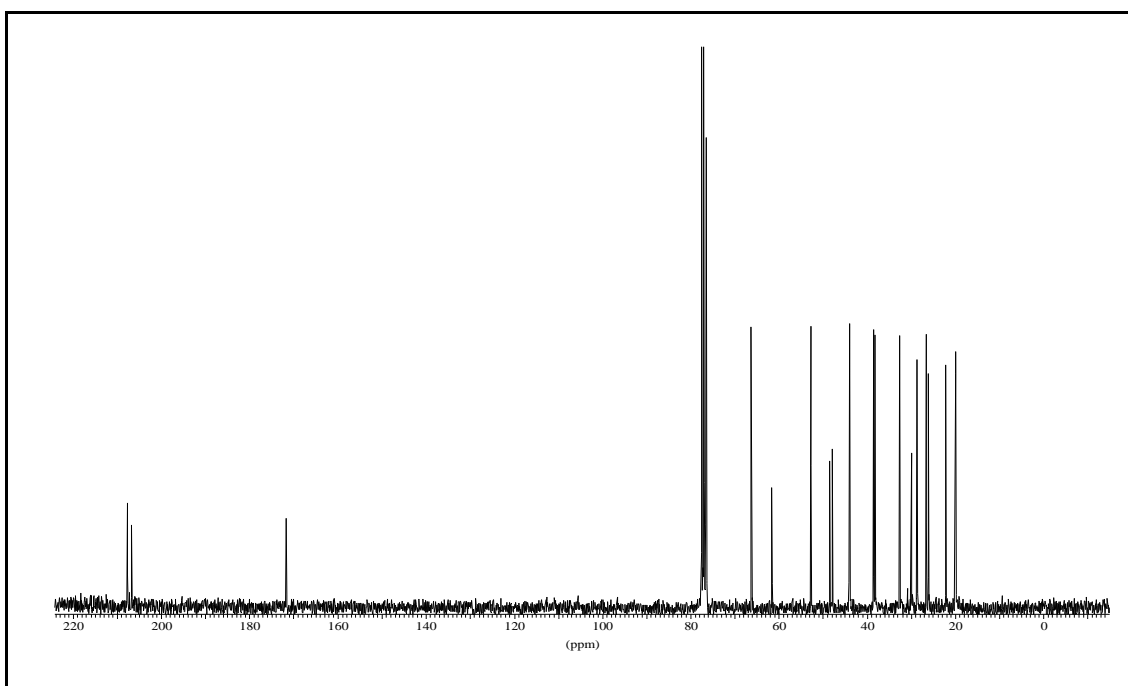
(2*R*)-*N*-((2*R*)-2-Acetil-2-metil-1,5-dioxohexil)bornano-10,2-sultama, 32



$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)

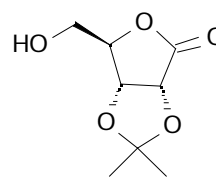


IR (KBr) ν (cm^{-1})

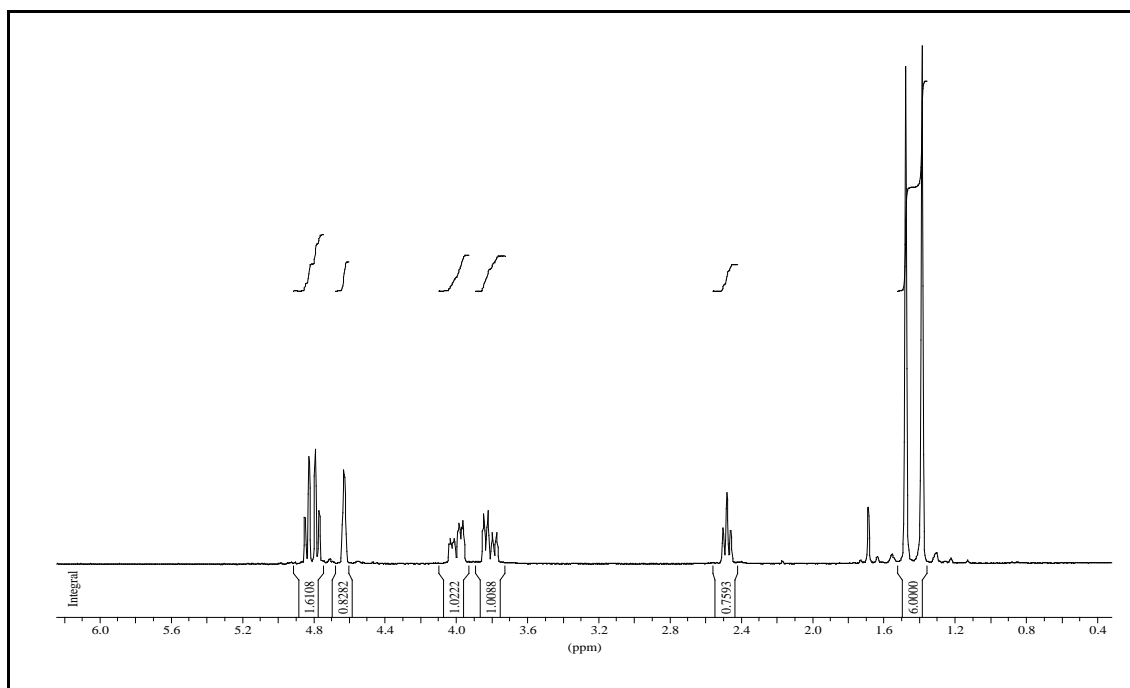


Difracció de raigs X

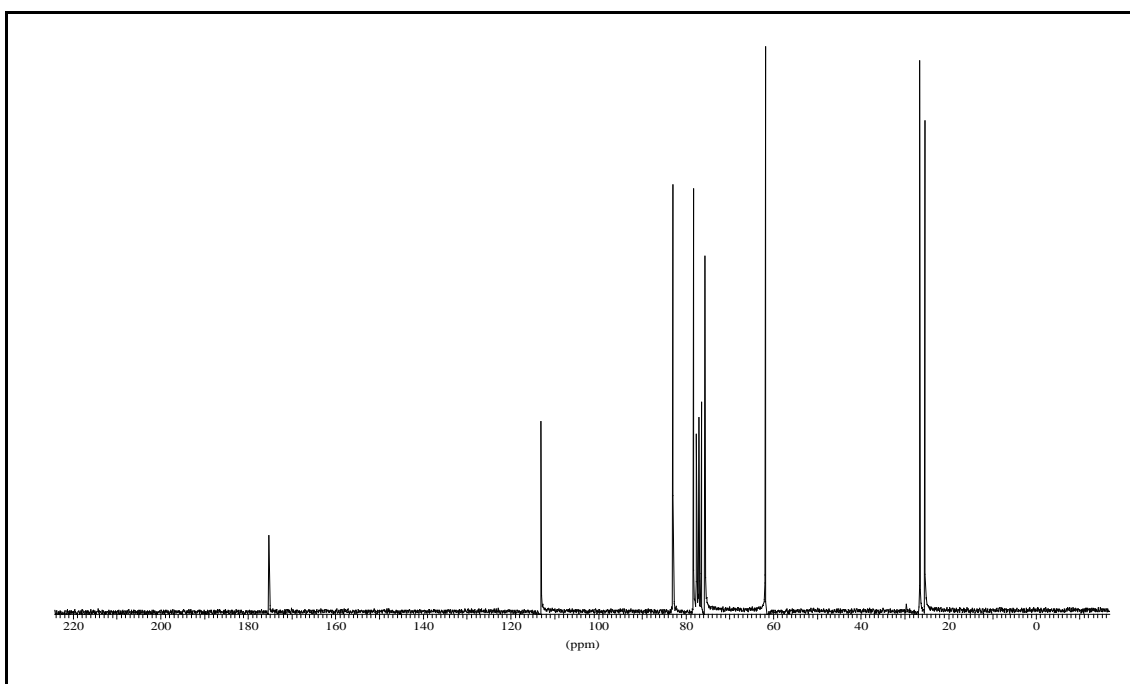
2,3-*O*-Isopropiliden- -D-ribonolactona, 18.



