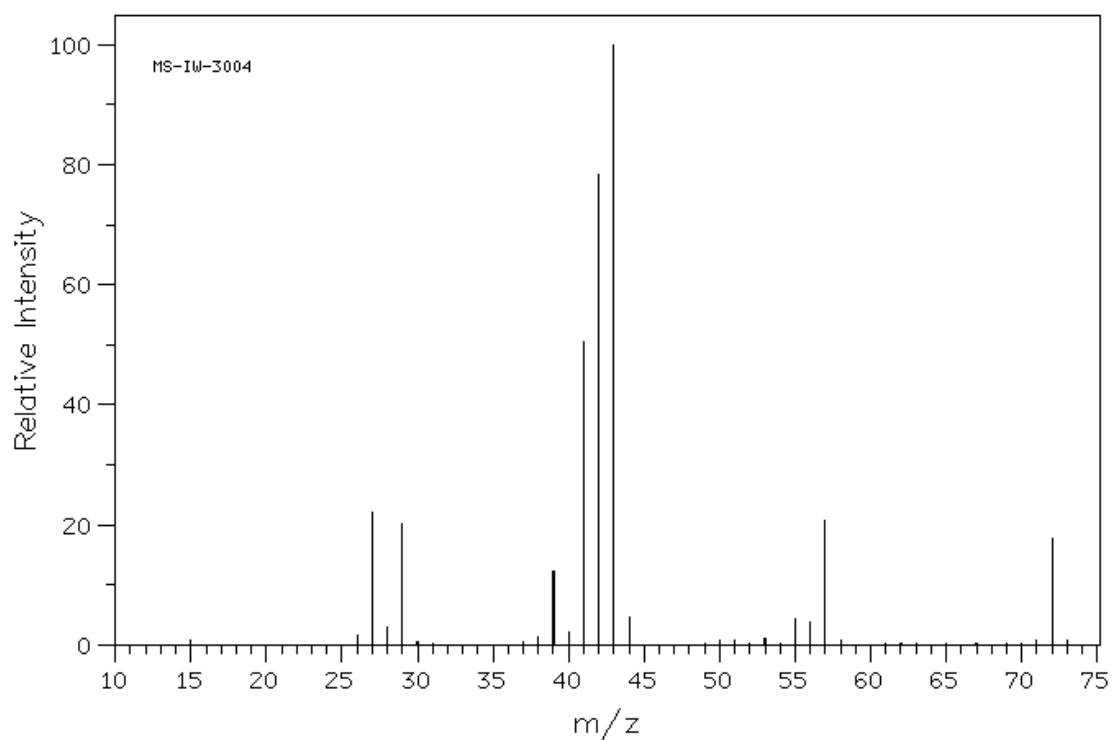
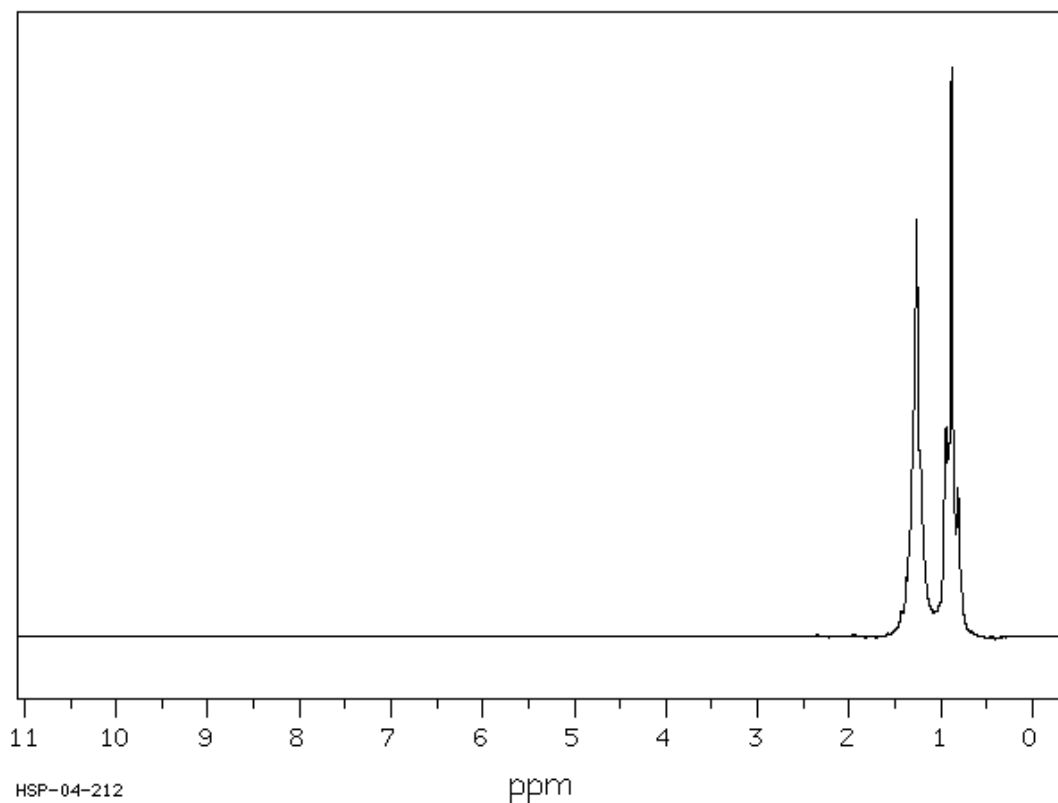


## 烃类（烯、炔、烷烃等）图谱的收集

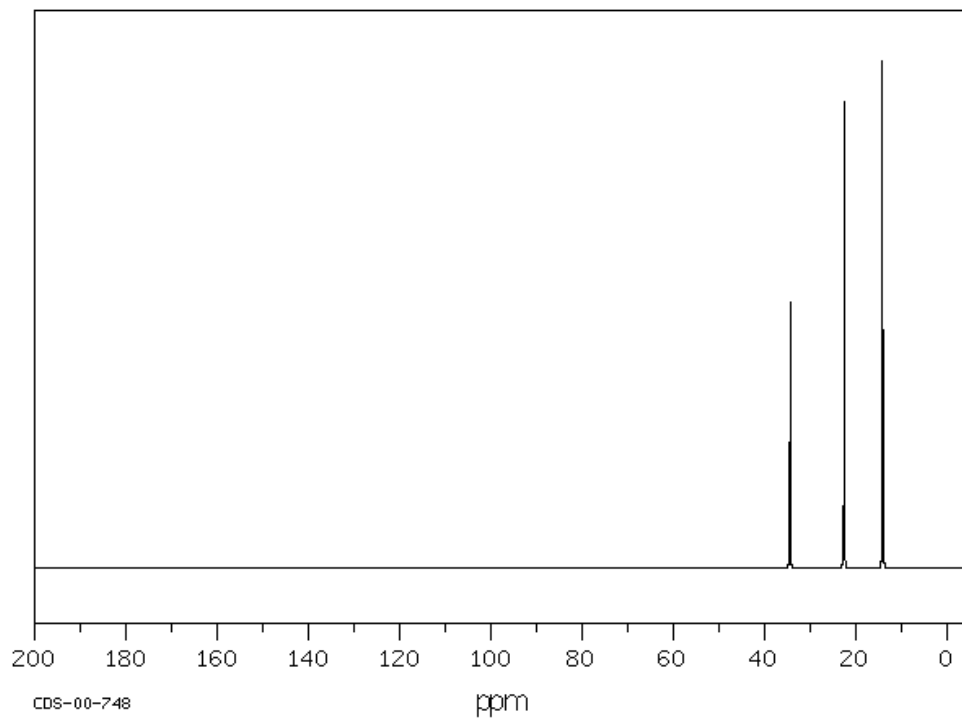
### 1. $\text{CH}_3(\text{CH}_2)_3\text{CH}_3$ 的四大谱图



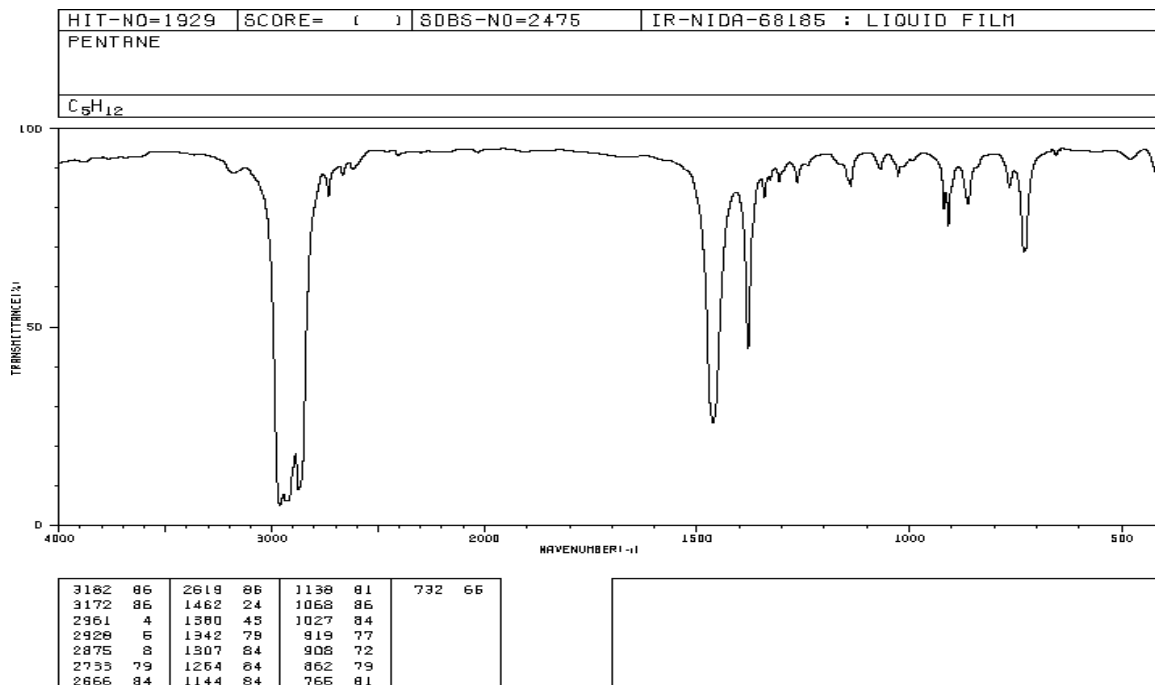
$\text{CH}_3(\text{CH}_2)_3\text{CH}_3$  的质谱