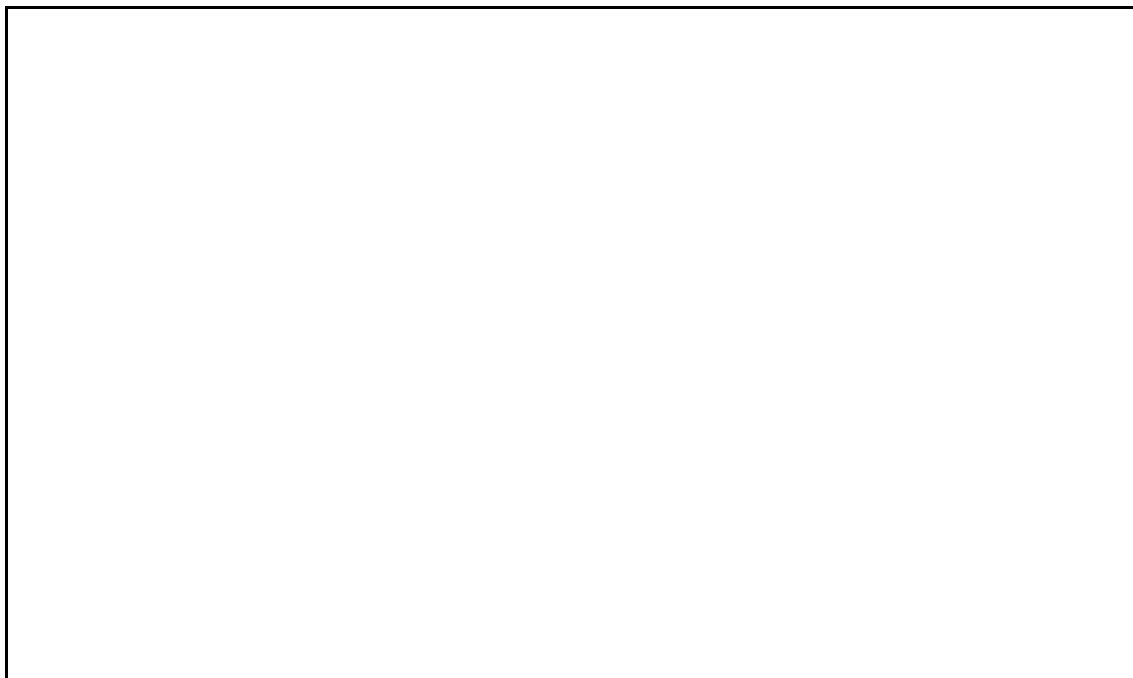
^1H -RMN (250 MHz, CDCl_3) δ (ppm)



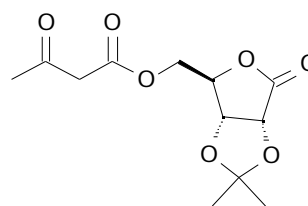
^{13}C -RMN (62.9 MHz, CDCl_3) δ (ppm)



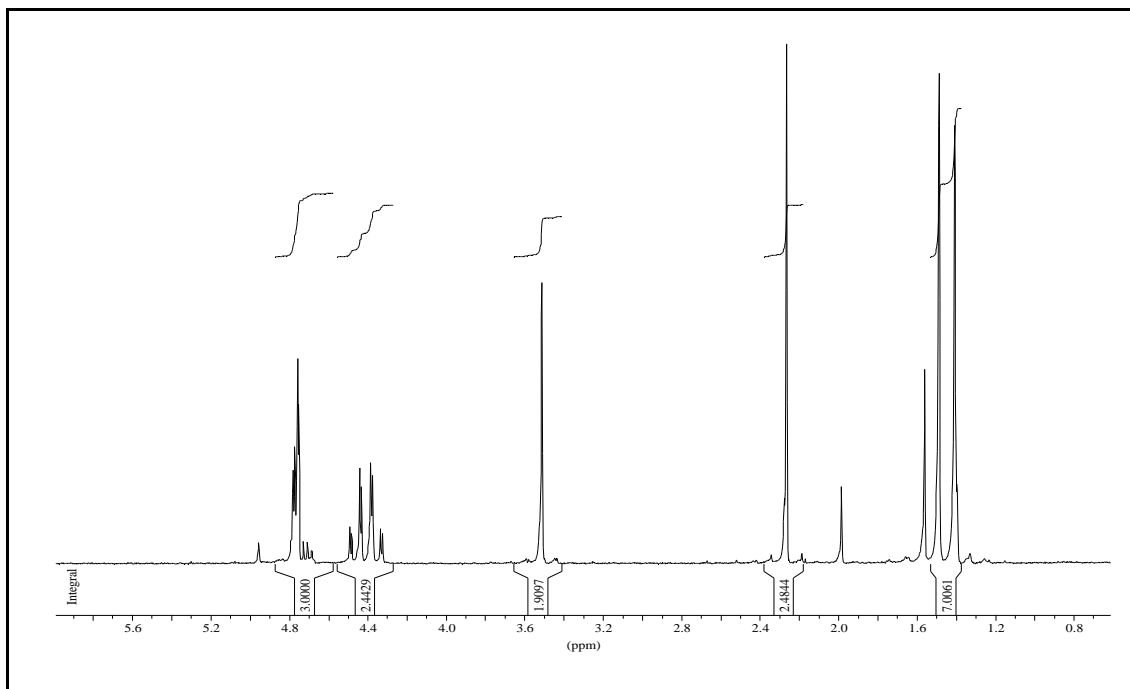
IR (KBr) ν (cm^{-1})



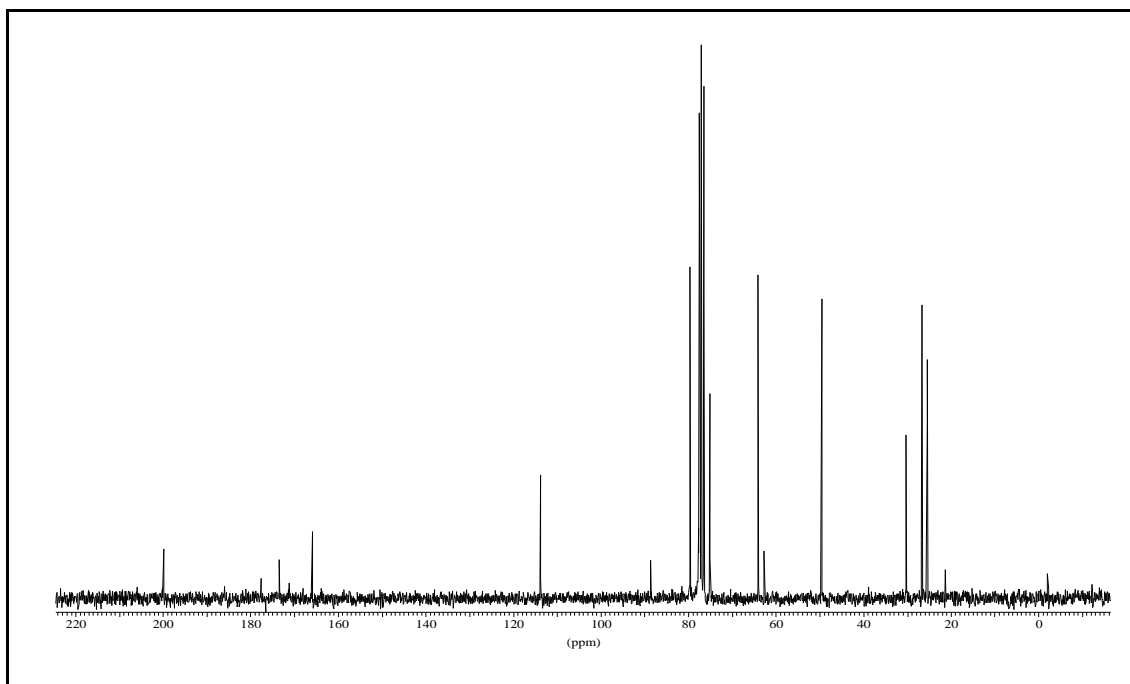
3-Oxobutanoat de 2,3-O-isopropiliden- -D-ribonolactona, 13e.



$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



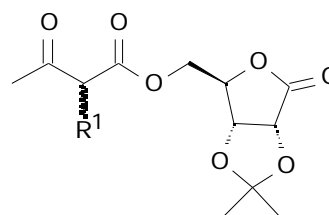
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



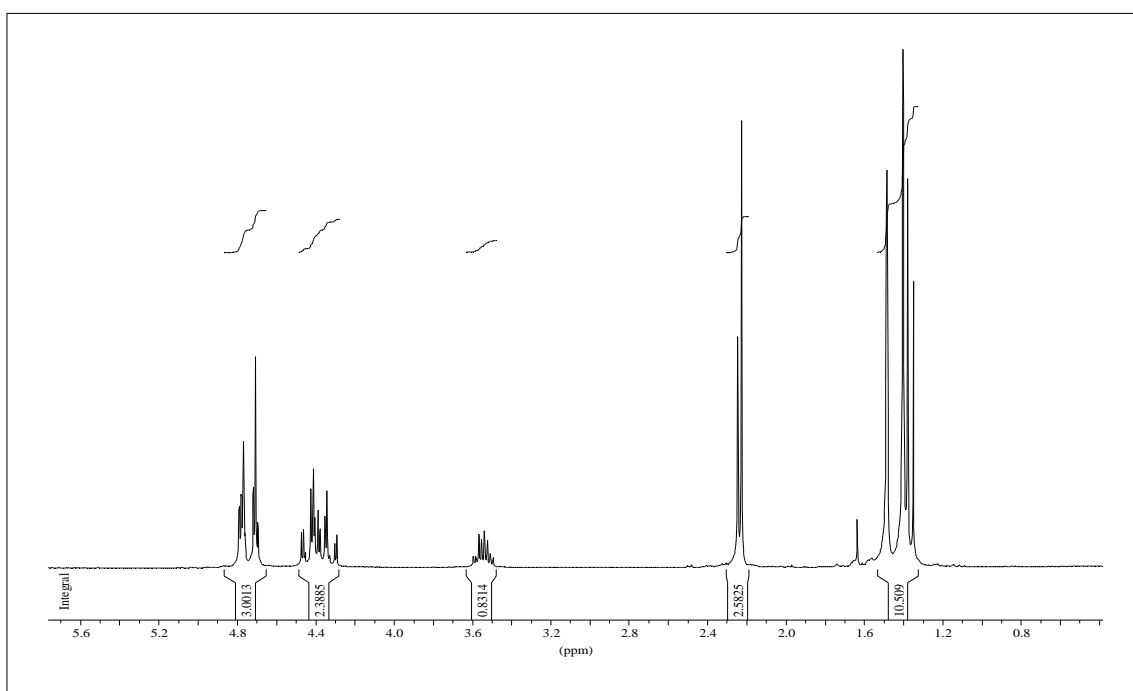
IR (KBr) ν (cm^{-1})



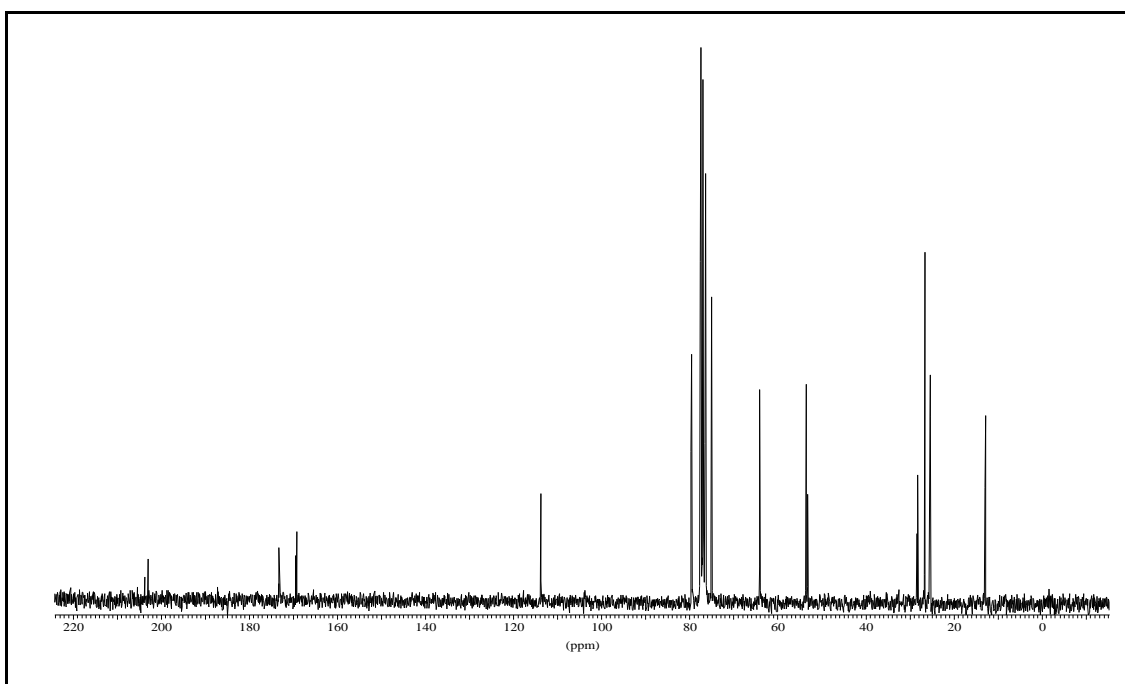
2-Metil-3-oxobutanoat de 2,3-*O*-isopropiliden- -D-ribono-
lactona, 24a



$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



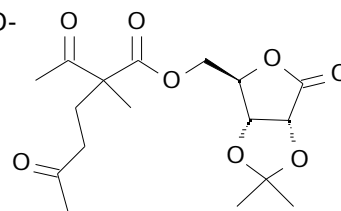
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