$\text{CH}_3(\text{CH}_2)_3\text{CH}_3$  的氢谱 90 MHz in  $\text{CDCl}_3$

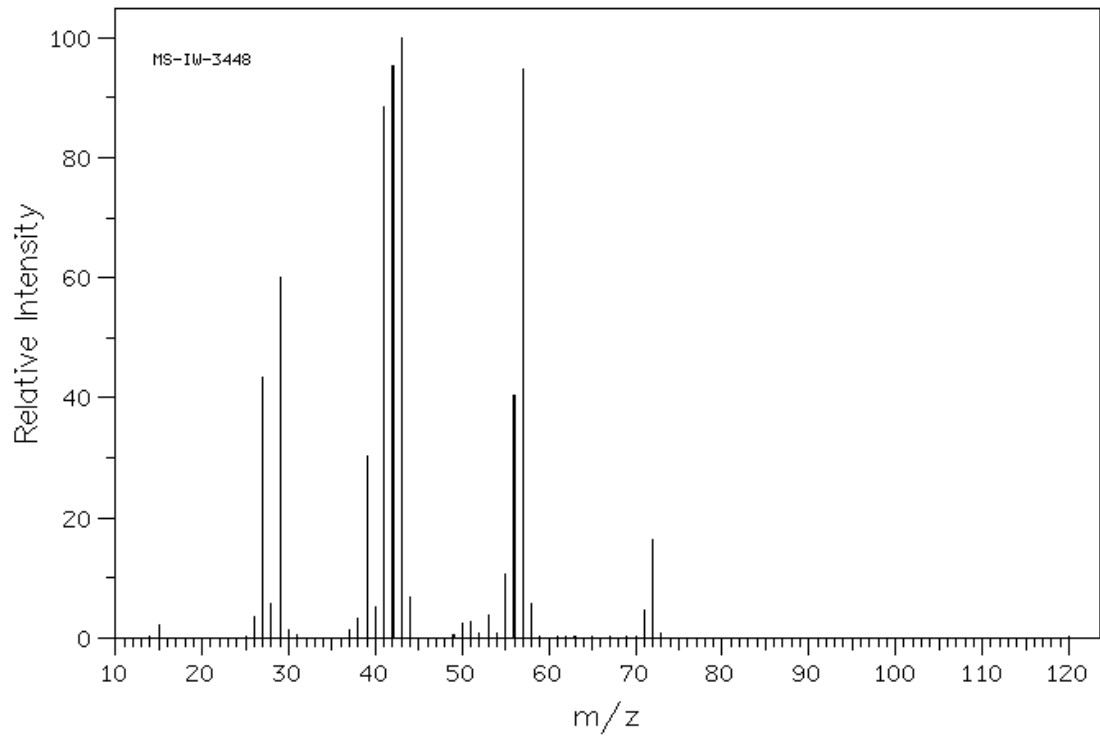


$\text{CH}_3(\text{CH}_2)_3\text{CH}_3$  的碳谱 in  $\text{CDCl}_3$

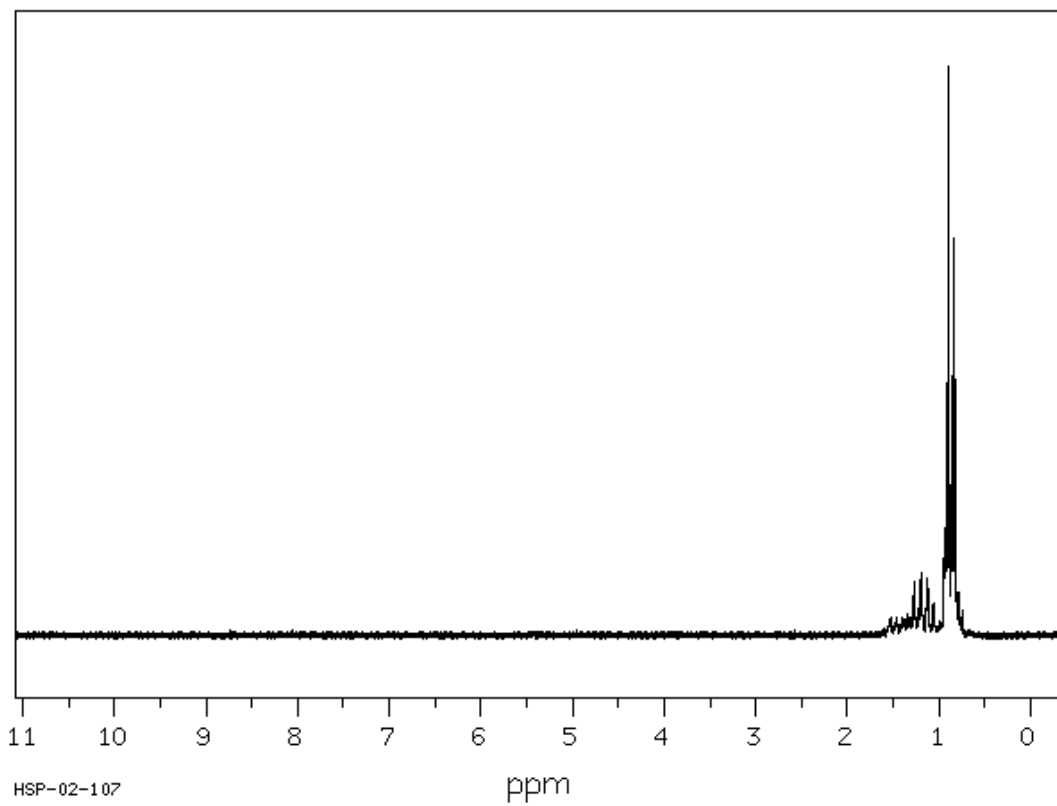


$\text{CH}_3(\text{CH}_2)_3\text{CH}_3$  的红外光 liquid film

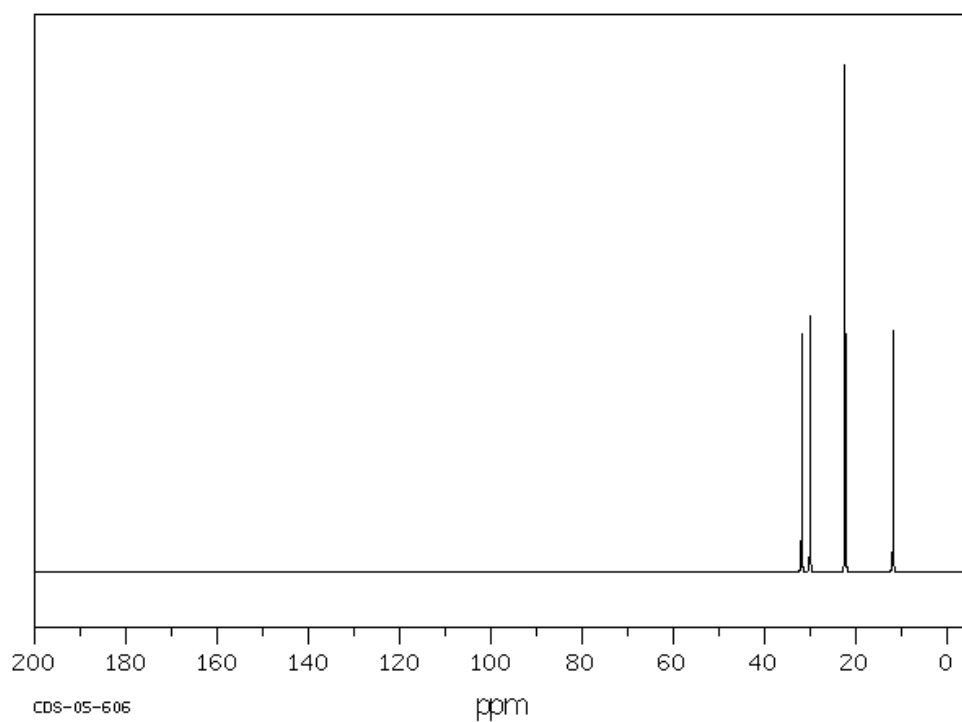
## 2. 二甲基丁烷的四大谱图



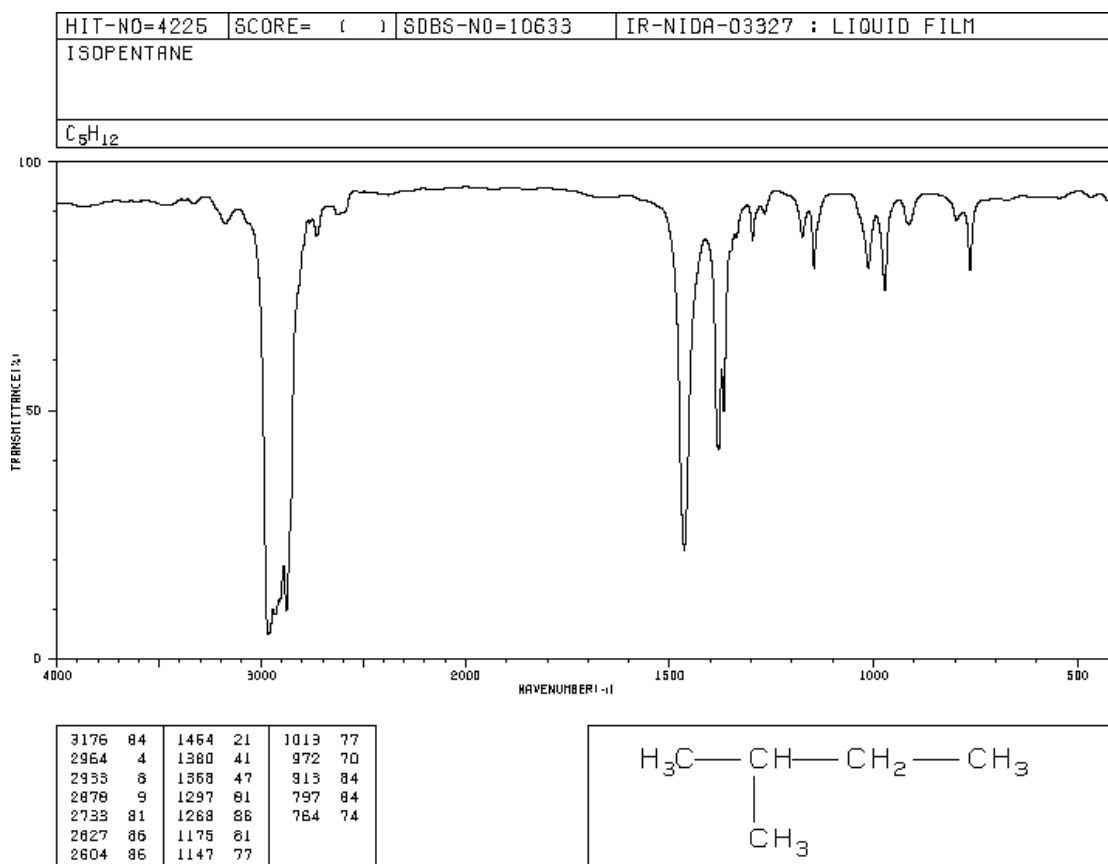
二甲基丁烷的质谱



二甲基丁烷的氢谱 90 MHz in  $\text{CDCl}_3$

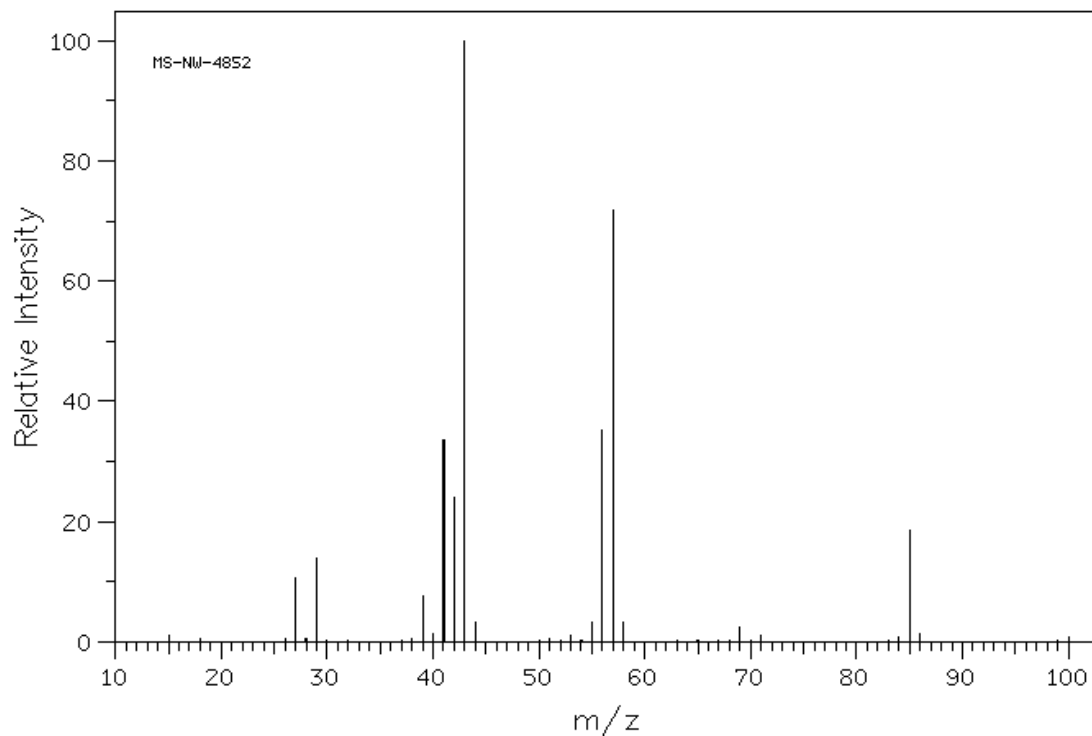


CH<sub>3</sub>(CH<sub>2</sub>)<sub>3</sub>CH<sub>3</sub> 的碳谱 CDCl<sub>3</sub>

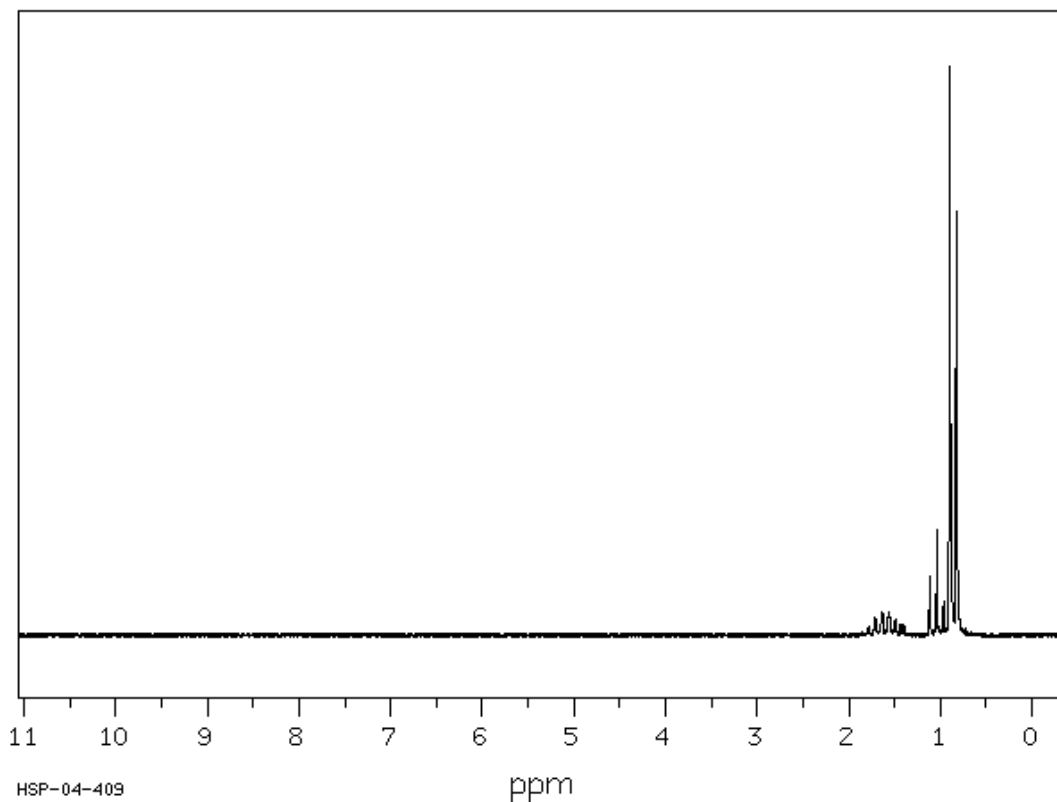


二甲基丁烷的红外光谱 liquid film

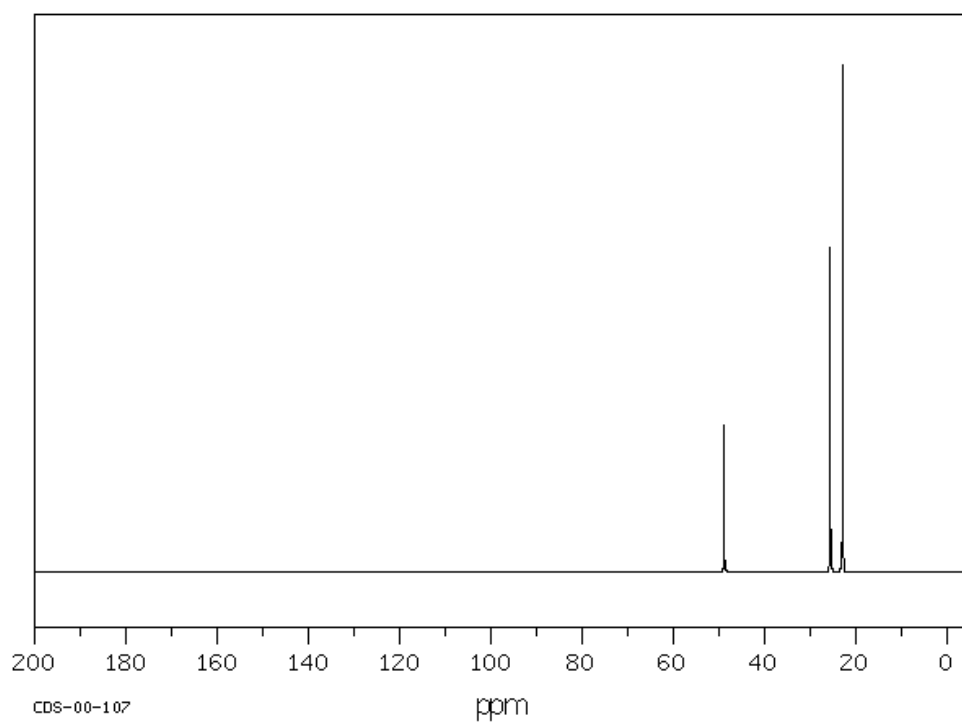
### 3. 2, 4 二甲基戊烷的四大谱图



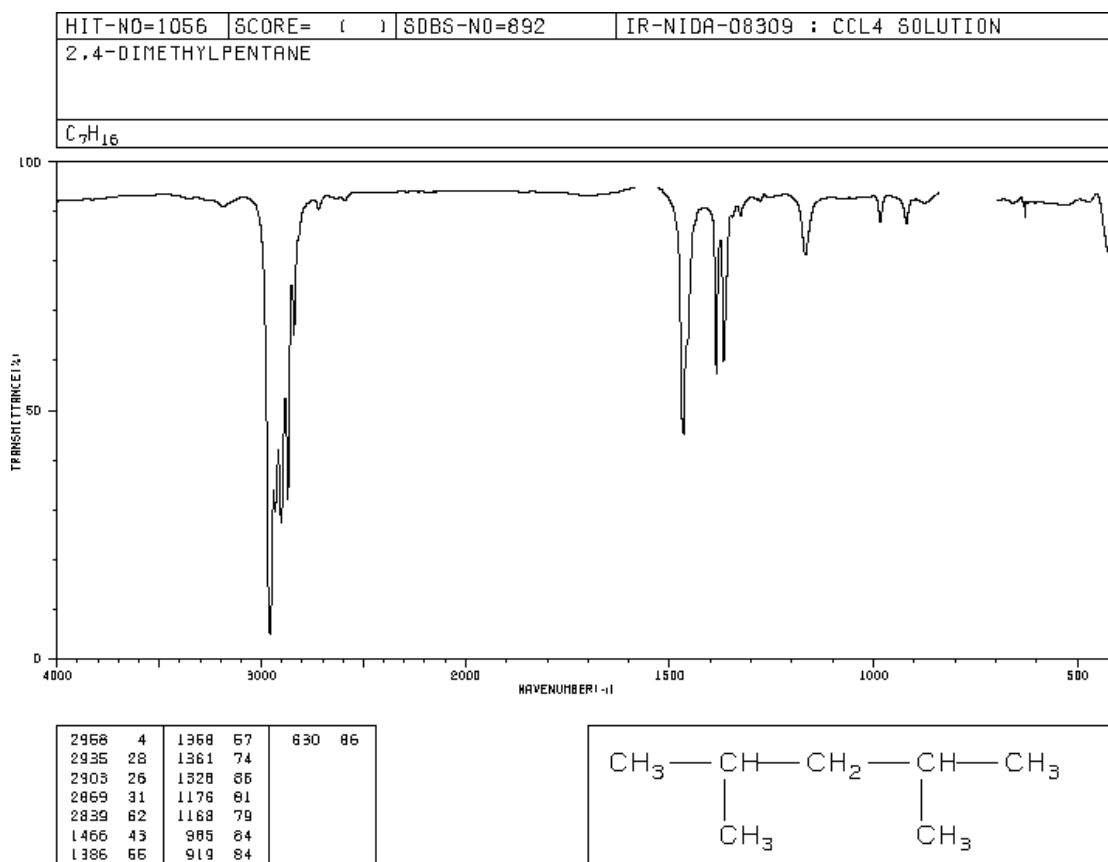
2, 4 二甲基戊烷的质谱



2, 4 二甲基戊烷的氢谱 90 MHz in CDCl<sub>3</sub>

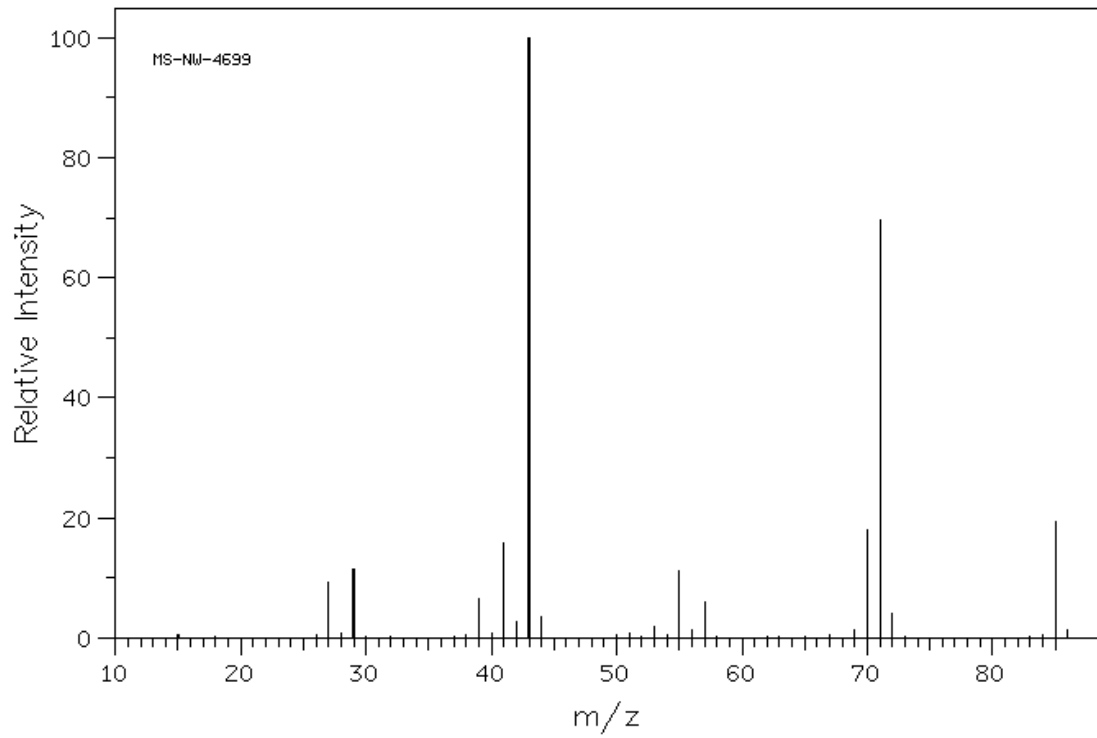