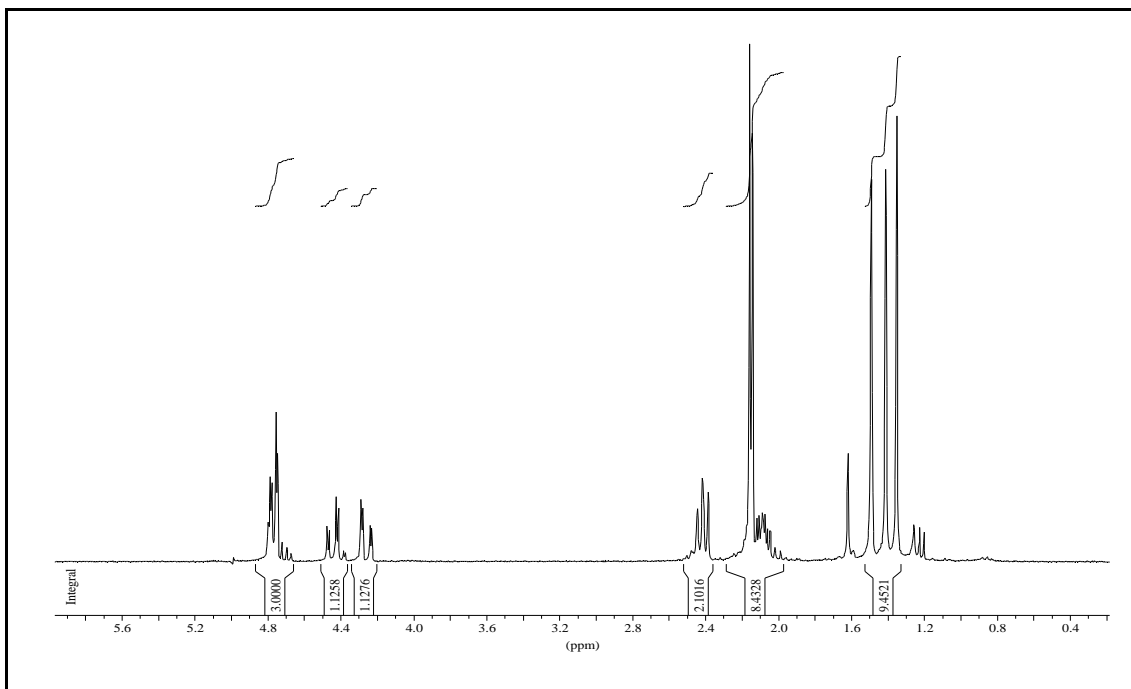
IR (KBr) ν (cm^{-1})



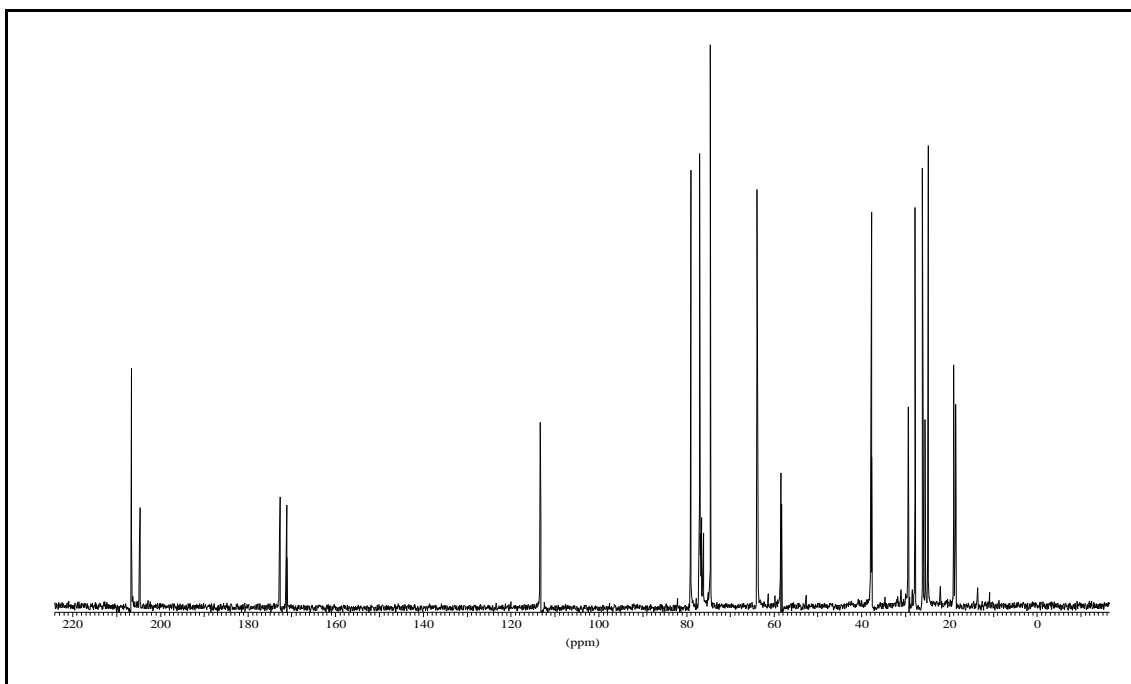
2-Acetil-2-metil-5-oxohexanoats de 2,3-O-isopropiliden- -D-
ribonolactona, mescla de diastereoisòmers, **26**



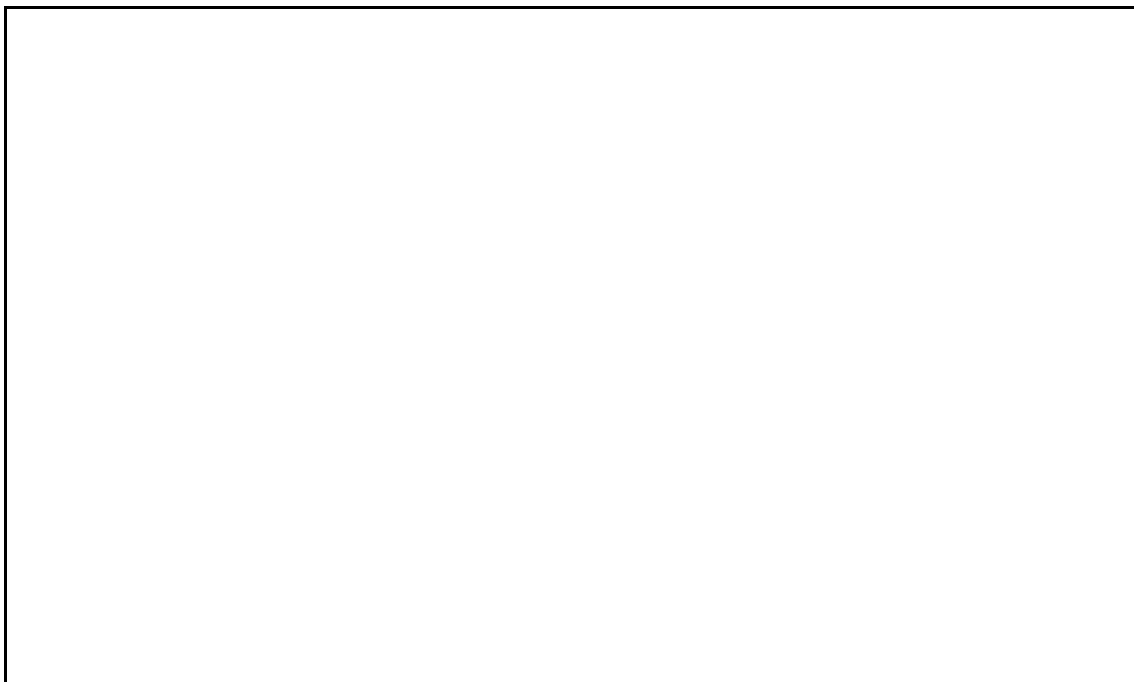
$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



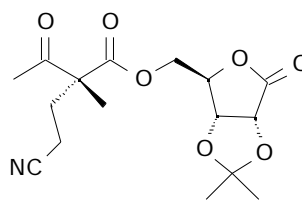
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