$\text{CH}_3(\text{CH}_2)_3\text{CH}_3$  的碳谱  $\text{CDCl}_3$

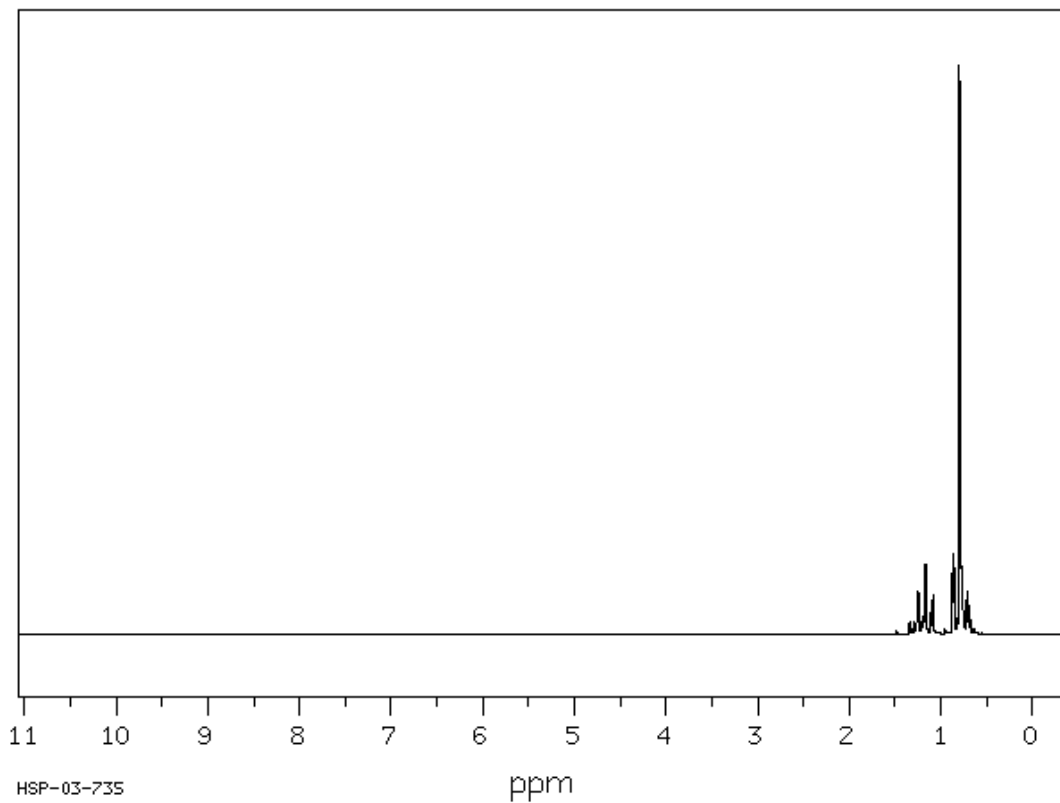


2, 4 二甲基戊烷的红外光谱

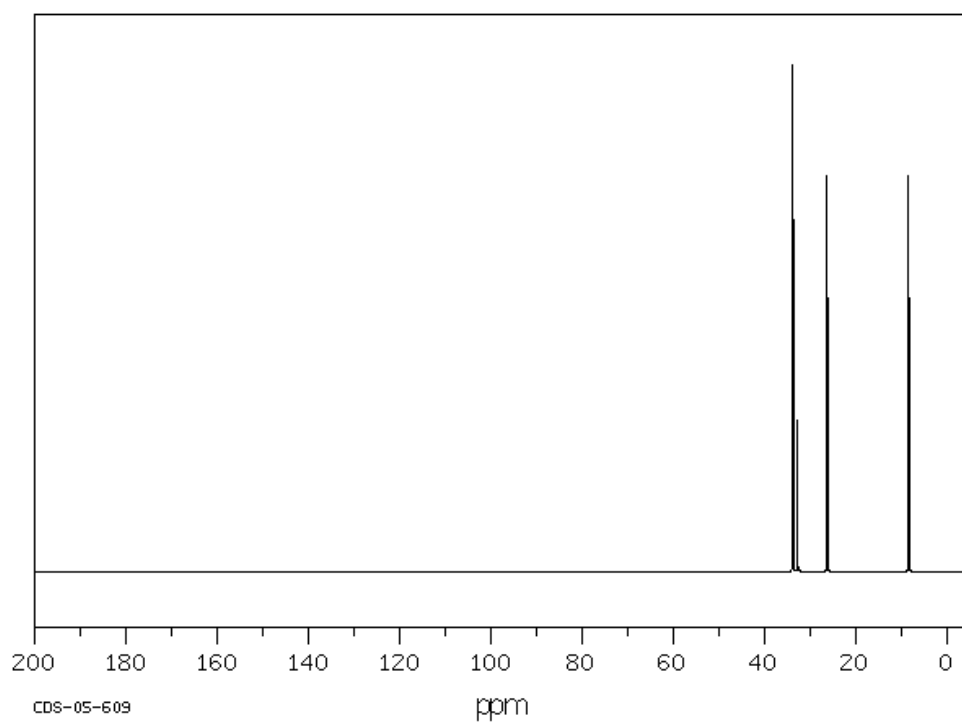
#### 4. 3, 3-二甲基戊烷的四大谱图



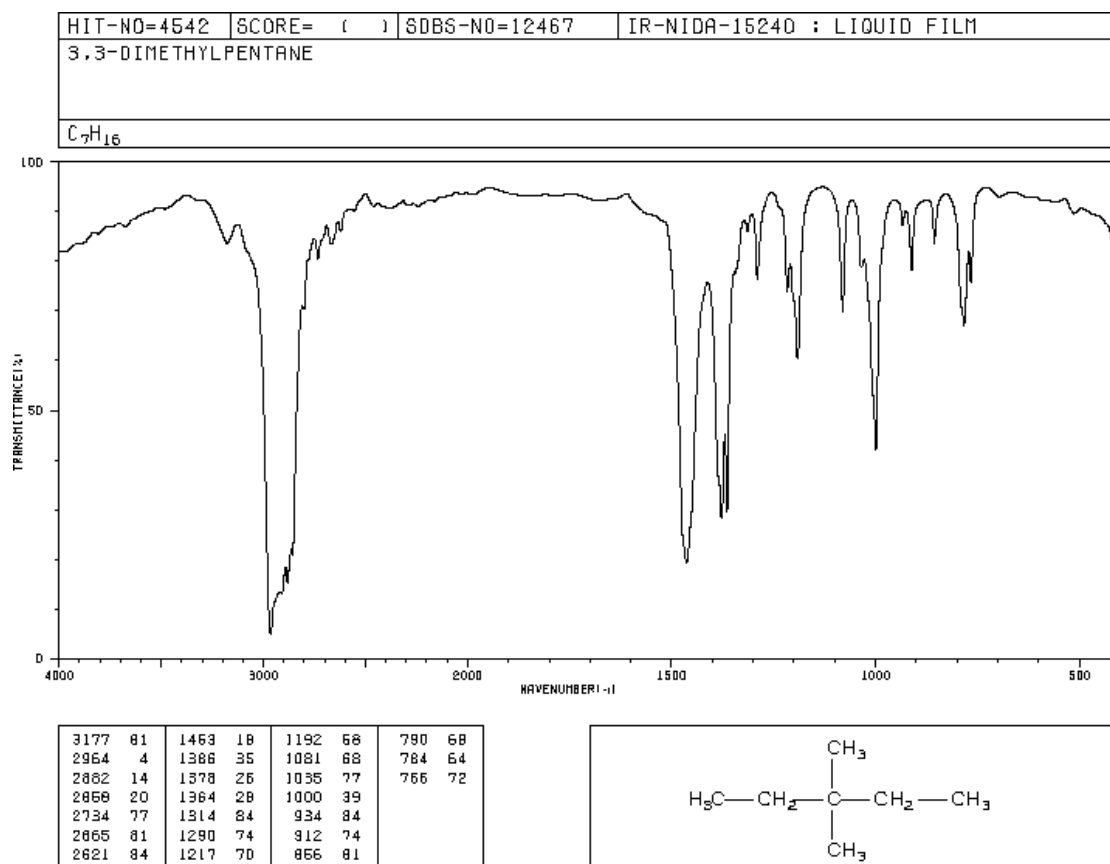
3, 3-二甲基戊烷的质谱



3, 3-二甲基戊烷的氢谱 90 MHz in CDCl<sub>3</sub>



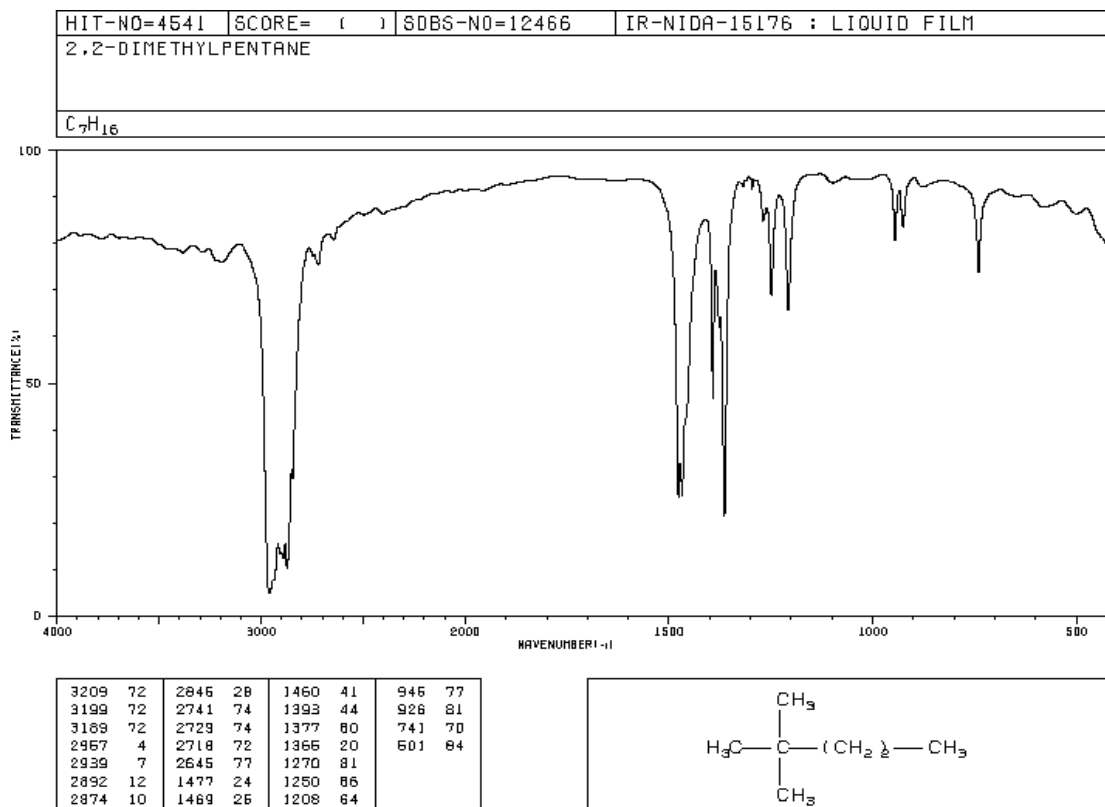
3, 3—二甲基戊烷的碳谱  $\text{CDCl}_3$



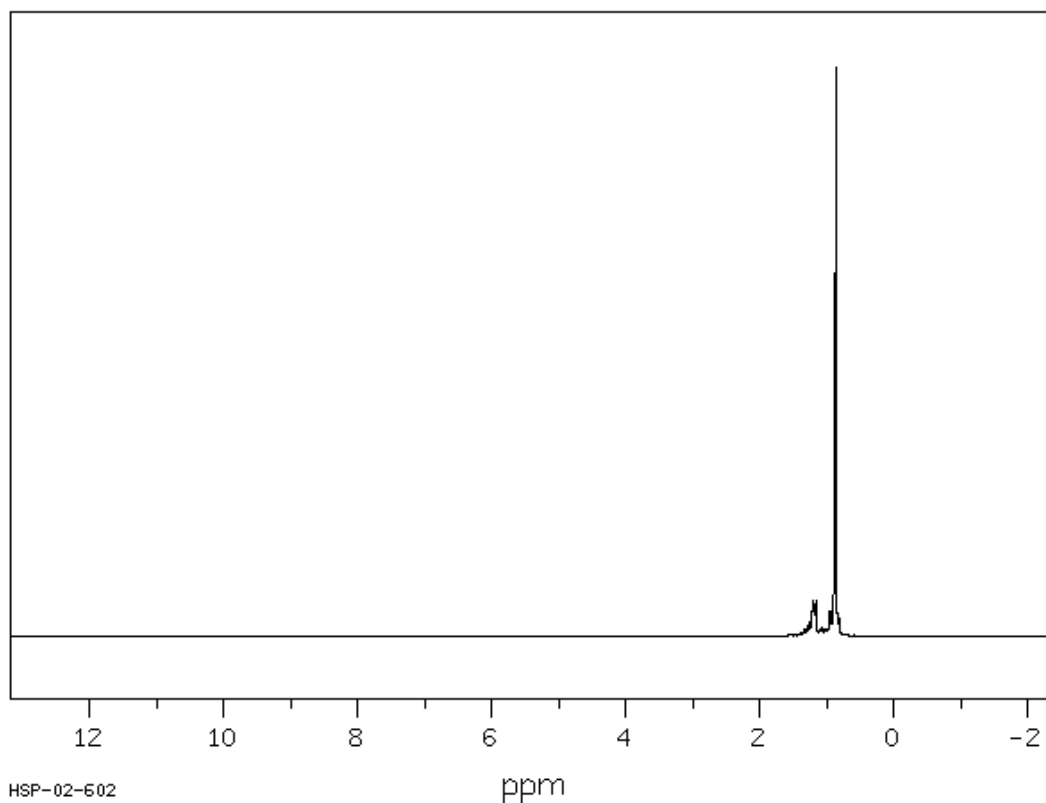
3, 3—二甲基戊烷的红外光谱



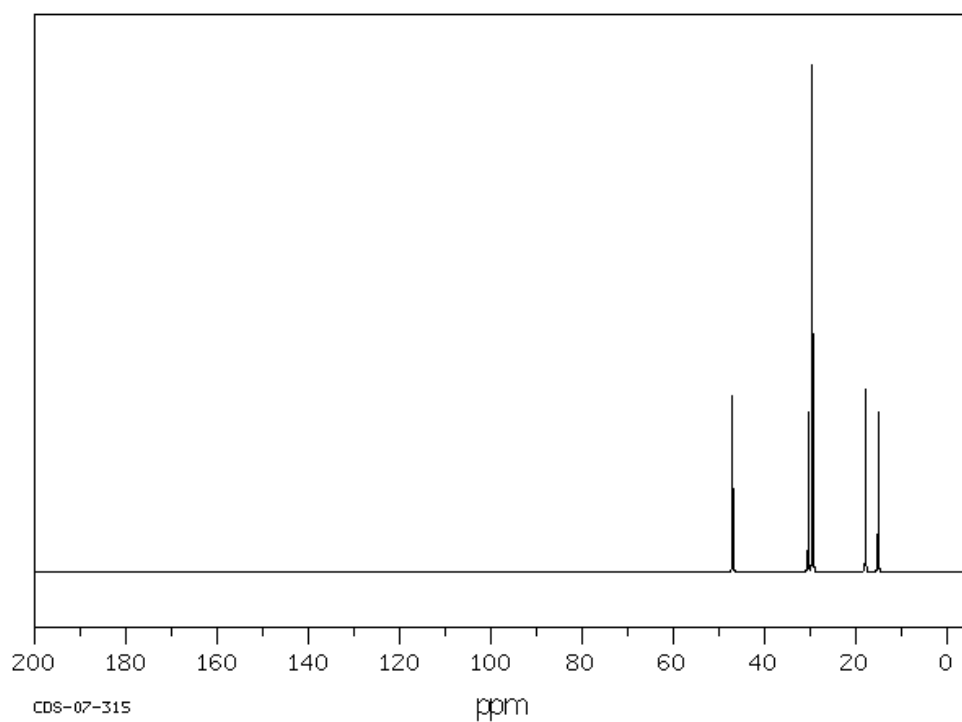
## 5. 2, 2-二甲基戊烷的红外光谱图和氢谱



2, 2-二甲基戊烷的红外光谱

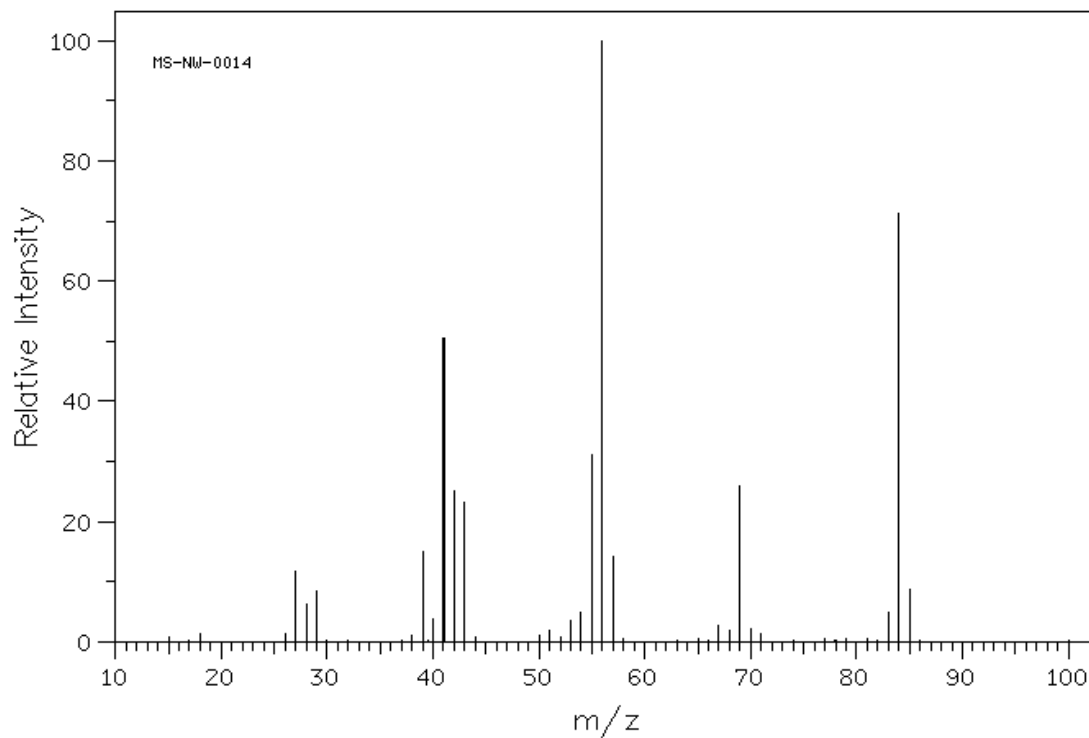


2, 2-二甲基戊烷的氢谱 90 MHz in CDCl<sub>3</sub>



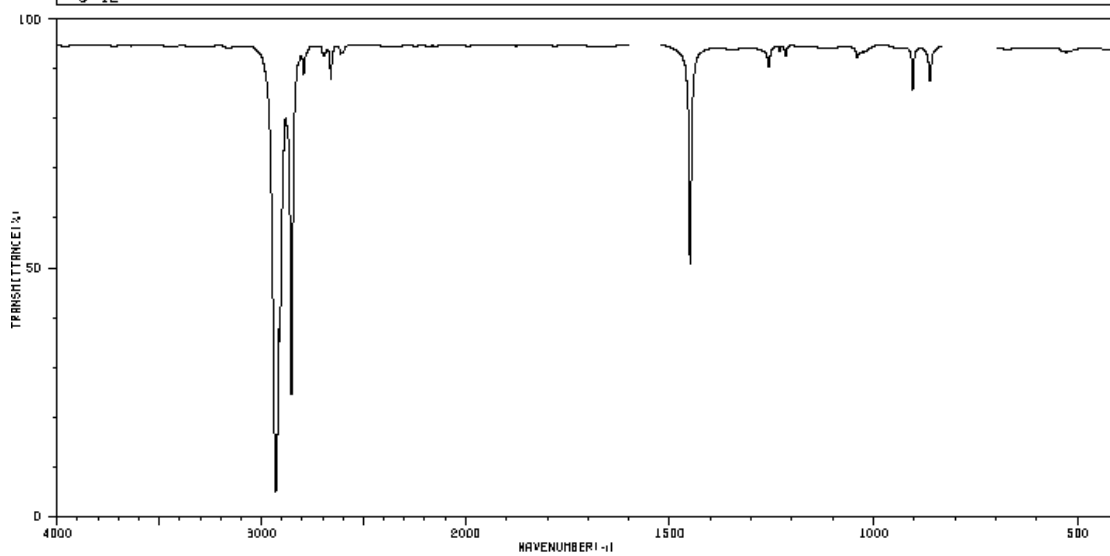
2, 2-二甲基戊烷的碳谱 CDCl<sub>3</sub>

6. 环己烷的谱图:

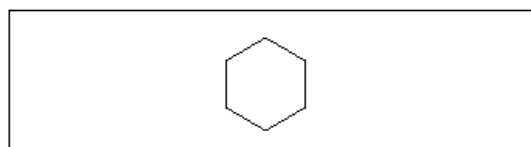


环己烷的质谱

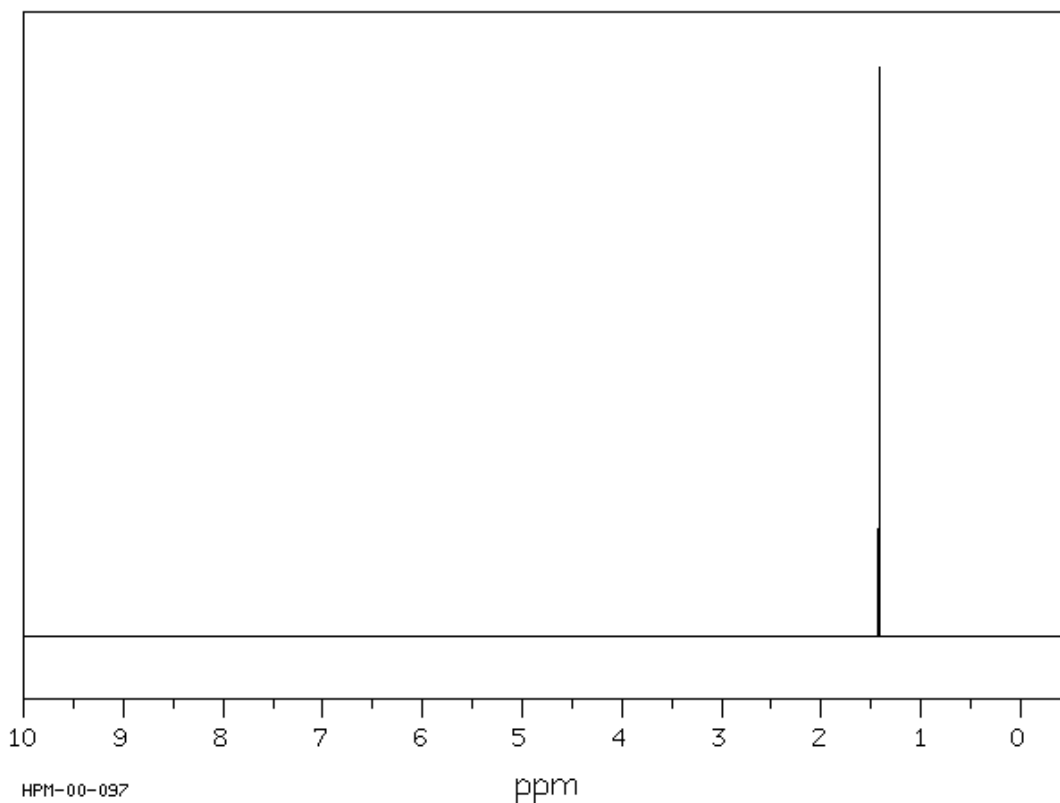
HIT-NO=1069	SCORE= ( )	SDBS-NO=897	IR-NIDA-07616 : CCL4 SOLUTION
CYCLOHEXANE			
C <sub>6</sub> H <sub>12</sub>			



2929	4	862	84
2911	34		
2853	23		
2794	86		
2661	84		
1451	49		
904	81		

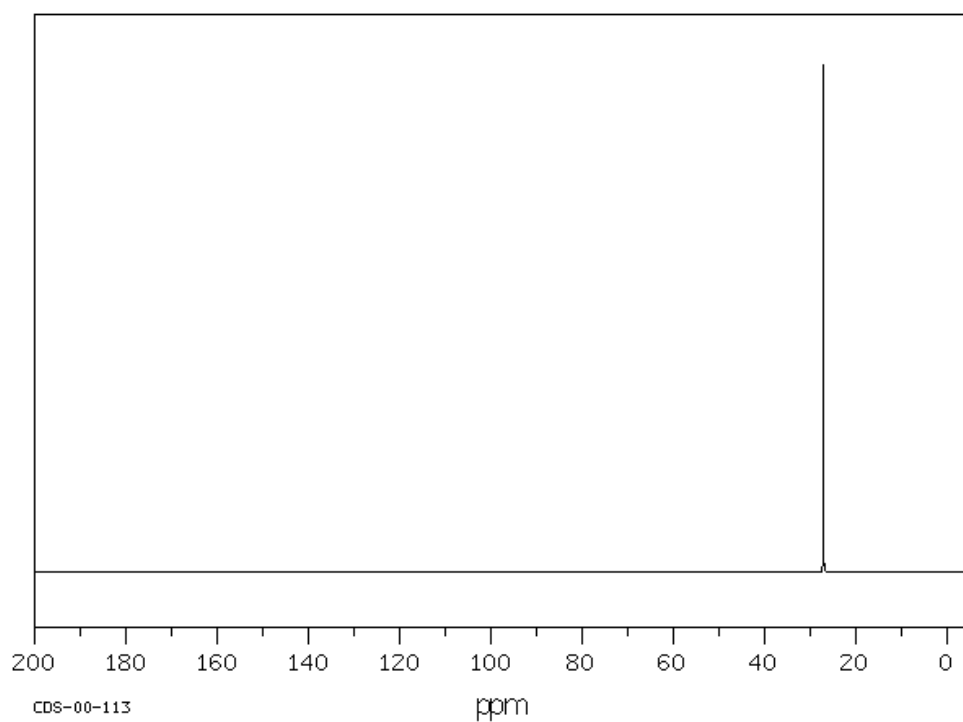


环己烷的红外光谱 CCl<sub>4</sub> solution



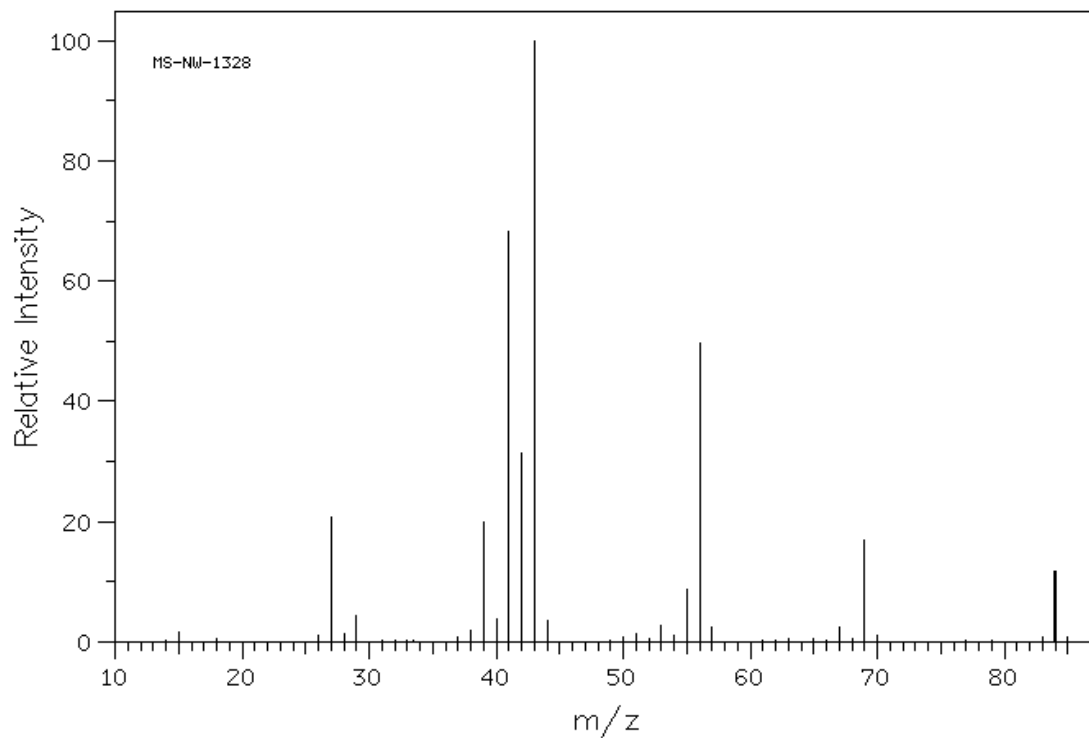
HPM-00-097

环己烷的氢谱 parameter in CDCl<sub>3</sub>



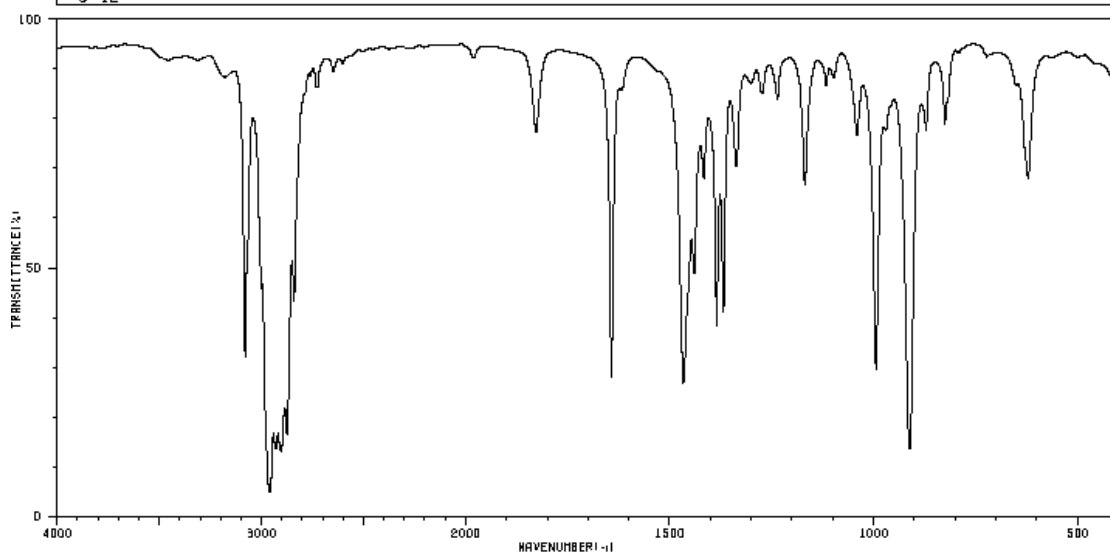
环己烷的氢谱 in  $\text{CDCl}_3$

### 7. 4-甲基-1 戊烯的图谱



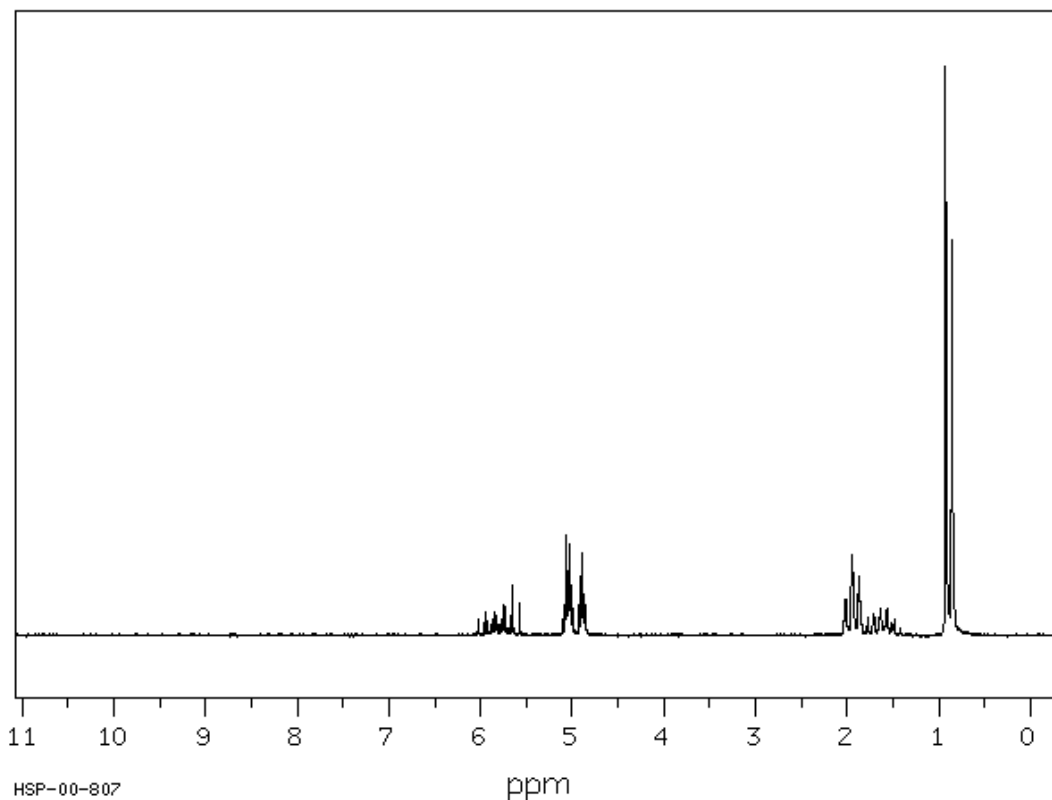
4-甲基-1 戊烯的质谱

HIT-NO=897	SCORE= ( )	SDBS-NO=212	IR-NIDA-03077 : LIQUID FILM
4-METHYL-1-PENTENE			
C <sub>6</sub> H <sub>12</sub>			

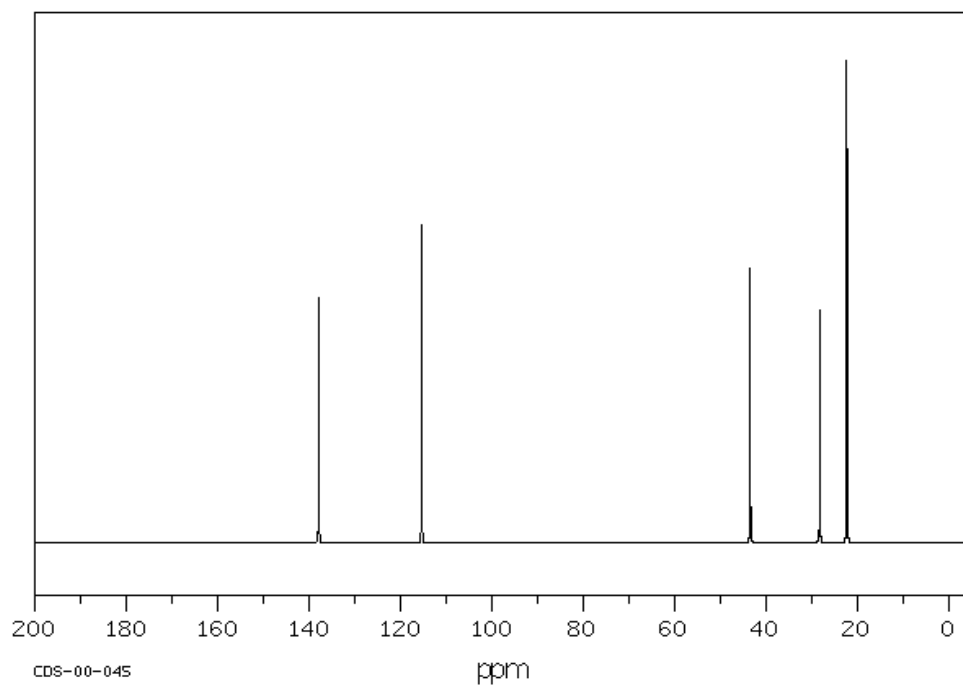


3178	84	2727	84	1385	37	1116	84	622	56	$\text{H}_2\text{C}=\text{CH}-\text{CH}_2-\underset{\text{CH}_3}{\text{CH}}-\text{CH}_3$
3079	31	2648	86	1368	39	1098	84			
2960	4	1828	74	1357	86	1041	74			
2929	13	1643	26	1300	84	994	28			
2904	12	1467	26	1274	81	911	13			
2874	15	1440	47	1236	81	871	74			
2839	42	1417	66	1169	64	826	77			