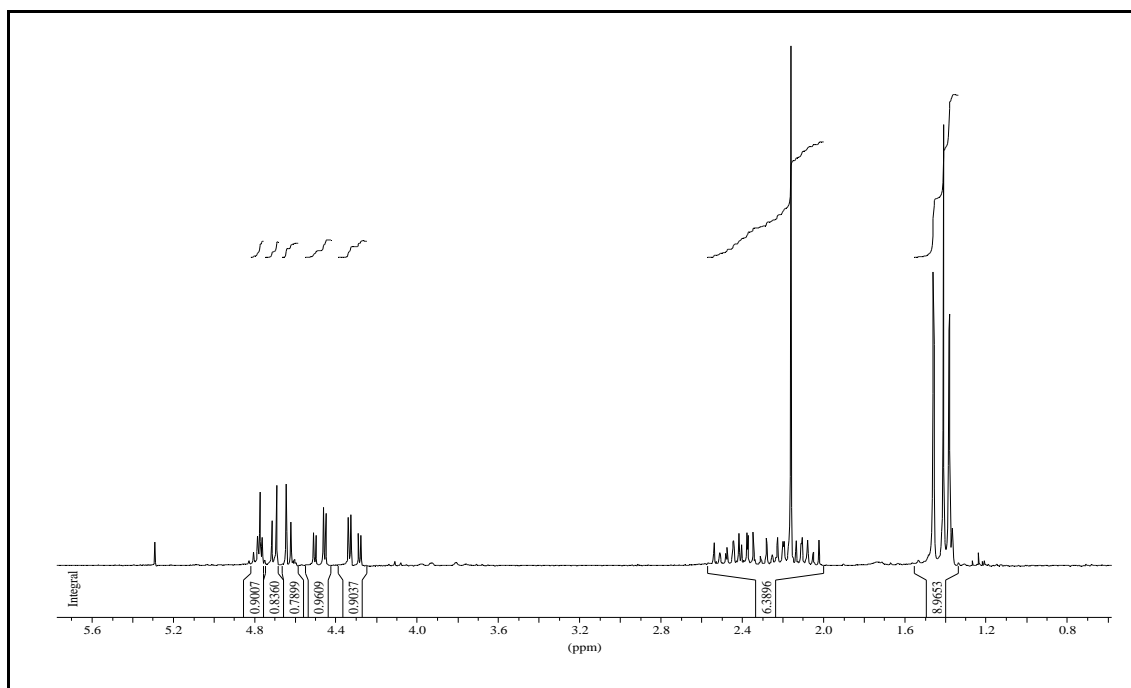
IR (film) ν (cm^{-1})



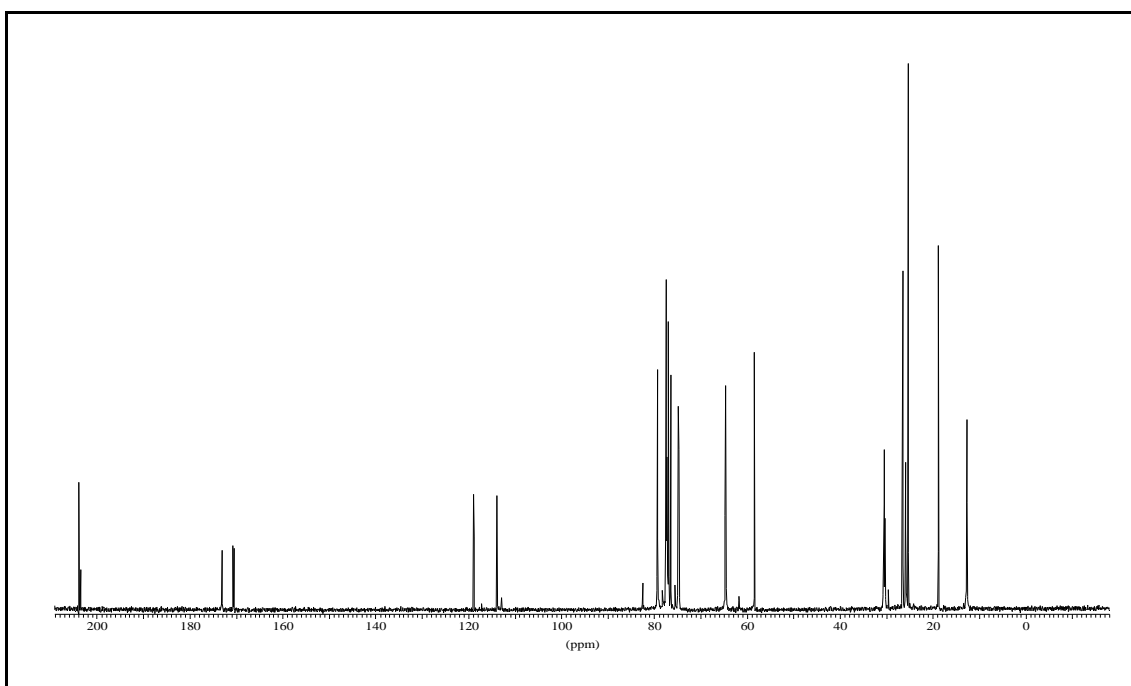
2-(2-Cianoetil)-2-metil-3-oxobutanoat de 2,3-O-isopropiliden
 -D- ribonolactona, 1r diastereoisòmer eluït, 30



$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



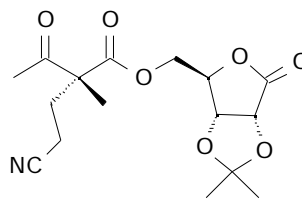
$^{12}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



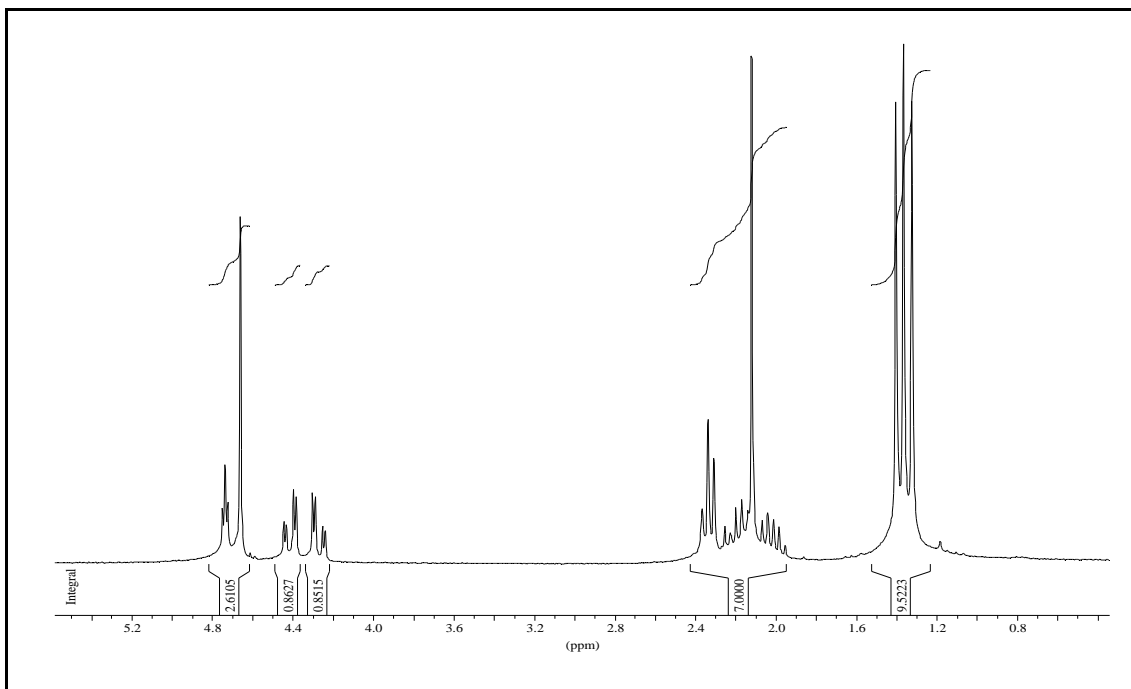
IR (film) ν (cm^{-1})