4-甲基-1-戊烯的红外光谱

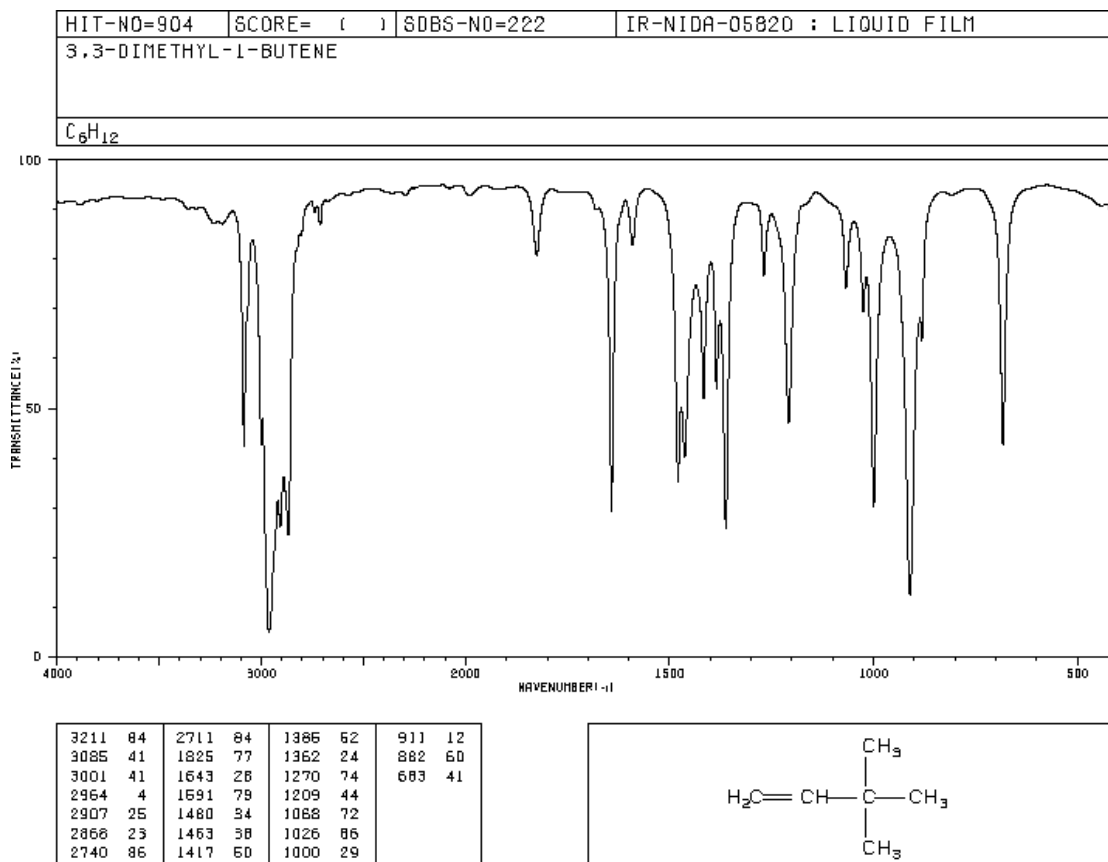


4-甲基-1-戊烯的氢谱 90 MHz in CDCl<sub>3</sub>

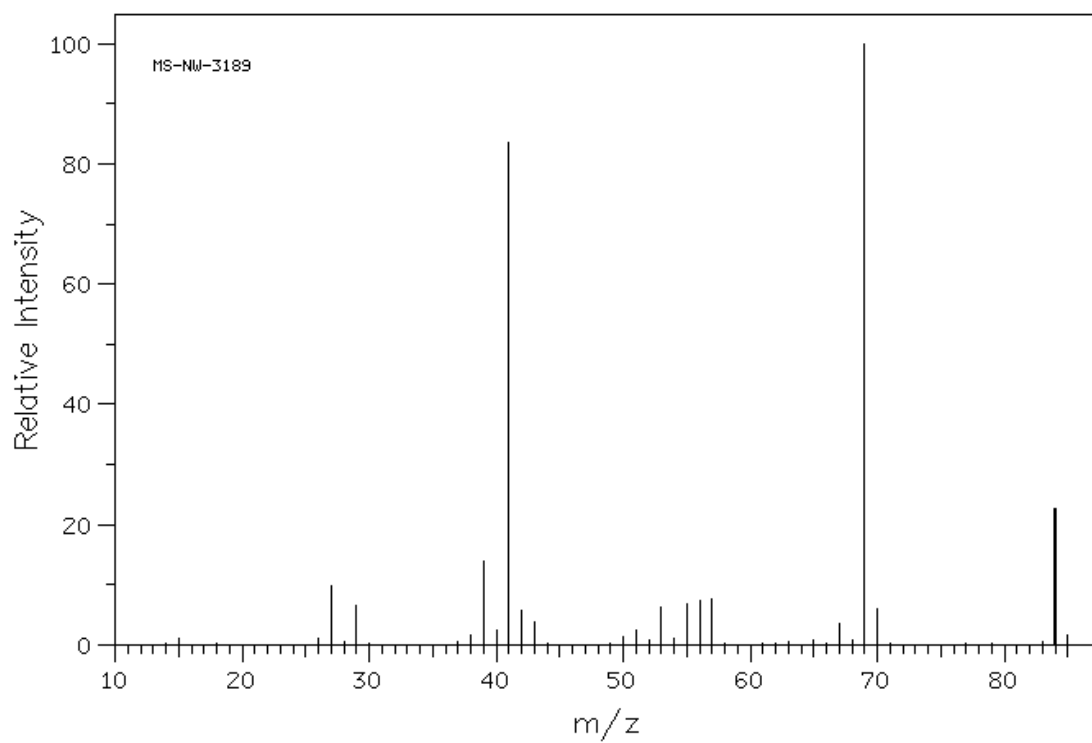


4-甲基1-戊烯的碳谱 in  $\text{CDCl}_3$

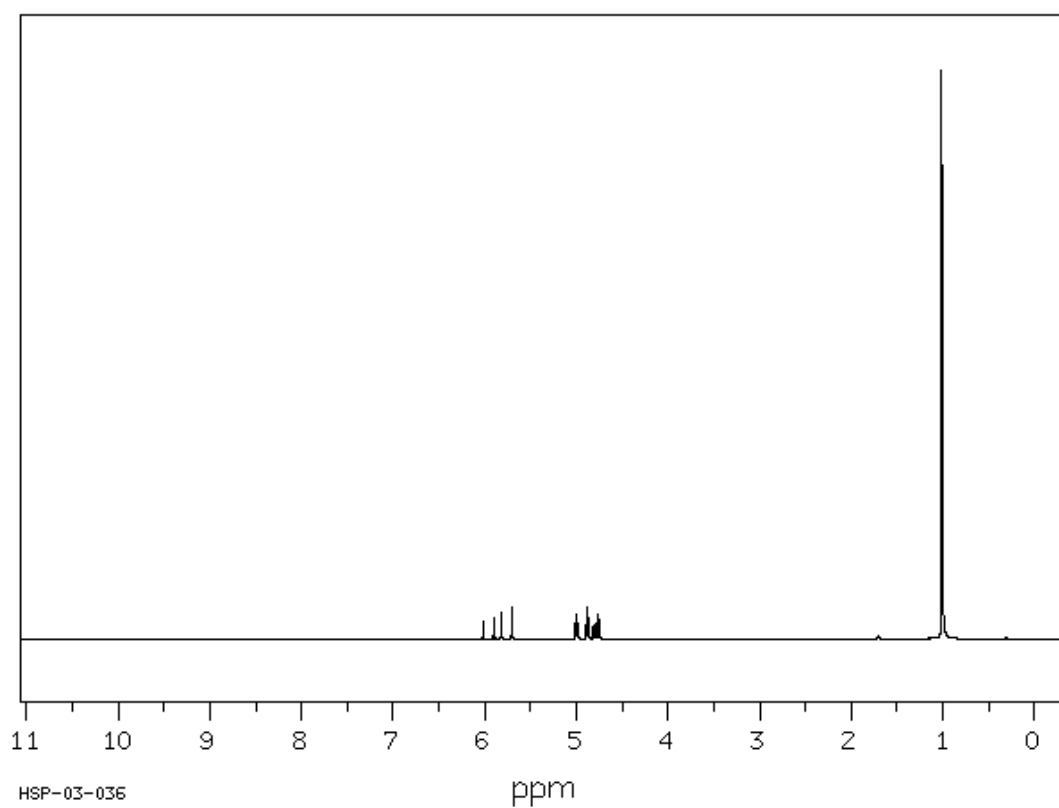
### 8. 3, 3-二甲基-1-丁烯的谱图



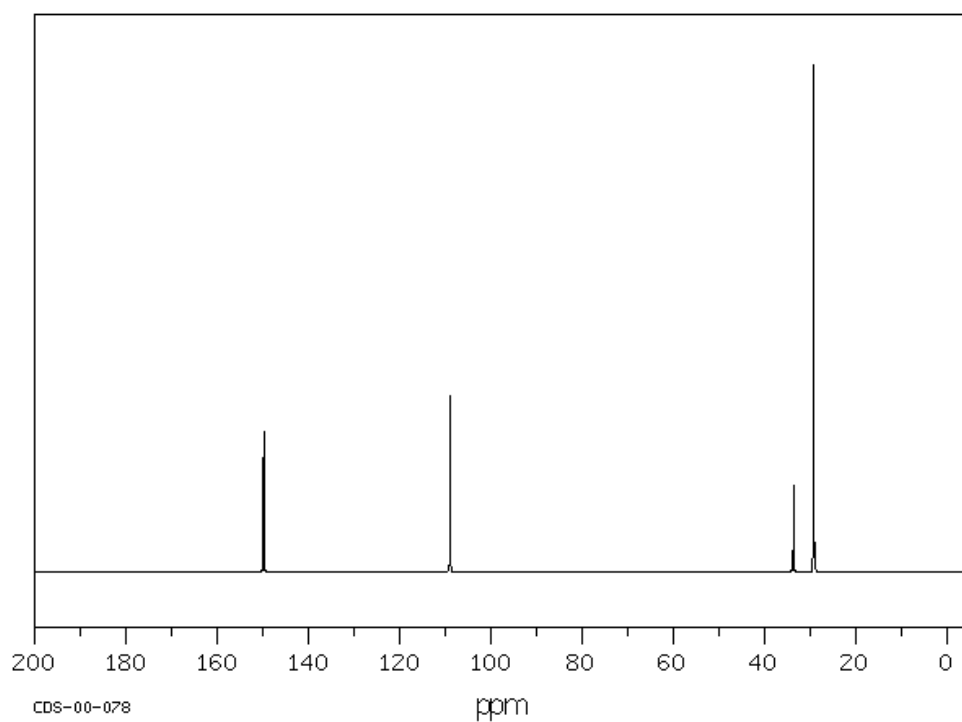
3, 3-二甲基-1-丁烯的红外谱



3, 3-二甲基-1-丁烯的质谱

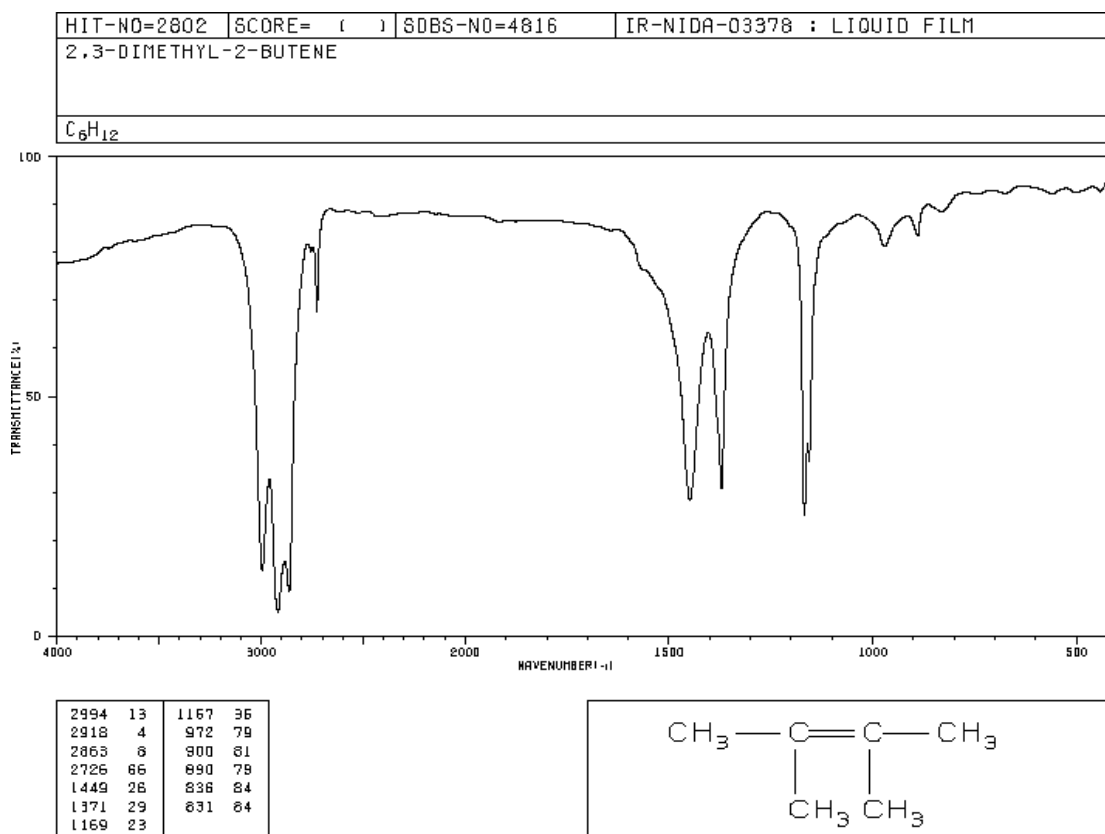


3, 3-二甲基 1-丁烯的氢谱 90 MHz in CDCl<sub>3</sub>



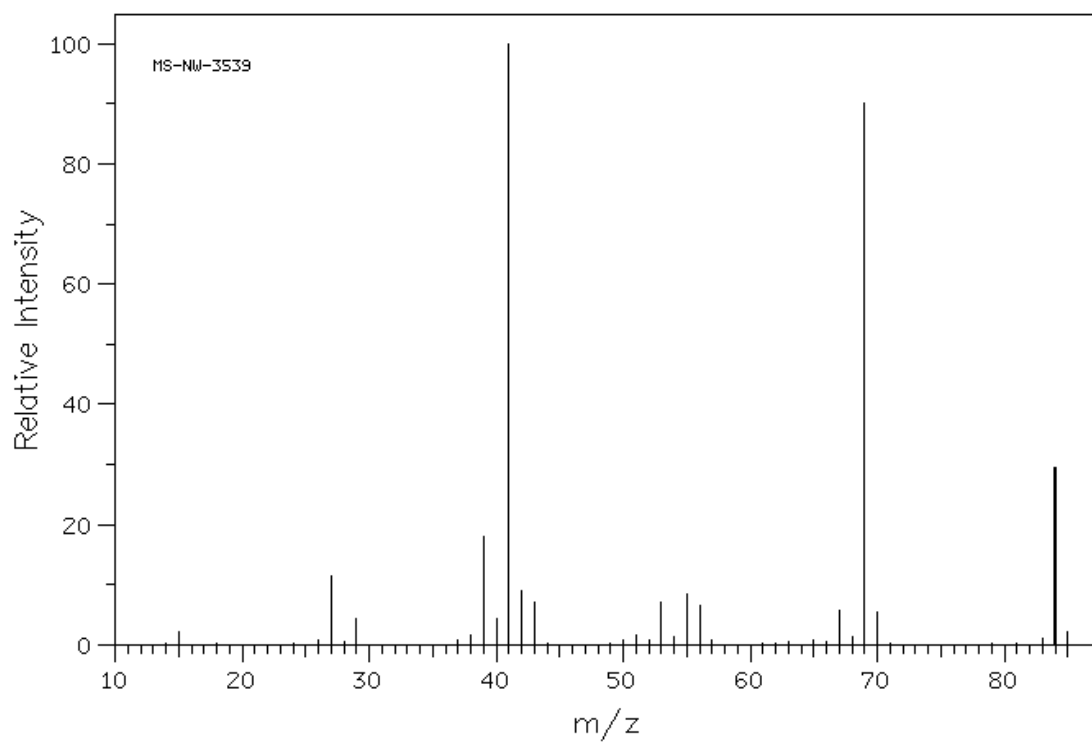
3, 3-二甲基 1-丁烯的碳谱 in CDCl<sub>3</sub>

9. 2, 3-二甲基-2-丁烯谱图

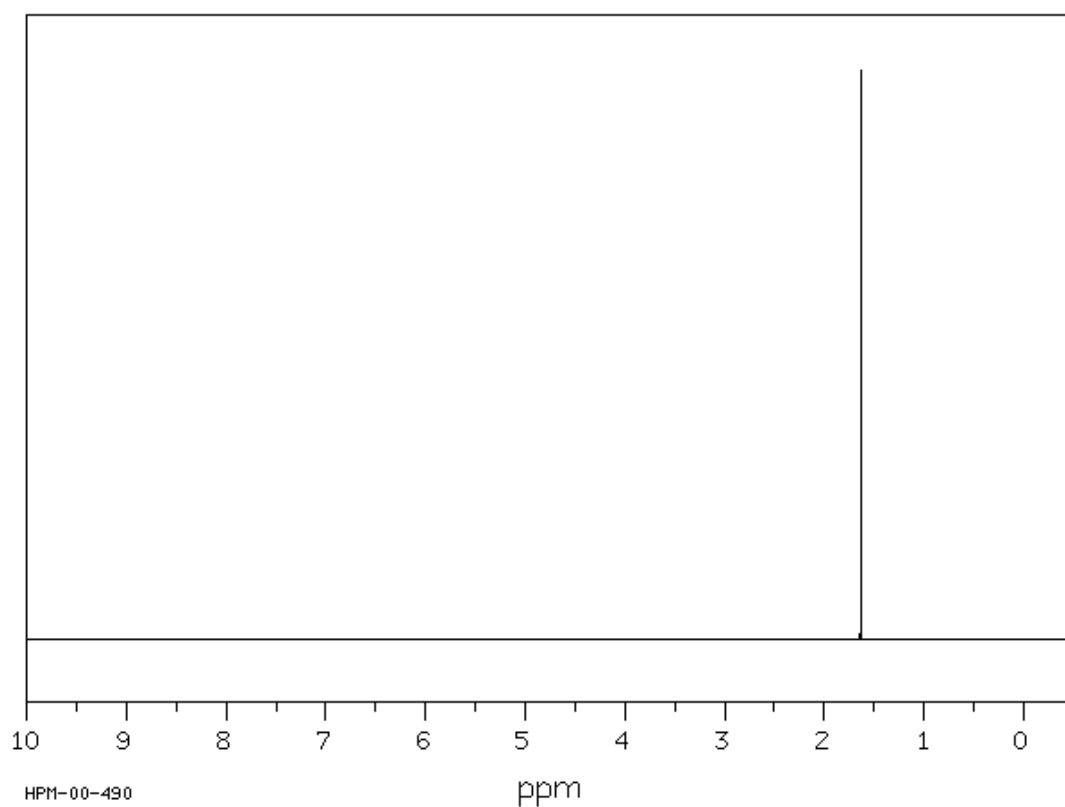


2, 3-二甲基-2-丁烯红外光谱

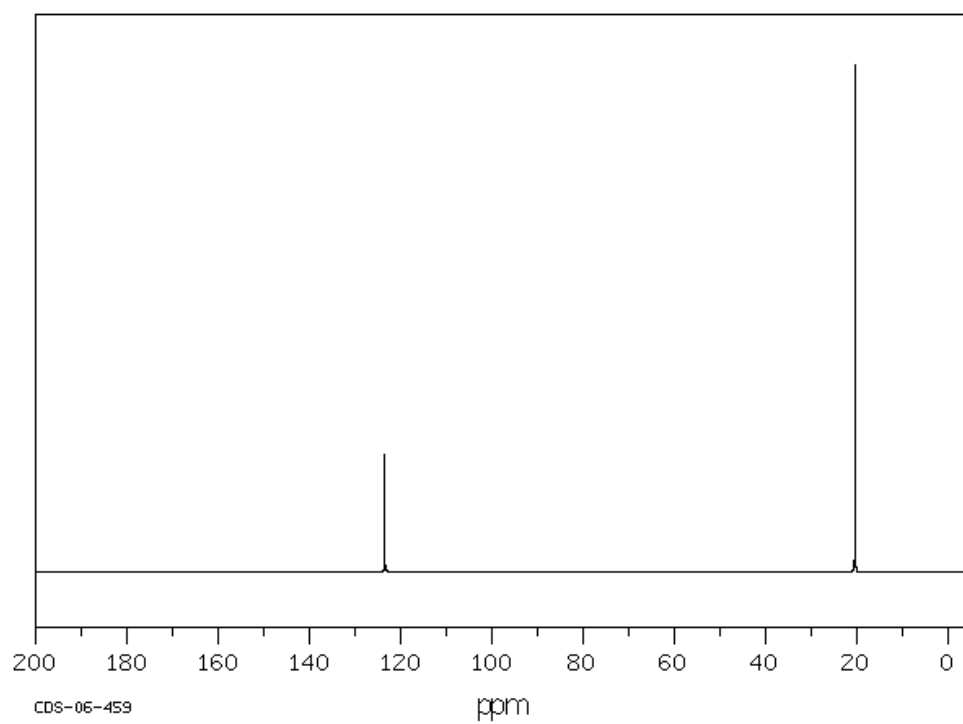




2, 3-二甲基-2-丁烯质谱



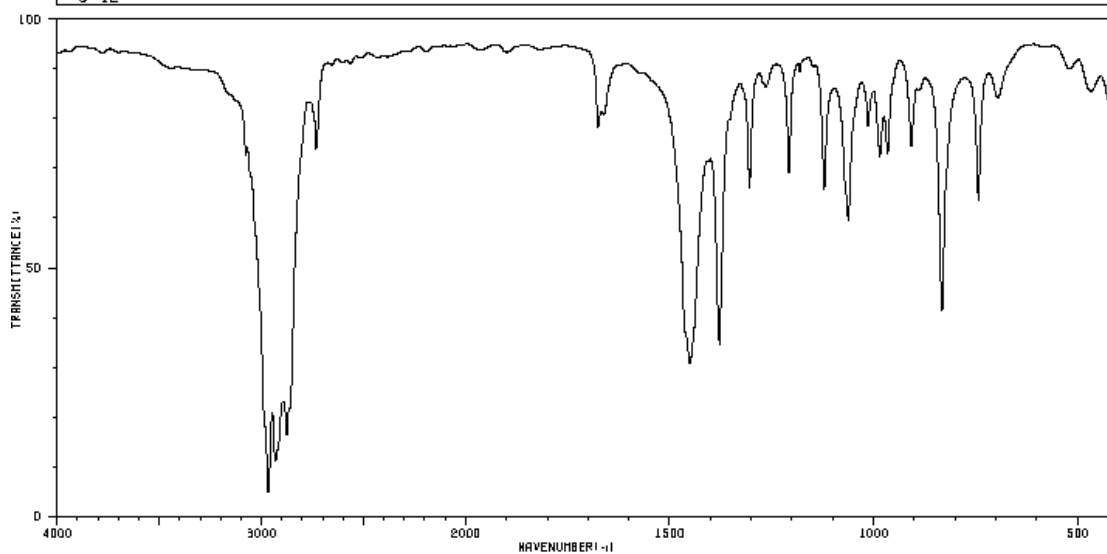
2, 3-二甲基-2-丁烯氢谱 parameter in CDCl<sub>3</sub>



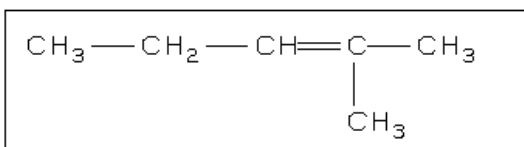
2, 3-二甲基-2-丁烯碳谱 in CDCl<sub>3</sub>

### 10. 2-甲基-2-戊烯的谱图

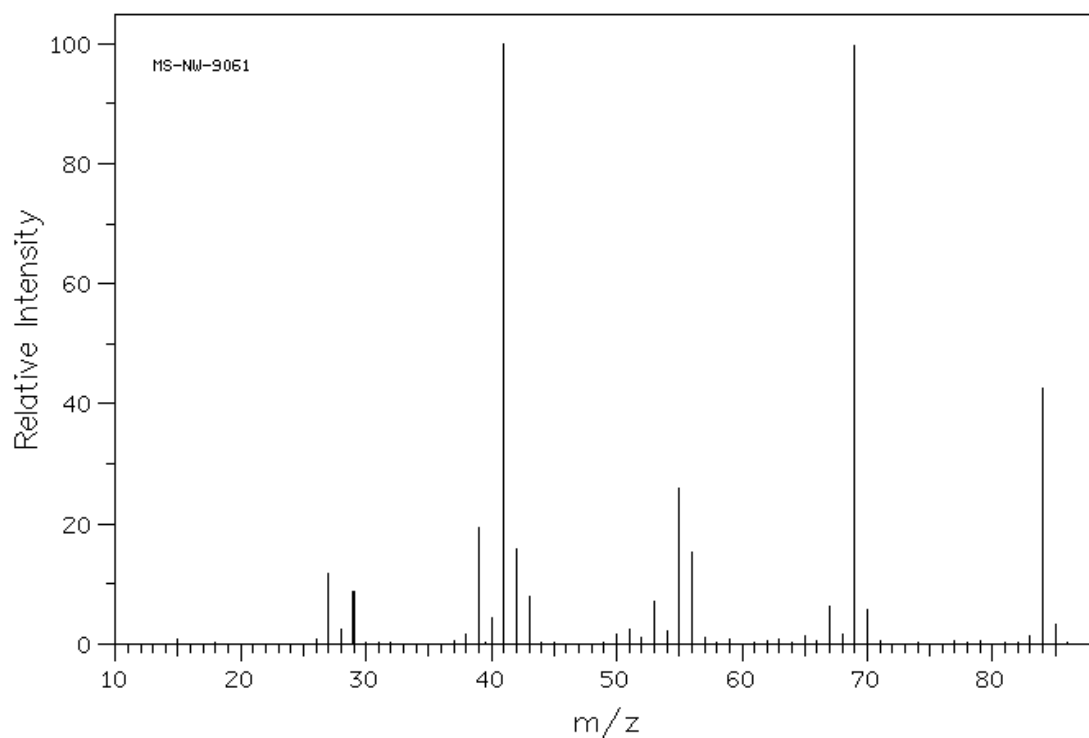
HIT-NO=2803	SCORE= ( )	SDBS-NO=4817	IR-NIDA-03381 : LIQUID FILM
2-METHYL-2-PENTENE			
C <sub>6</sub> H <sub>12</sub>			



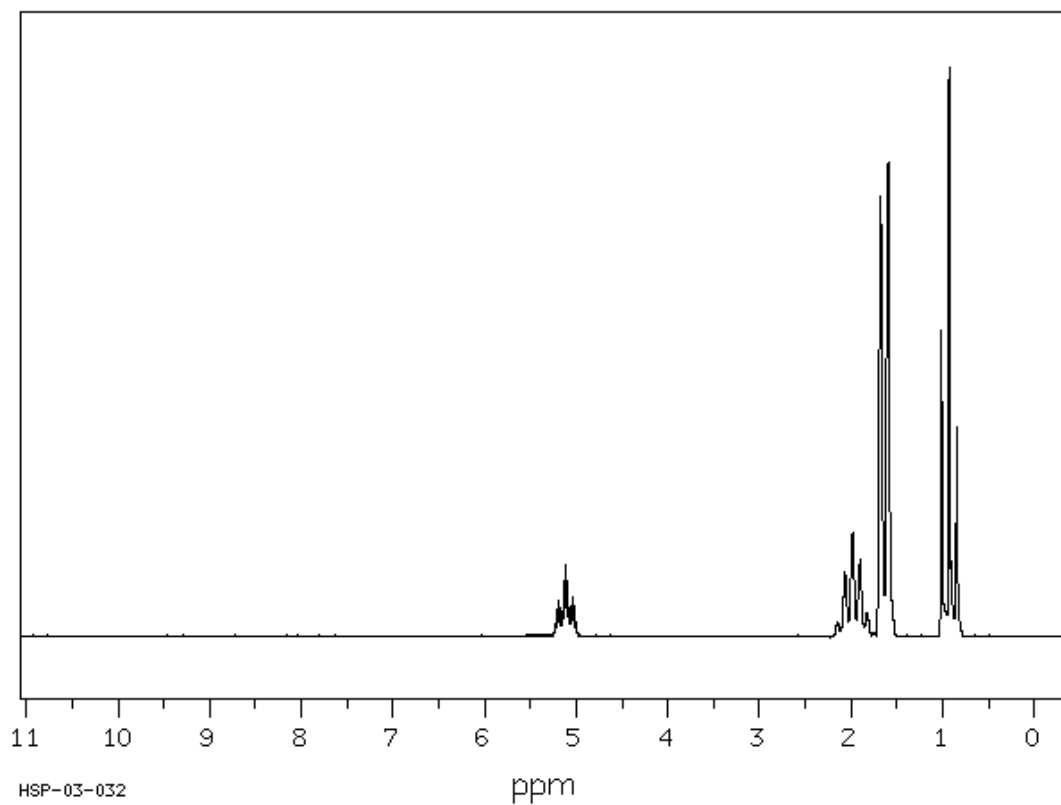
3076	70	1661	77	1181	86	833	39
2966	4	1463	35	1121	62	743	60
2932	10	1450	29	1062	57	696	61
2876	16	1378	39	1014	74	619	66
2732	70	1305	64	985	70	468	81
1876	74	1264	84	966	70		
1667	79	1208	68	908	72		



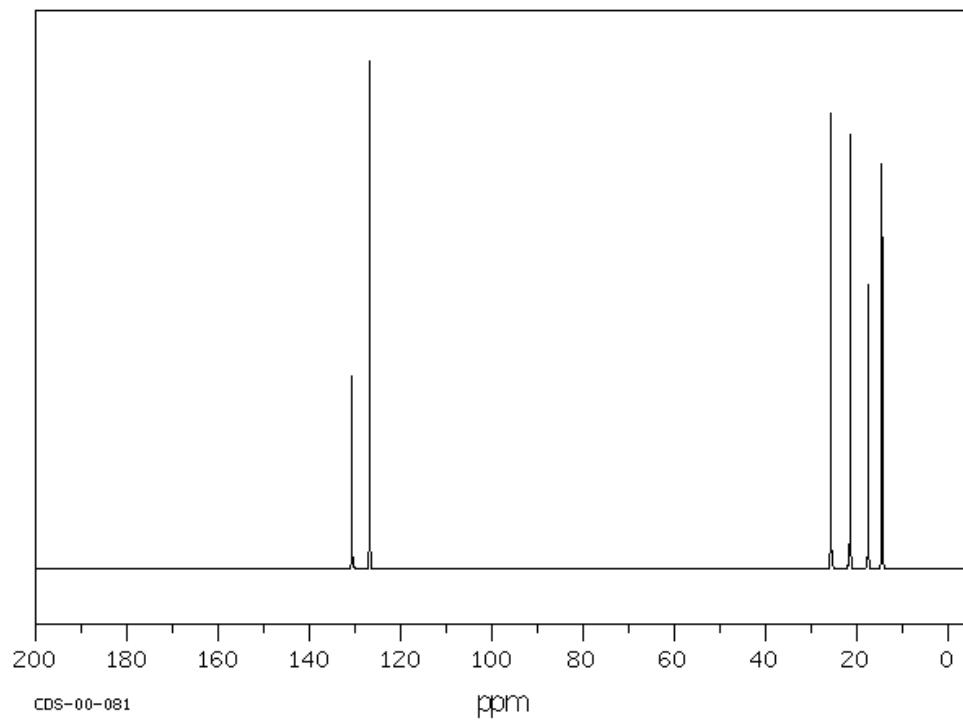
2-甲基-2-戊烯的红外光谱



2-甲基-2-戊烯的质谱

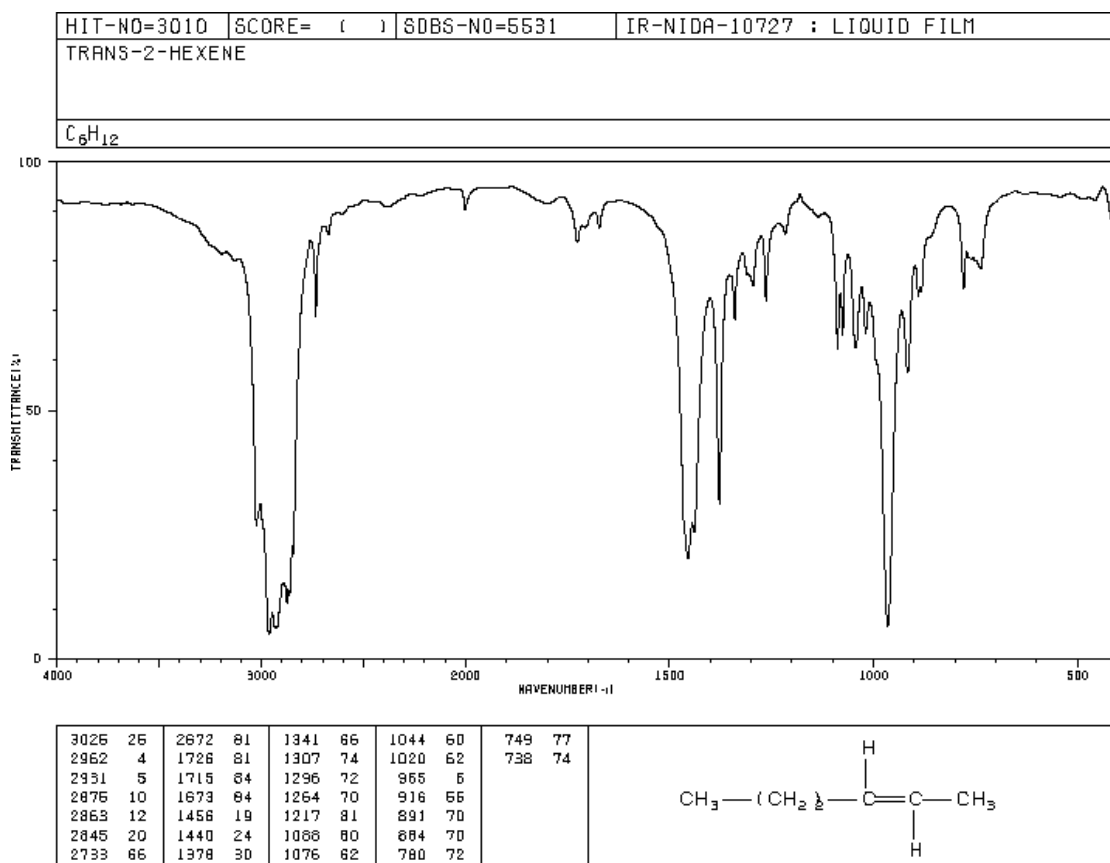


2-甲基-2-戊烯的氢谱 90 MHz in  $\text{CDCl}_3$

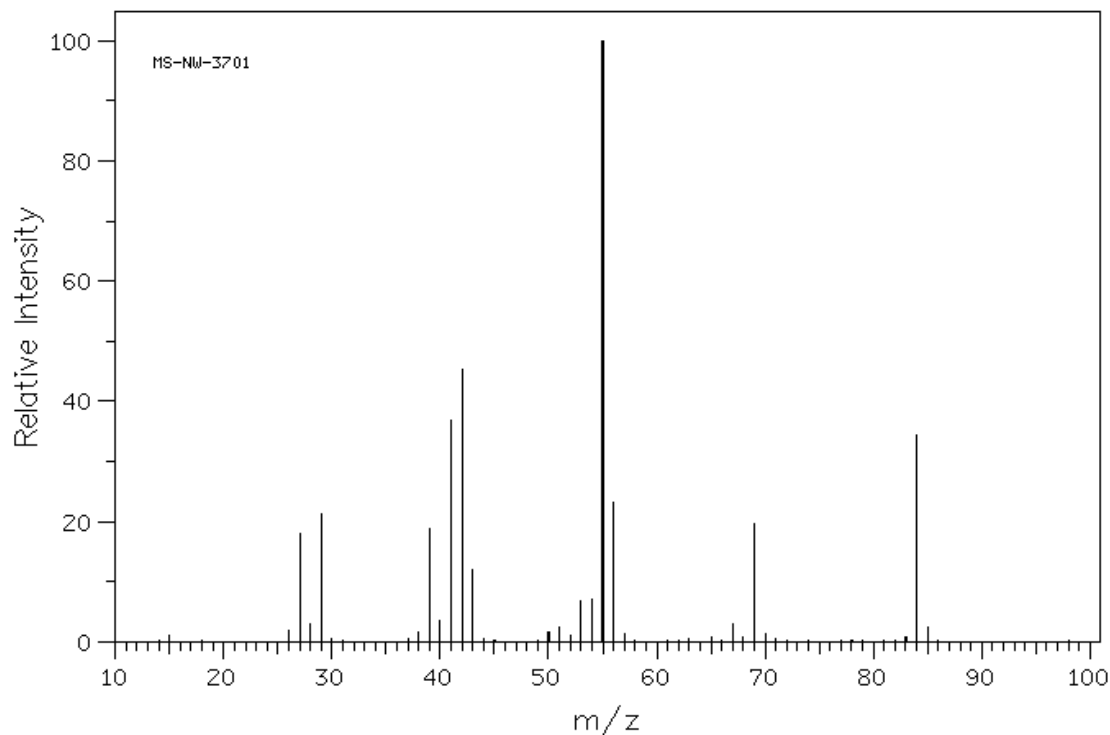


2-甲基-2-戊烯的碳谱 in  $\text{CDCl}_3$

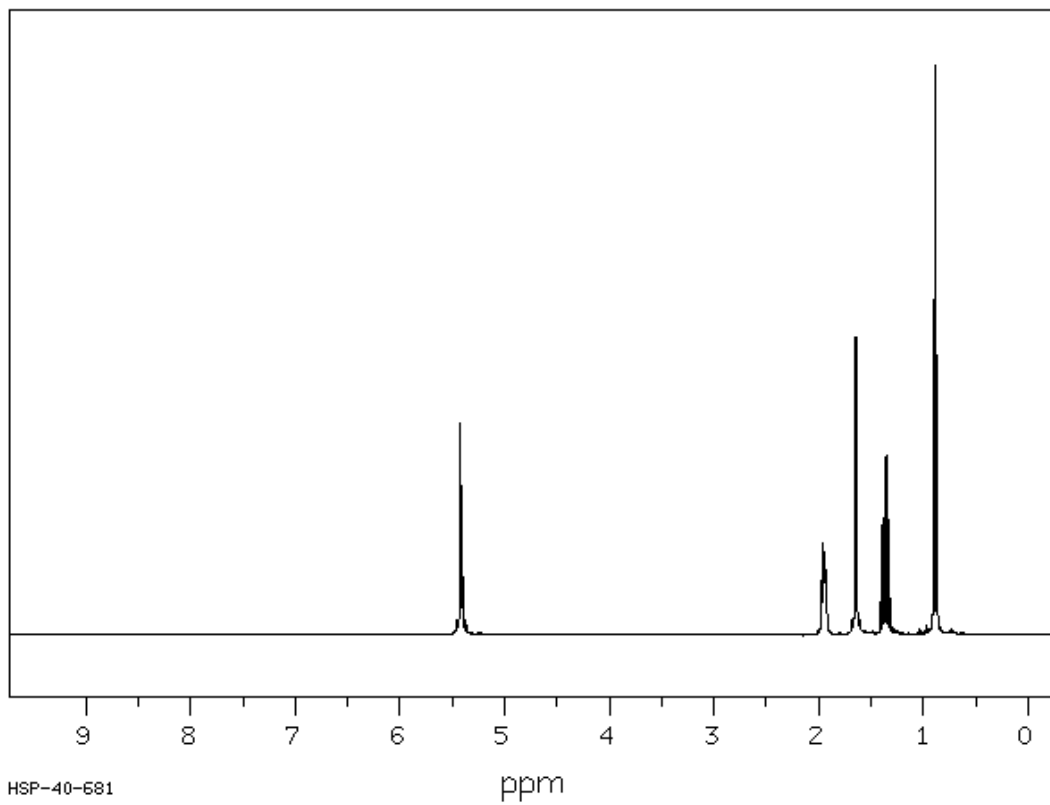
### 11. 反式-2-己烯的谱图



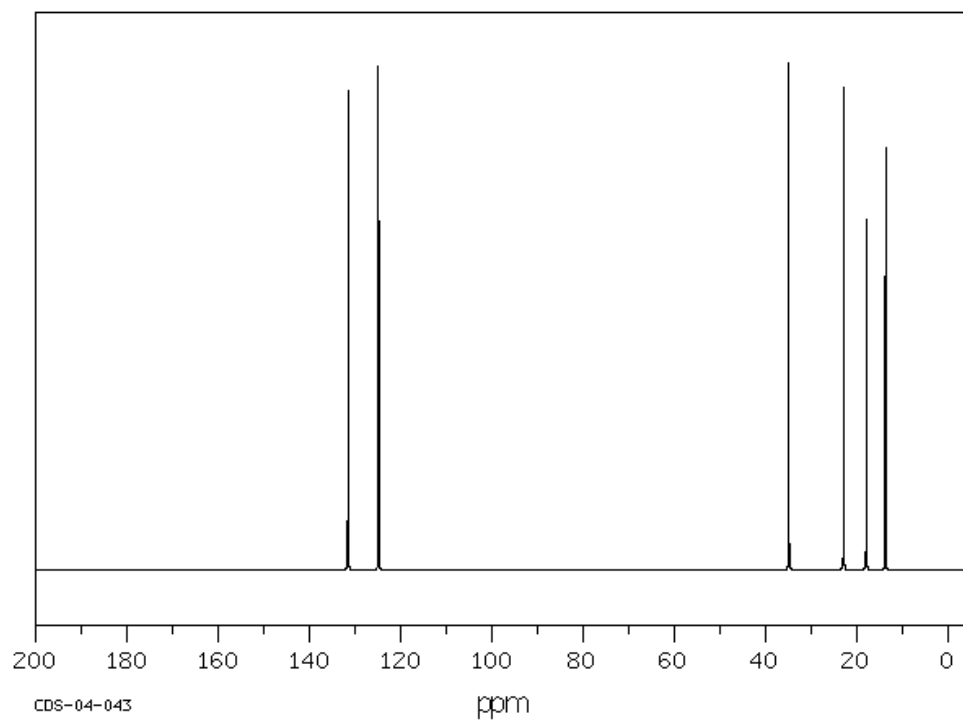
反式-2-己烯的红外光谱



反式-2-己烯的质谱

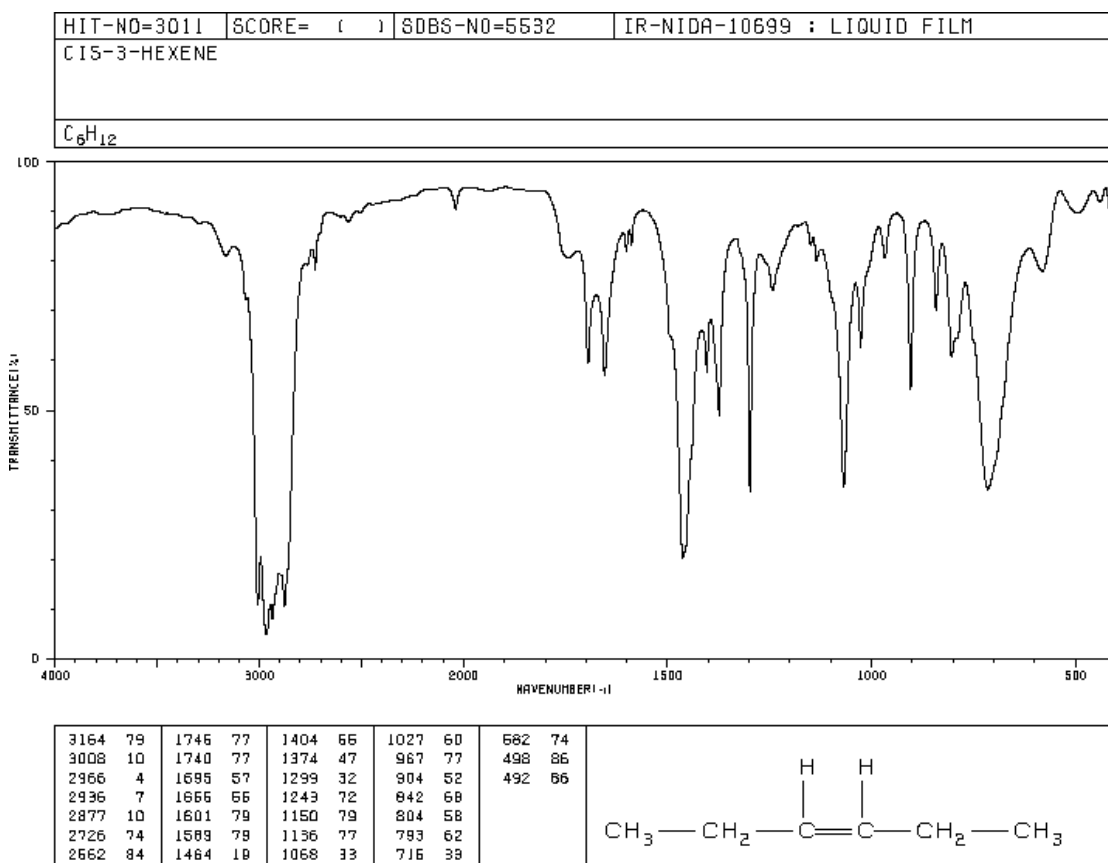


反式-2-己烯的氢谱 400MHz in  $\text{CDCl}_3$

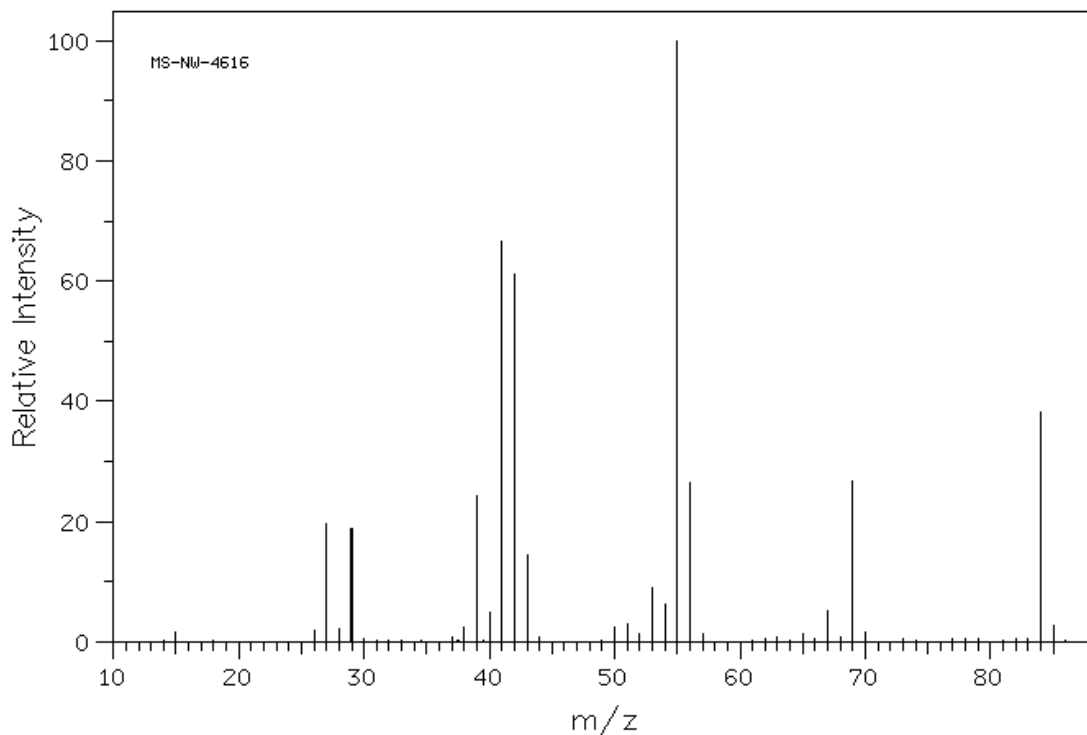


反式-2-己烯的碳谱  $\text{CDCl}_3$

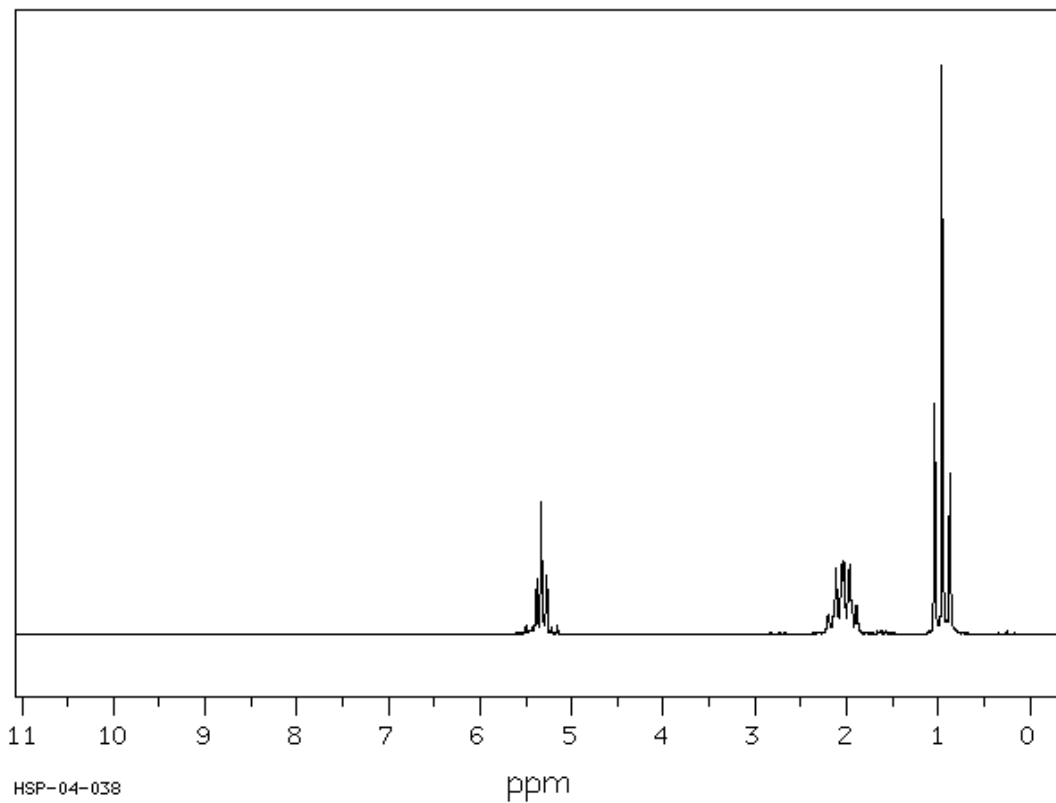
12. 顺式 3-己烯的谱图



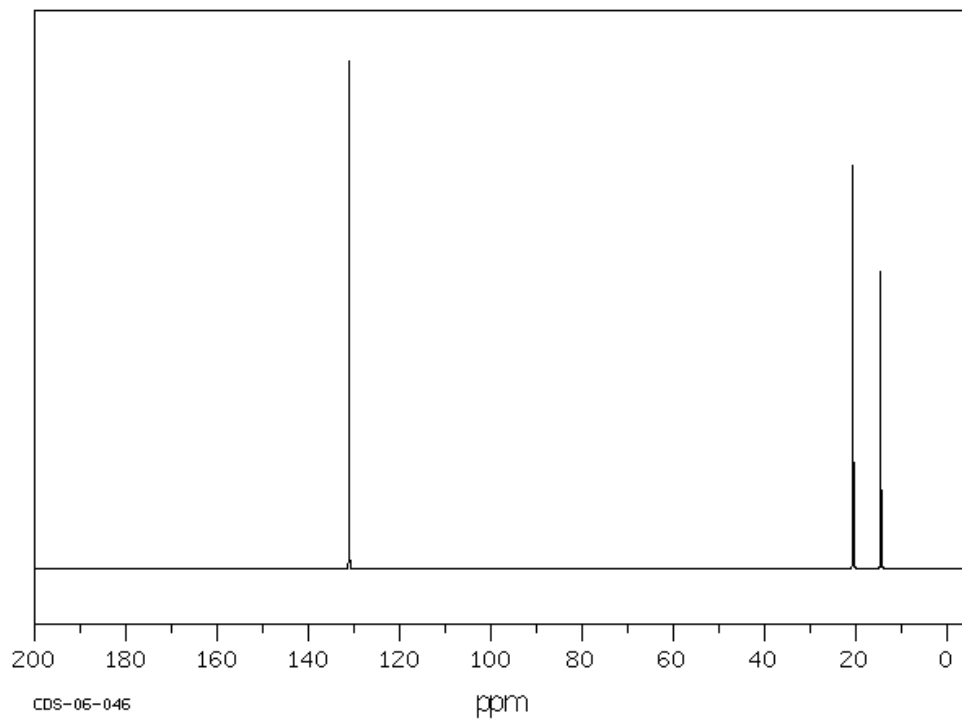
顺式 3-己烯的红外光谱