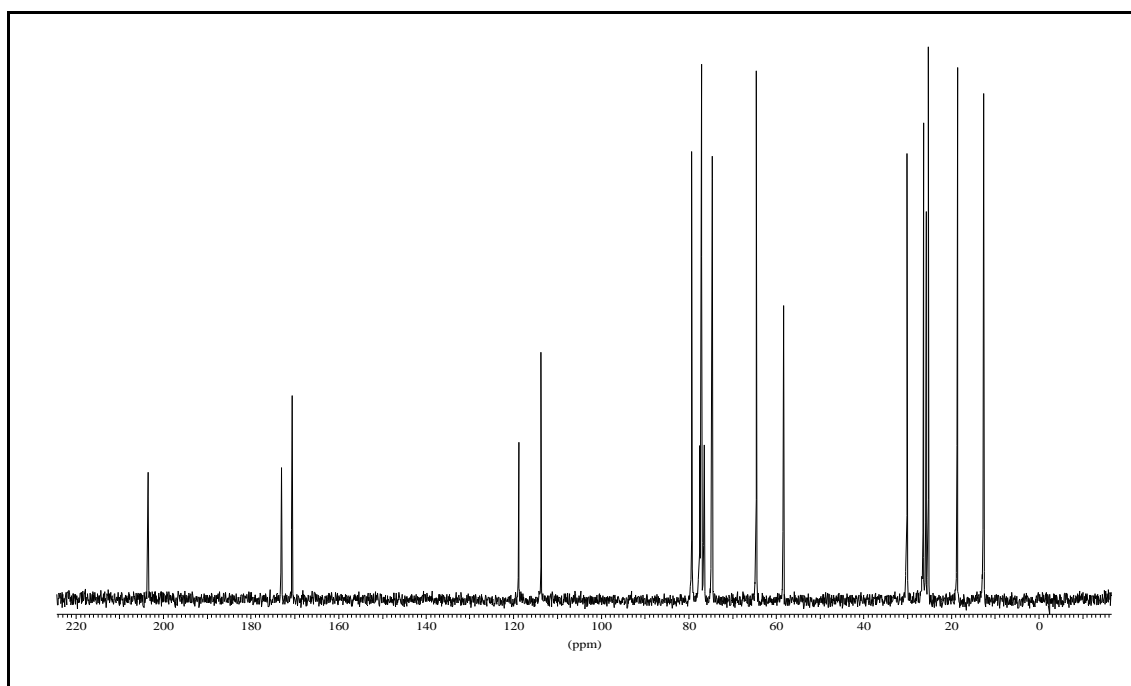
2-(2-Cianoetil)-2-metil-3-oxobutanoat de 2,3-O-isopropiliden-D-ribonolactona, 2n diastereoisòmer eluït, 30



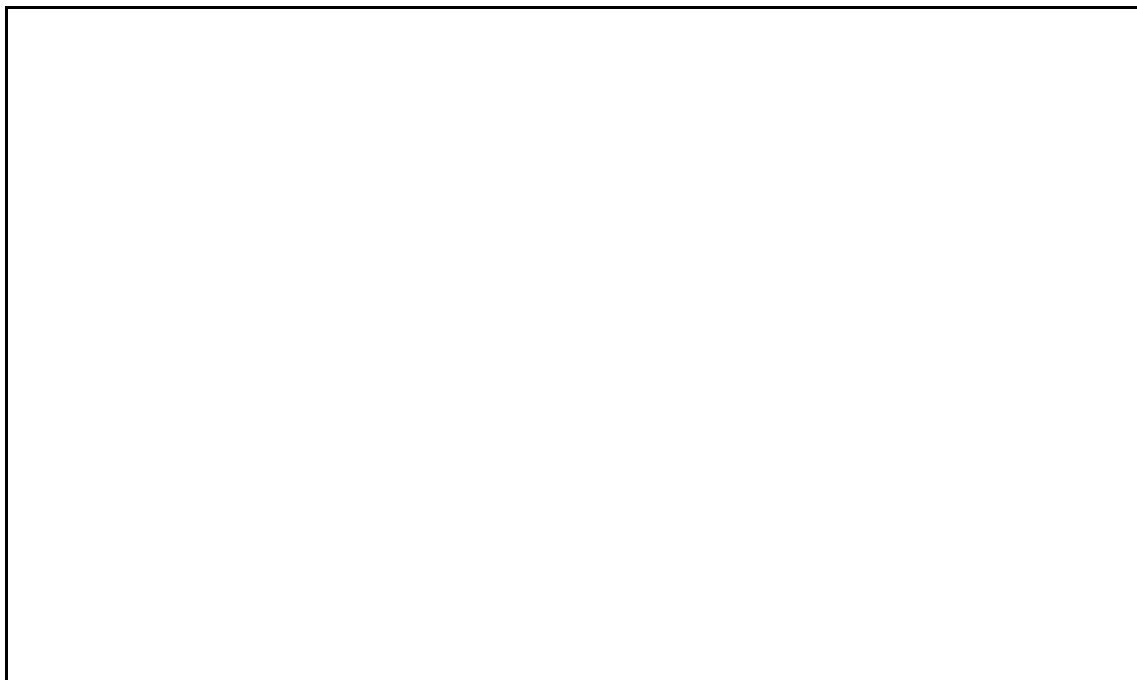
$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



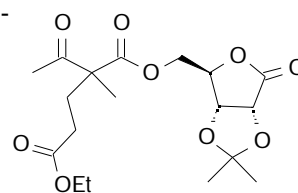
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



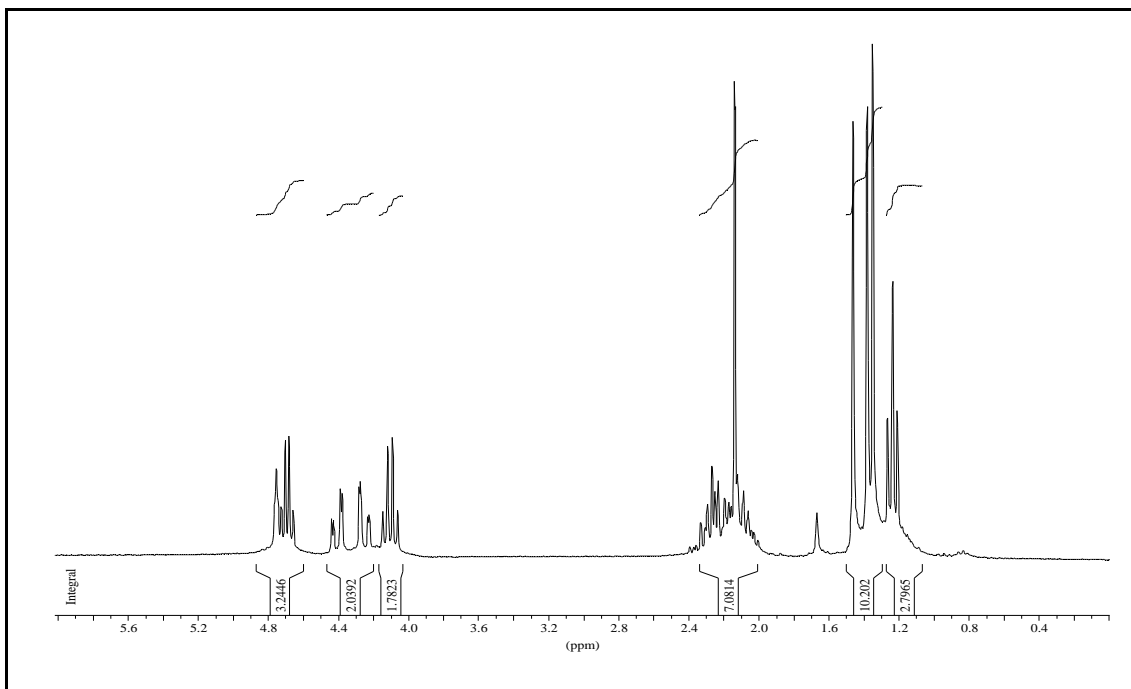
IR (film) ν (cm^{-1})