顺式 3-己烯的质谱



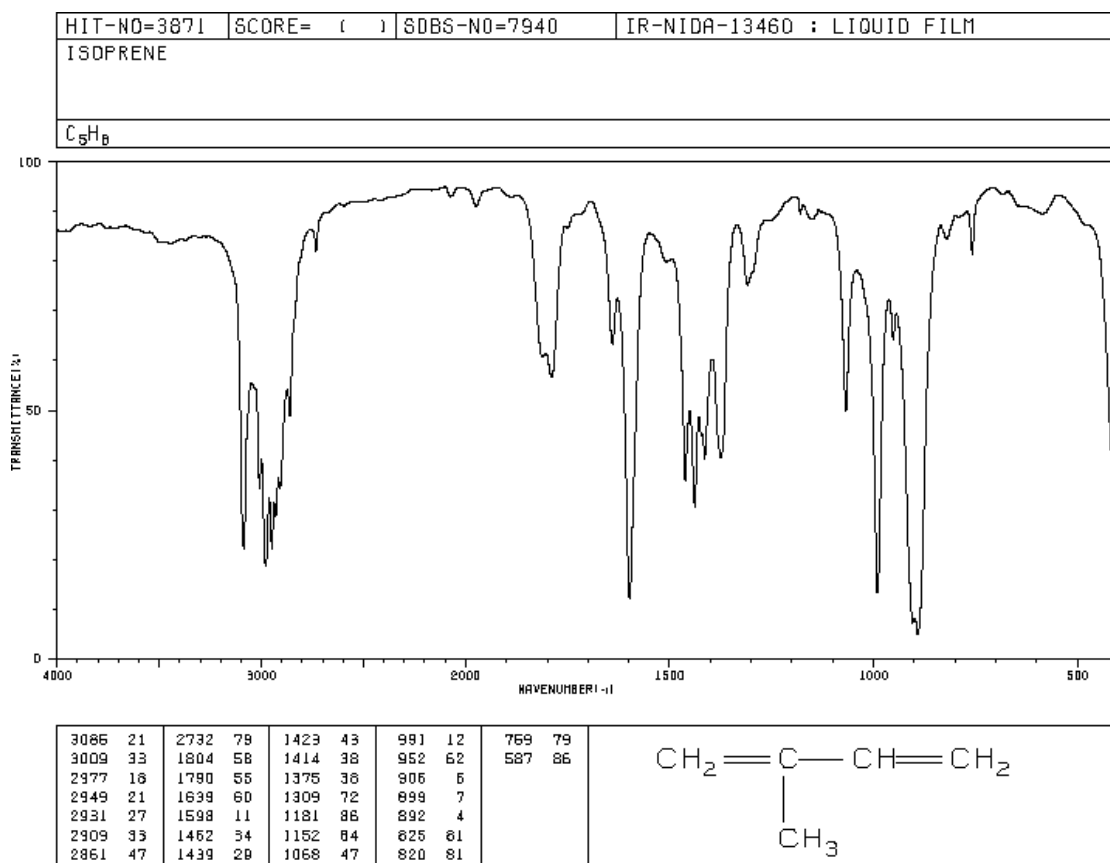
顺式 3-己烯的氢谱 90 MHz in  $\text{CDCl}_3$



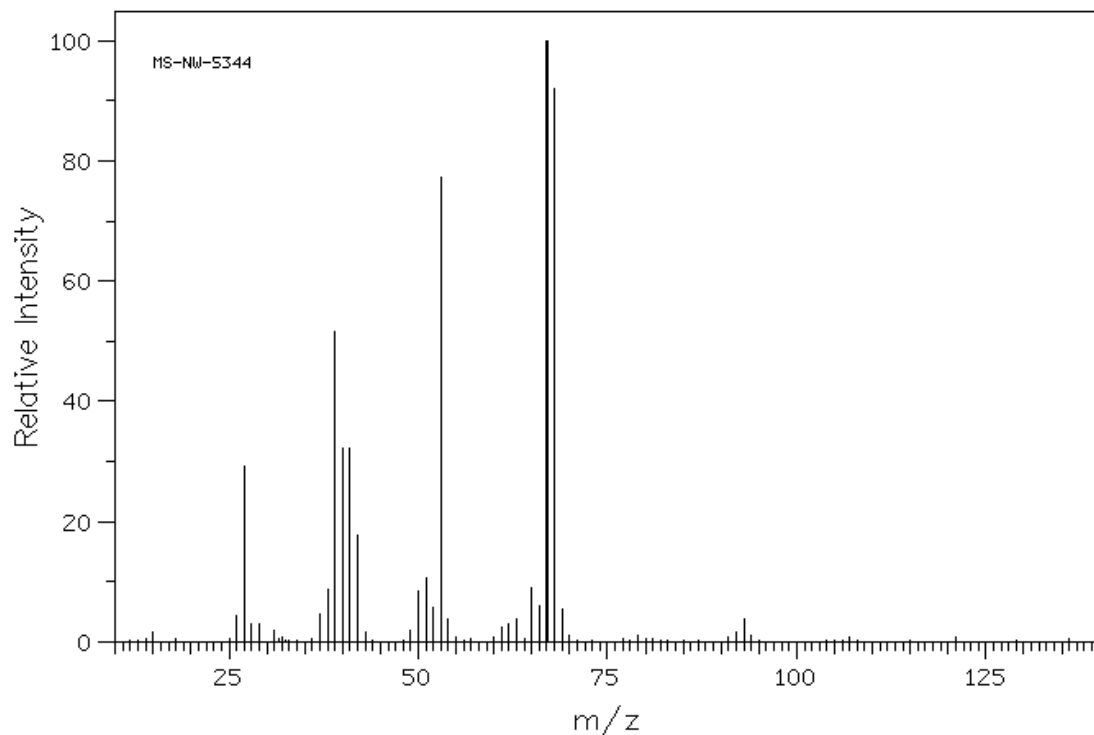
顺式 3-己烯的碳谱  $\text{CDCl}_3$



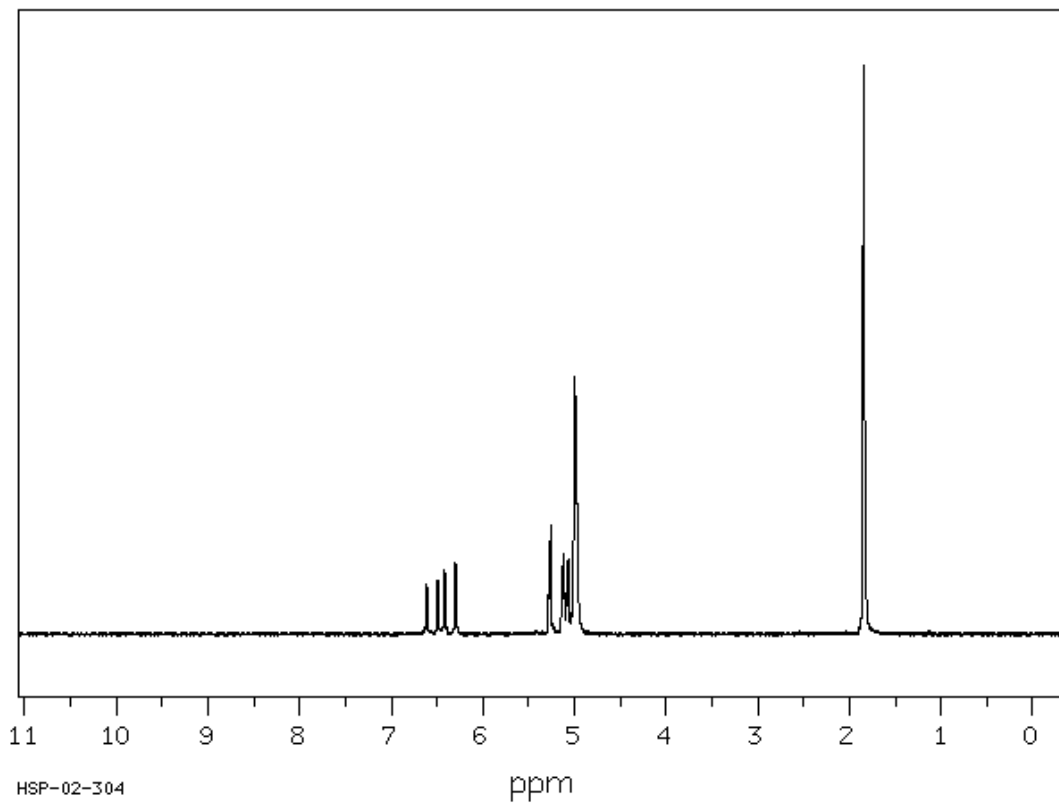
13. 2-甲基-1,3 丁二烯的谱图



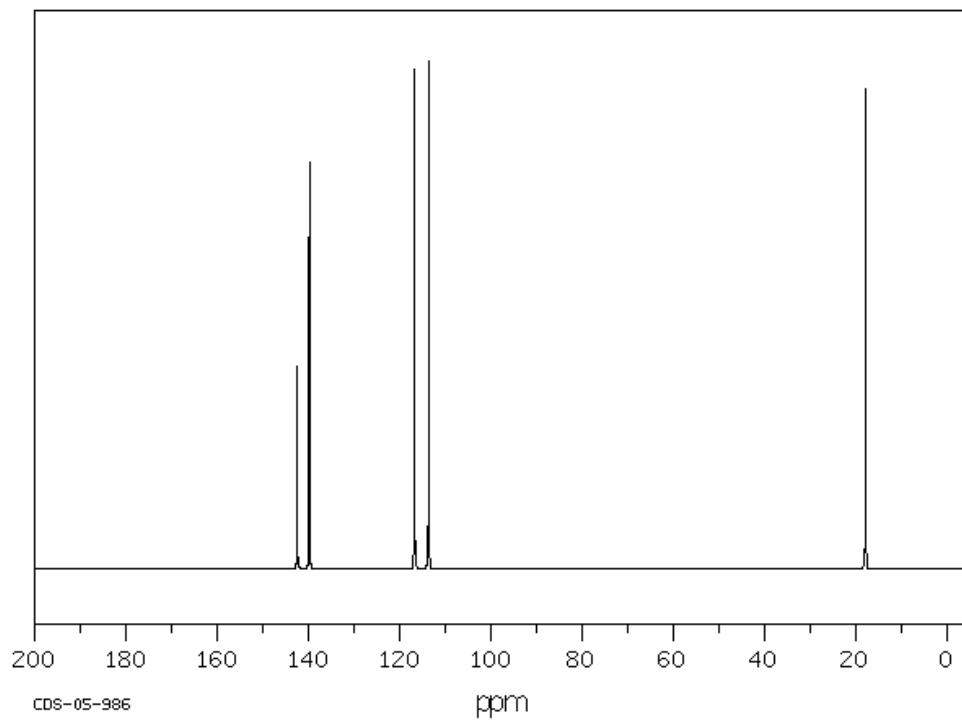
2-甲基-1,3 丁二烯的红外光谱



2-甲基-1,3 丁二烯的质谱

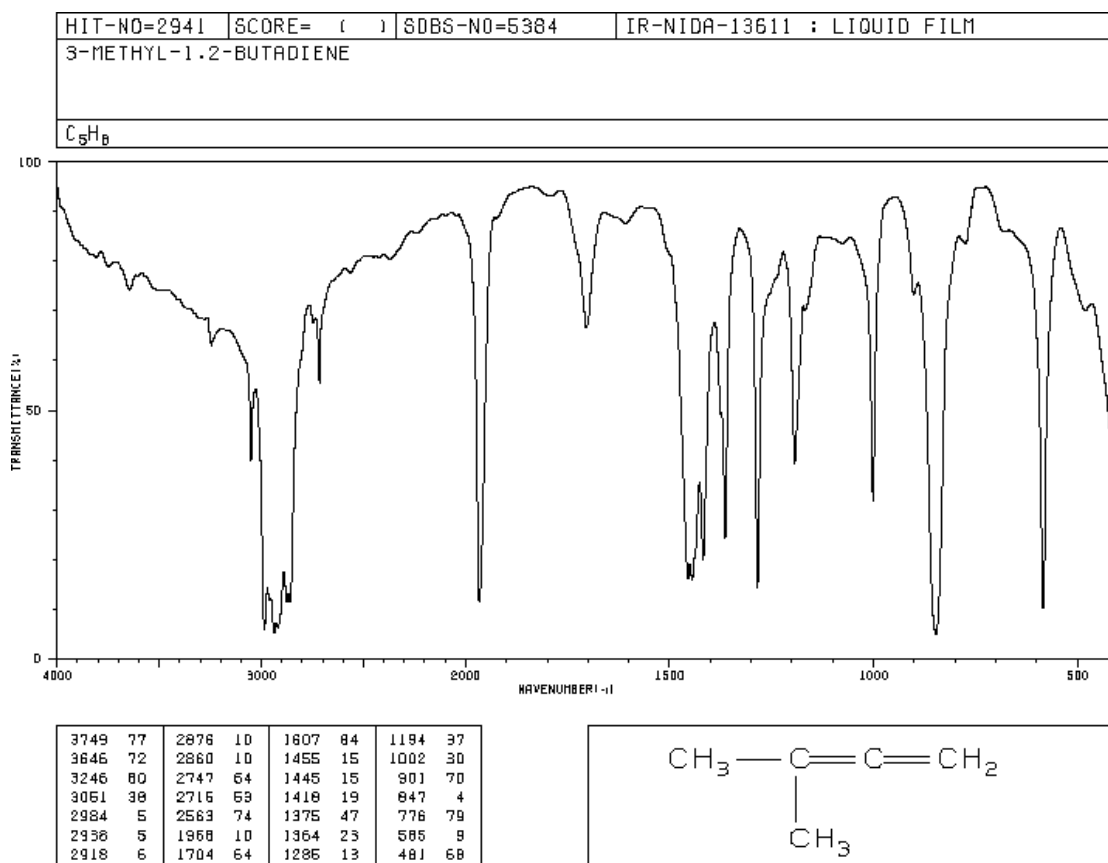


2-甲基-1,3 丁二烯的氢谱 90 MHz in  $\text{CDCl}_3$

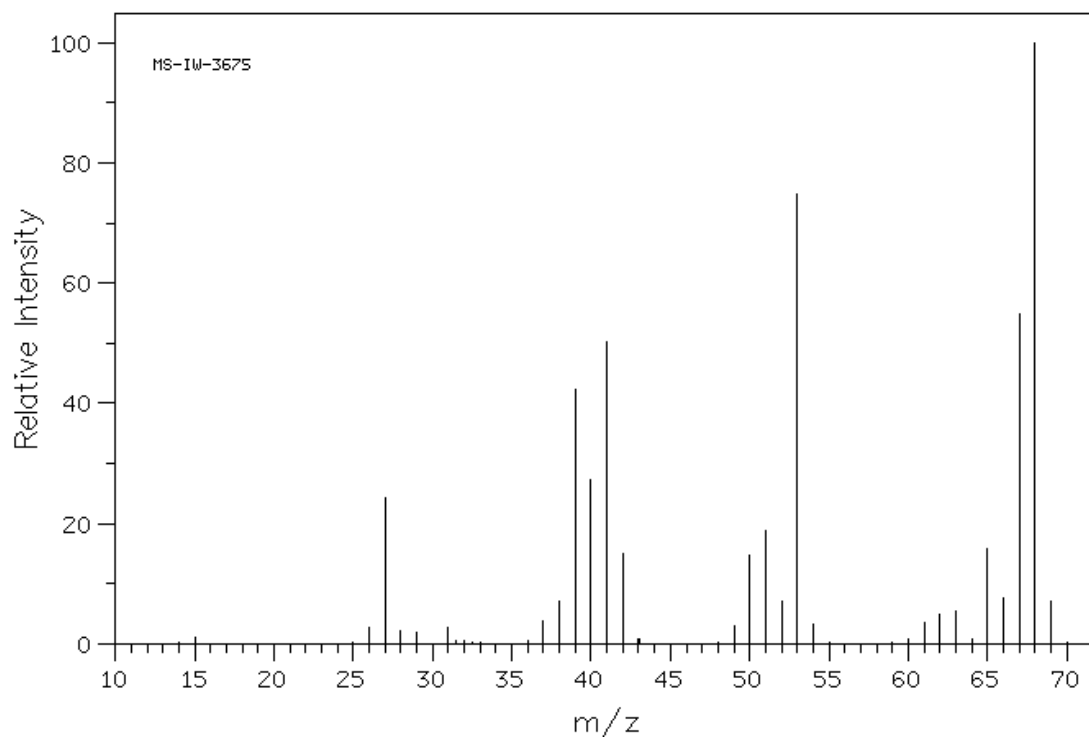


2-甲基-1,3 丁二烯的碳谱 in  $\text{CDCl}_3$

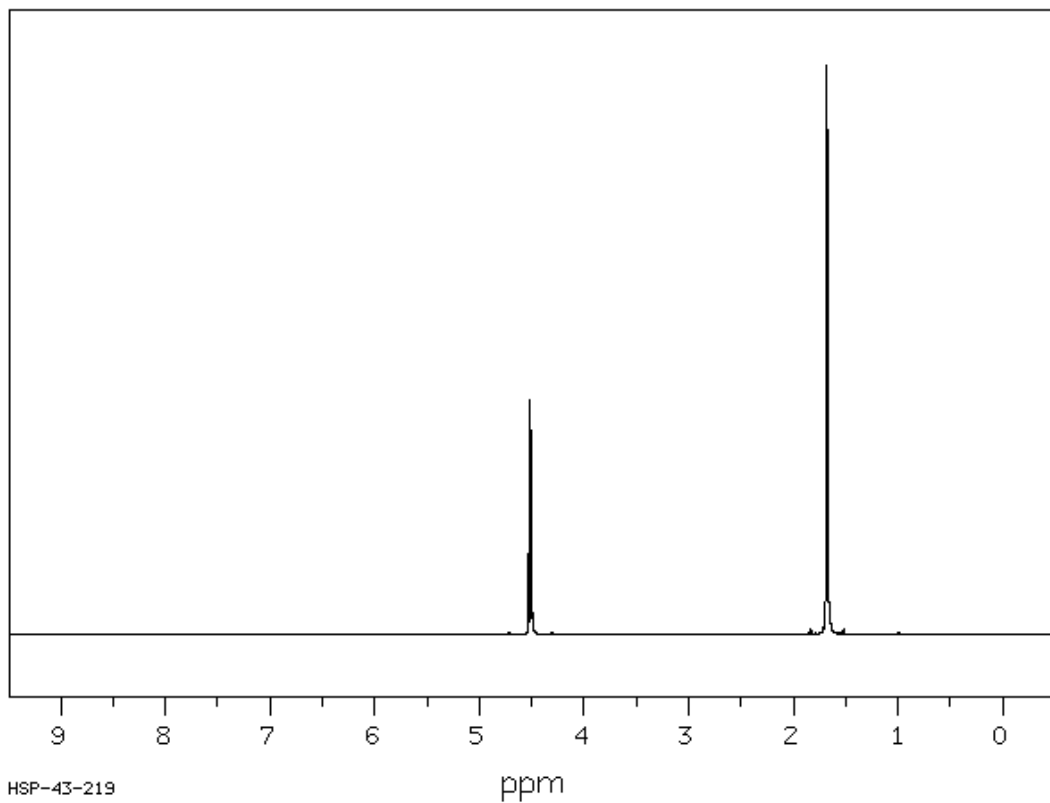
14. 3-甲基-1,2-丁二烯的谱图



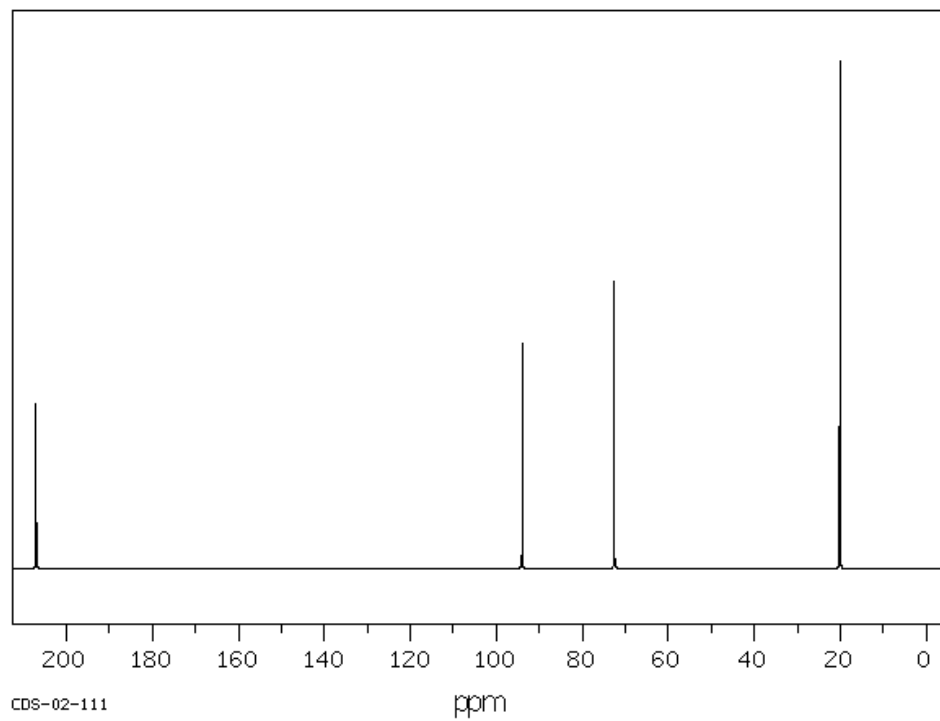
3-甲基-1,2-丁二烯的红外光谱



3-甲基-1,2-丁二烯的质谱