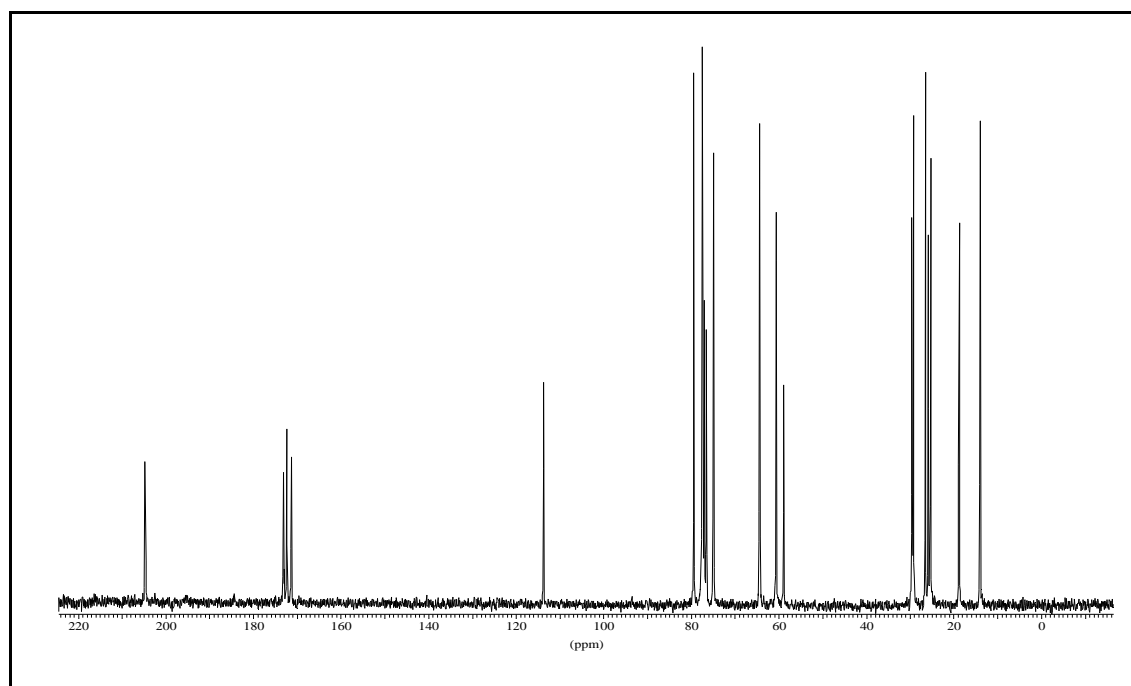
2-Acetil-4-etoxicarbonil-2-metilbutanoat de 2,3-O-isopropiliden-D-ribonolactona, diastereoisòmer minoritari, 33



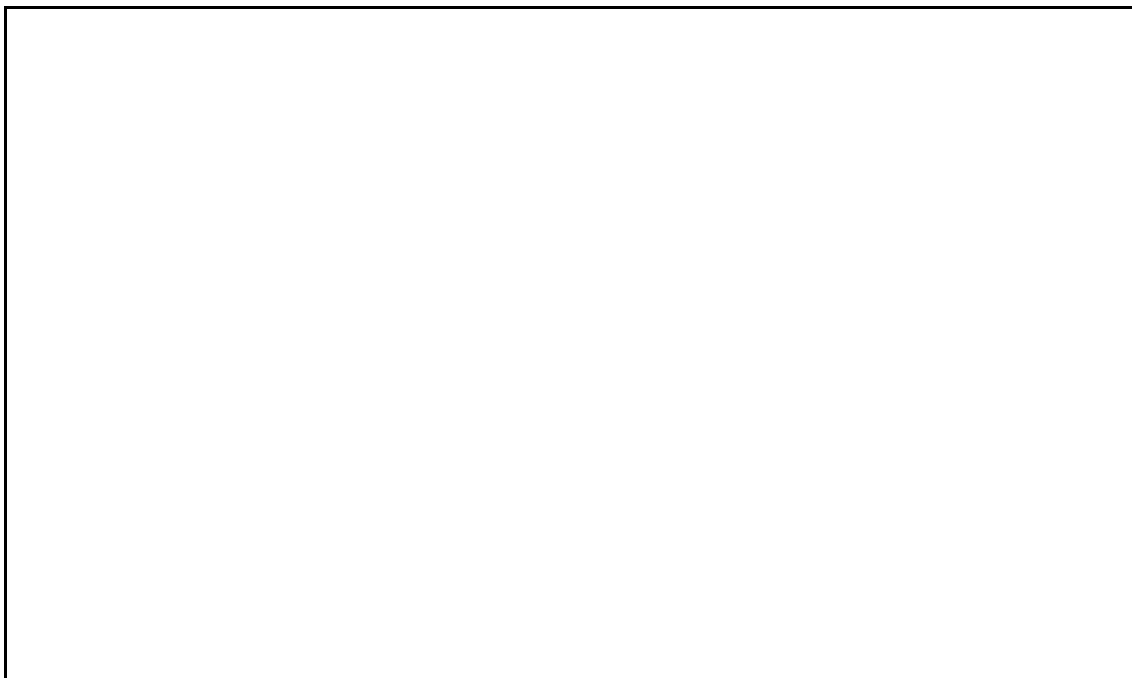
$^1\text{H-RMN}$ (250 MHz, CDCl_3) δ (ppm)



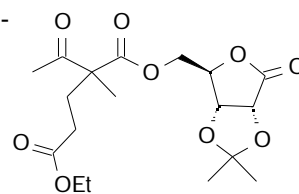
$^{13}\text{C-RMN}$ (62.9 MHz, CDCl_3) δ (ppm)



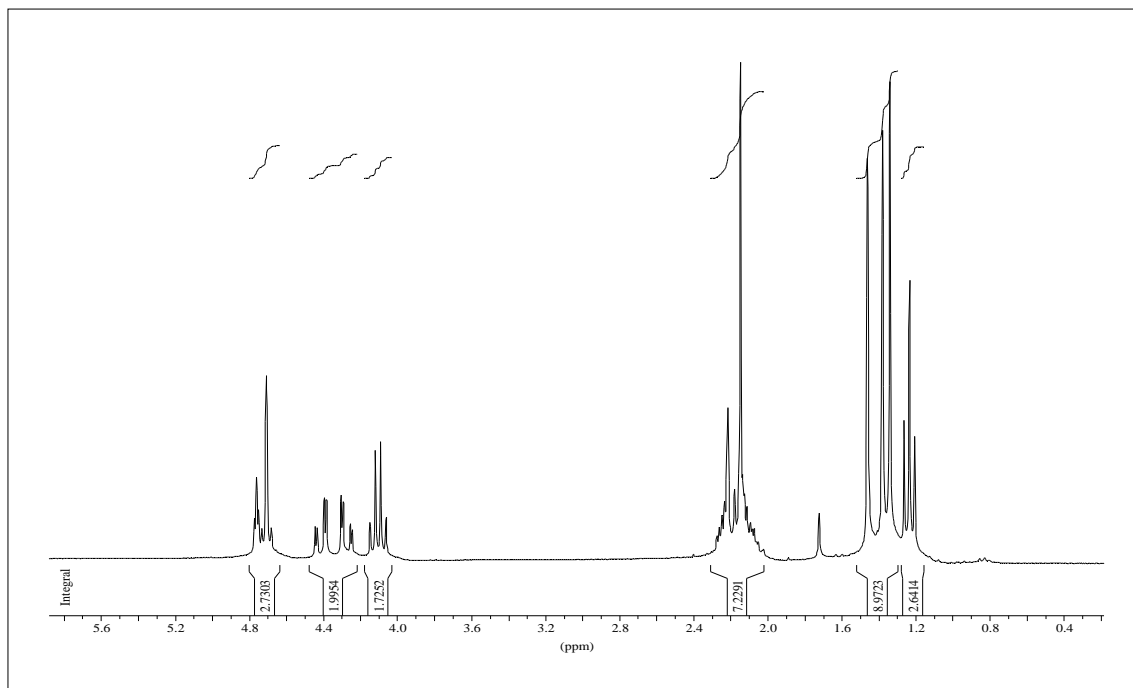
IR (film) ν (cm^{-1})



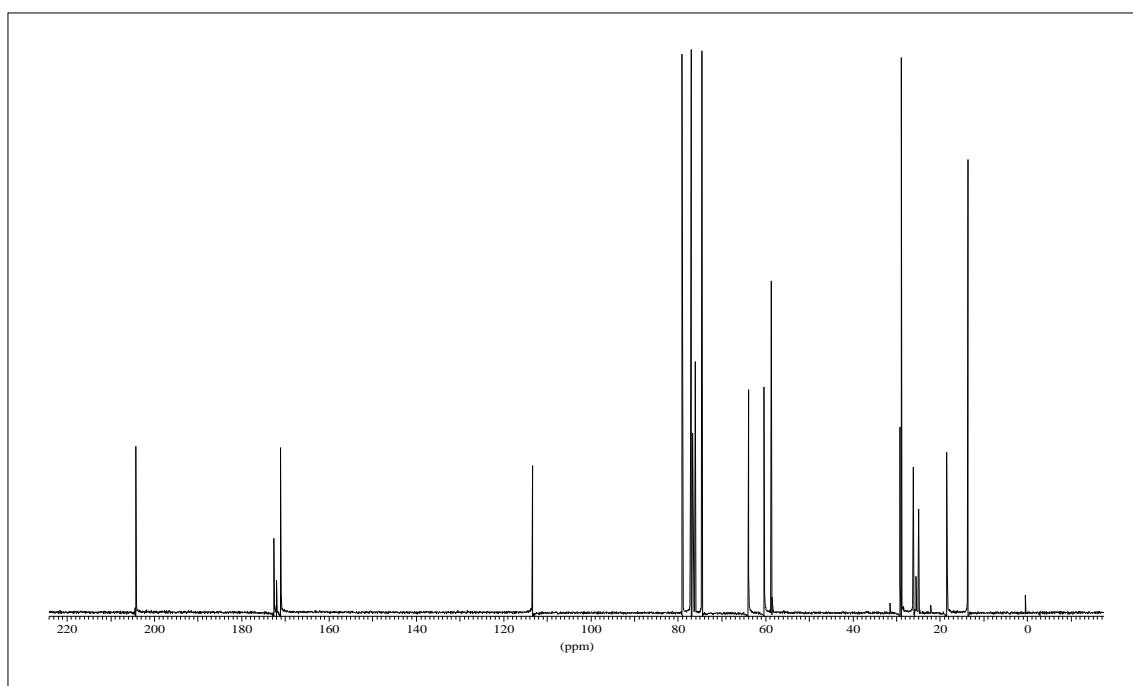
2-Acetil-4-etoxicarbonil-2-metilbutanoat de 2,3-O-isopropiliden-D-ribonolactona, diastereoisòmer majoritari, 33



^1H -RMN (250 MHz, CDCl_3) δ (ppm)



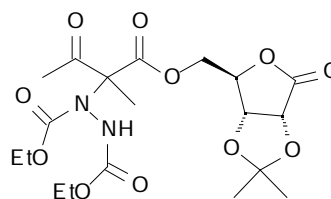
^{13}C -RMN (62.9 MHz, CDCl_3) δ (ppm)



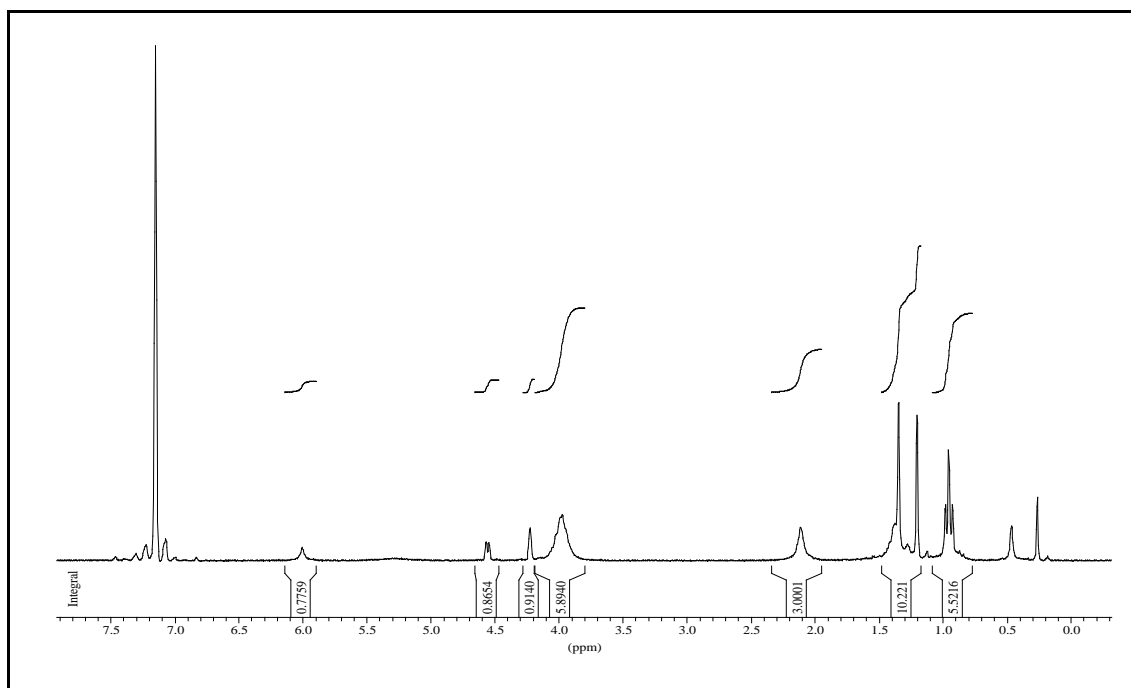
IR (film) ν (cm^{-1})



2-(*N,N*-bis(Etoxicarbonil)hidrazino)-2-metil-3-oxobutanoat de 2,3-*O*-isopropiliden-*D*-ribonolactona, diastereoisòmer majoritari, 27



$^1\text{H-RMN}$ (250 MHz, C_6D_6) T = 336 K δ (ppm)



$^{13}\text{C-RMN}$ (62.9 MHz, C_6D_6) T = 336 K δ (ppm)