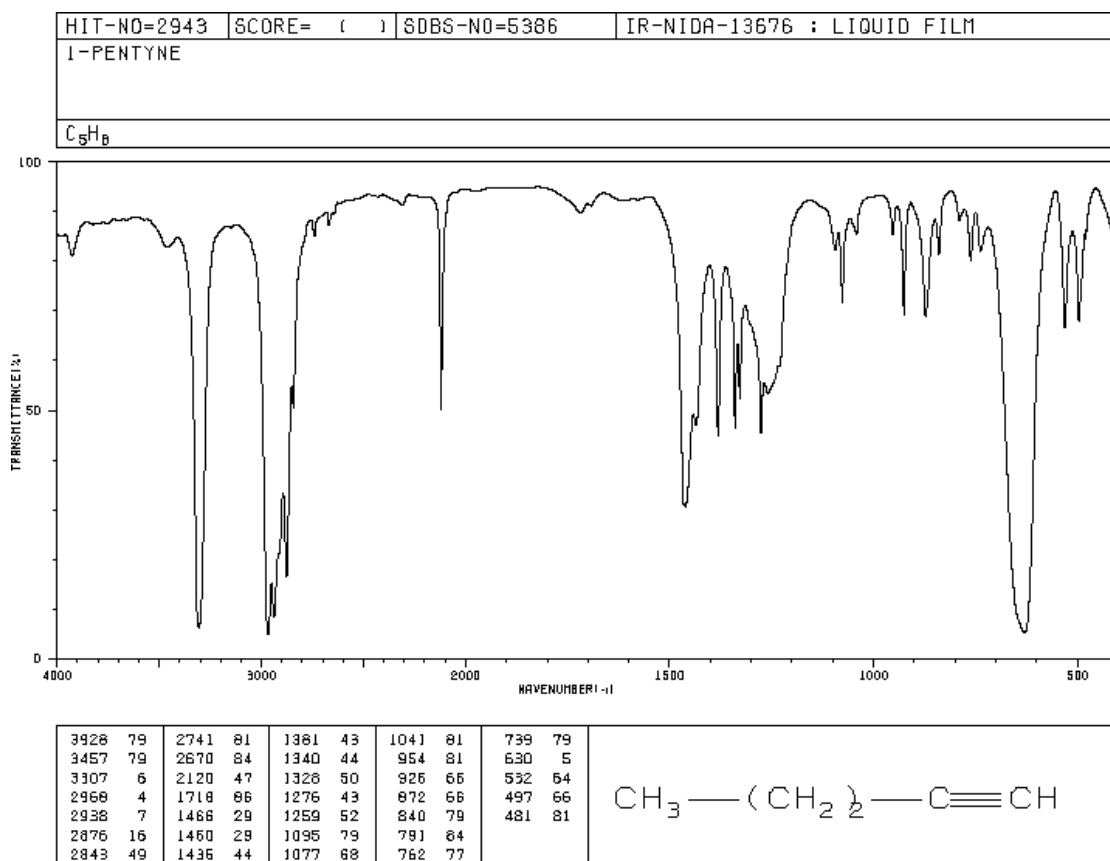


3-甲基-1,2-丁二烯的氢谱图 400 MHz in  $\text{CDCl}_3$

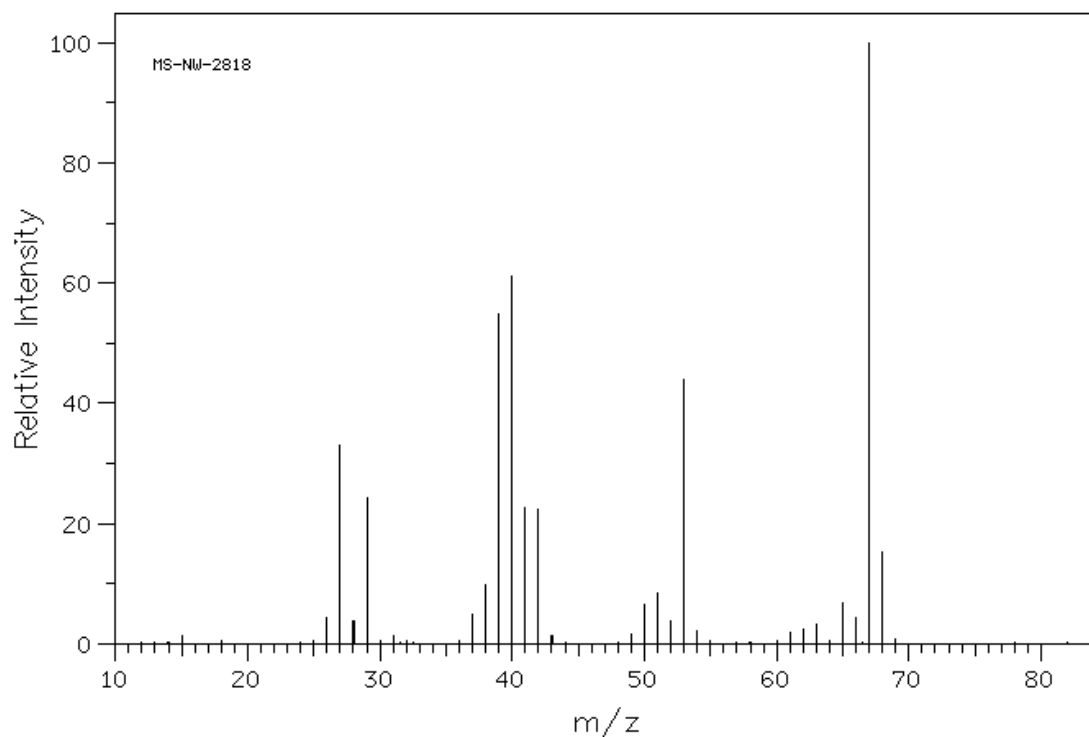


3-甲基-1,2-丁二烯的碳谱图 in  $\text{CDCl}_3$

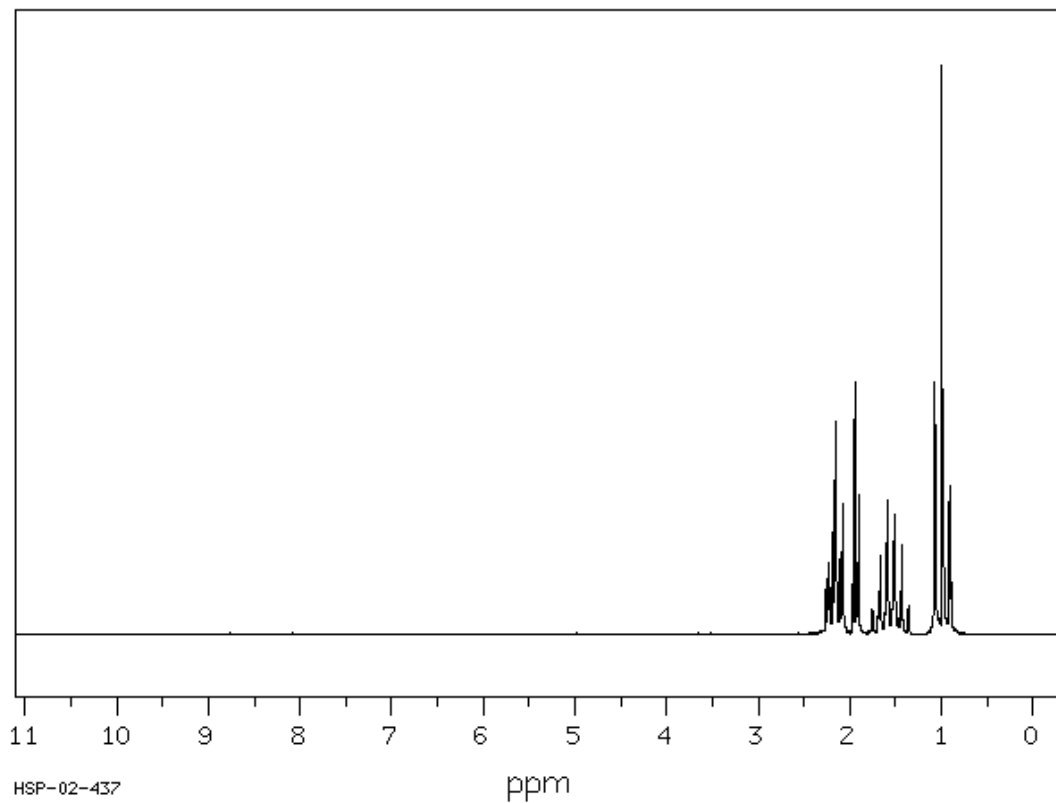
15. 1-戊炔的谱图



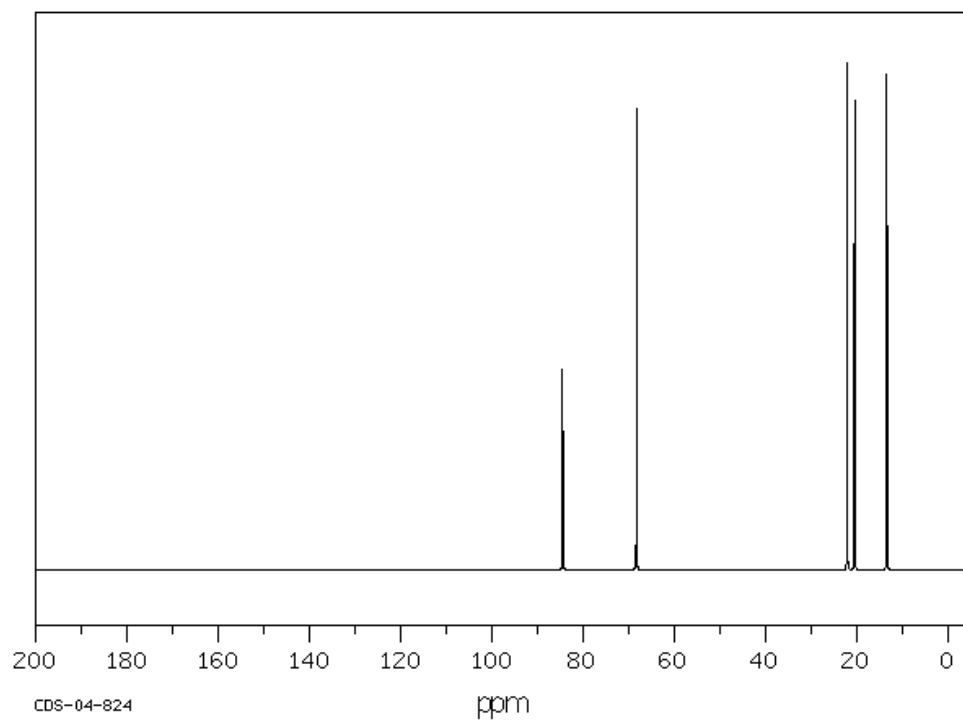
1-戊炔的谱红外光谱



1-戊炔的质谱图

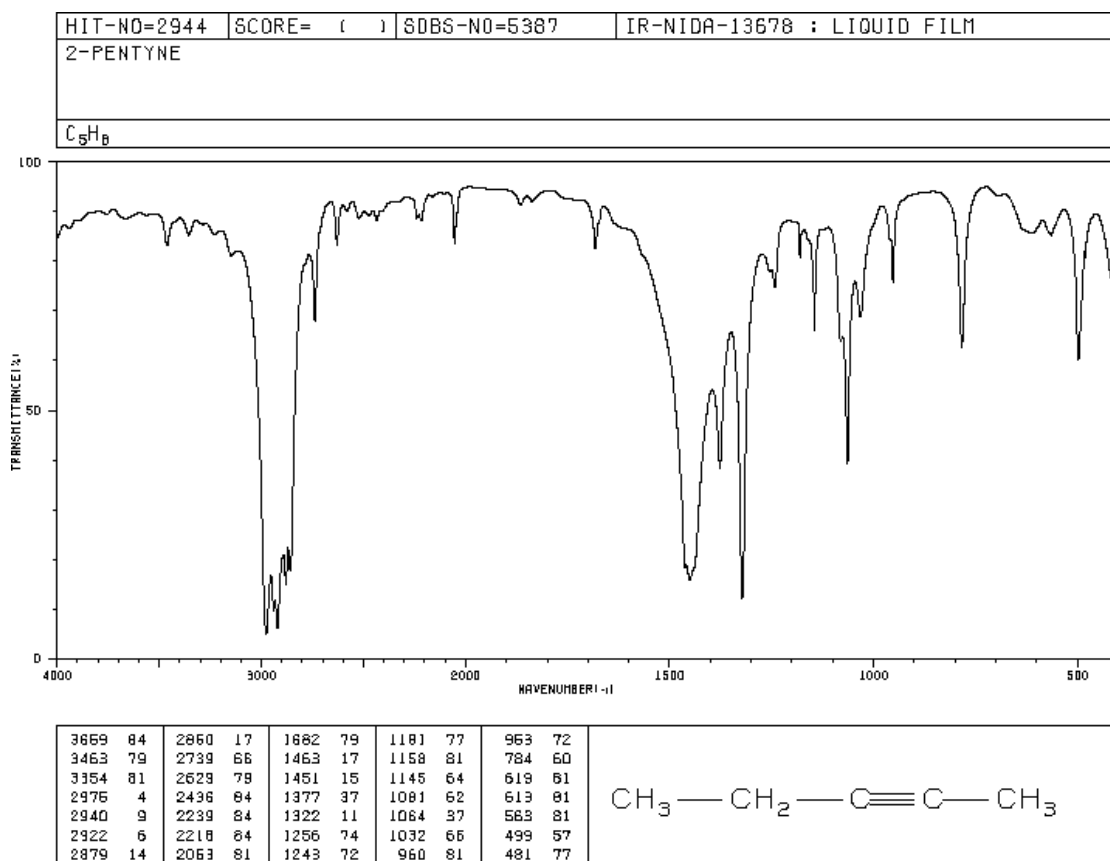


1-戊炔的氢谱图 90 MHz in  $\text{CDCl}_3$

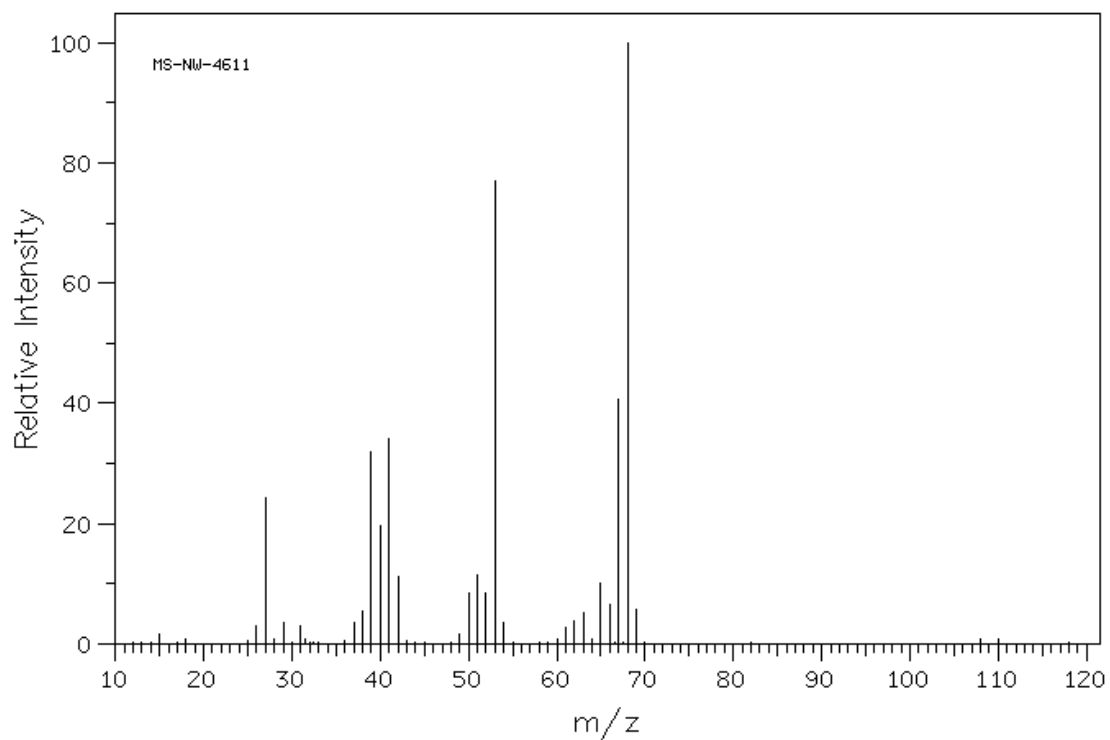


1-戊炔的碳谱图 in  $\text{CDCl}_3$

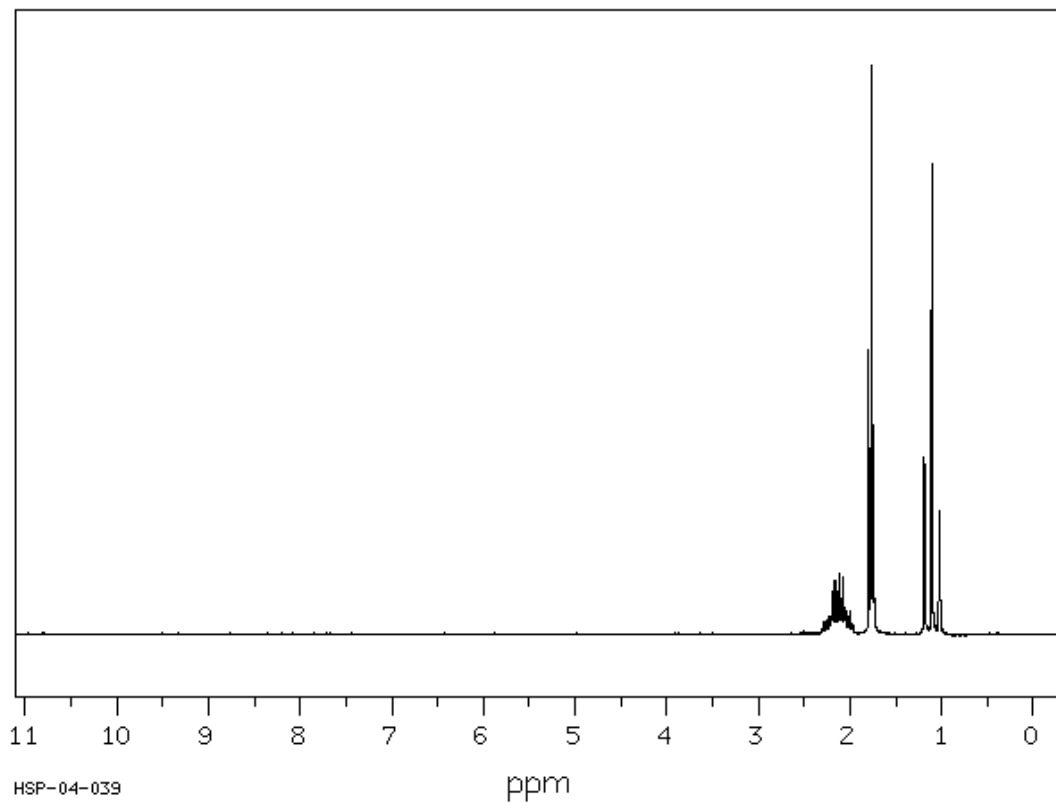
### 16.2-戊炔的谱图



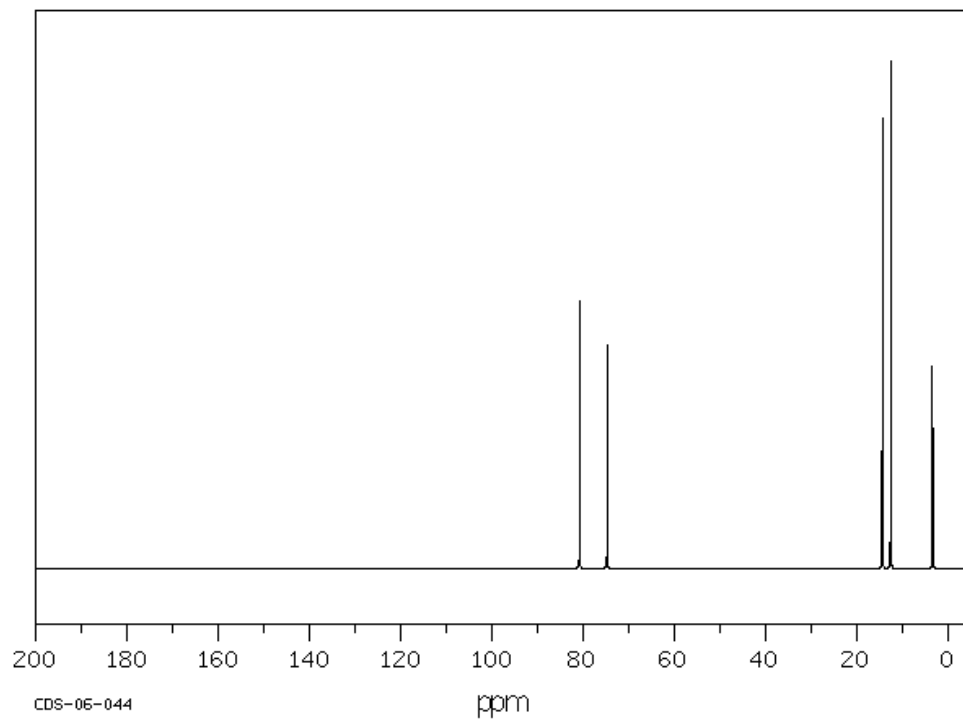
2-戊炔的红外光谱图



2-戊炔的质谱



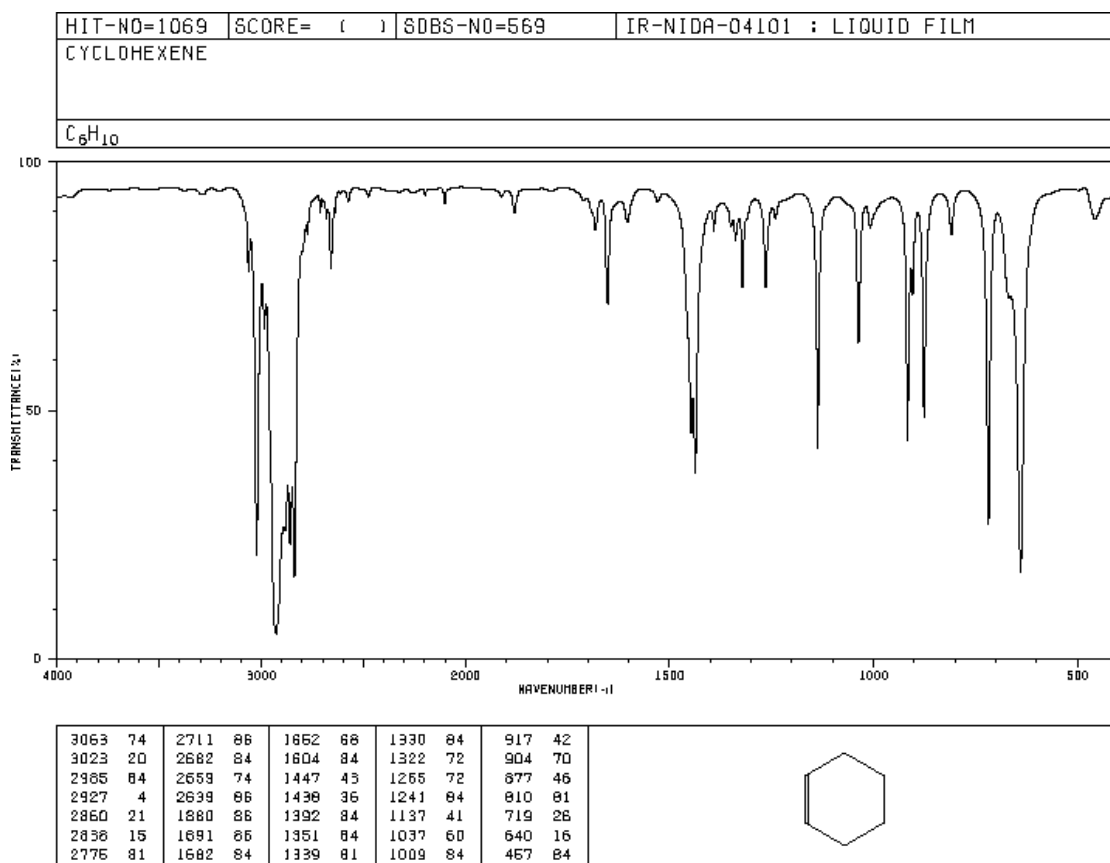
2-戊炔的氢谱图 90 MHz in CDCl<sub>3</sub>



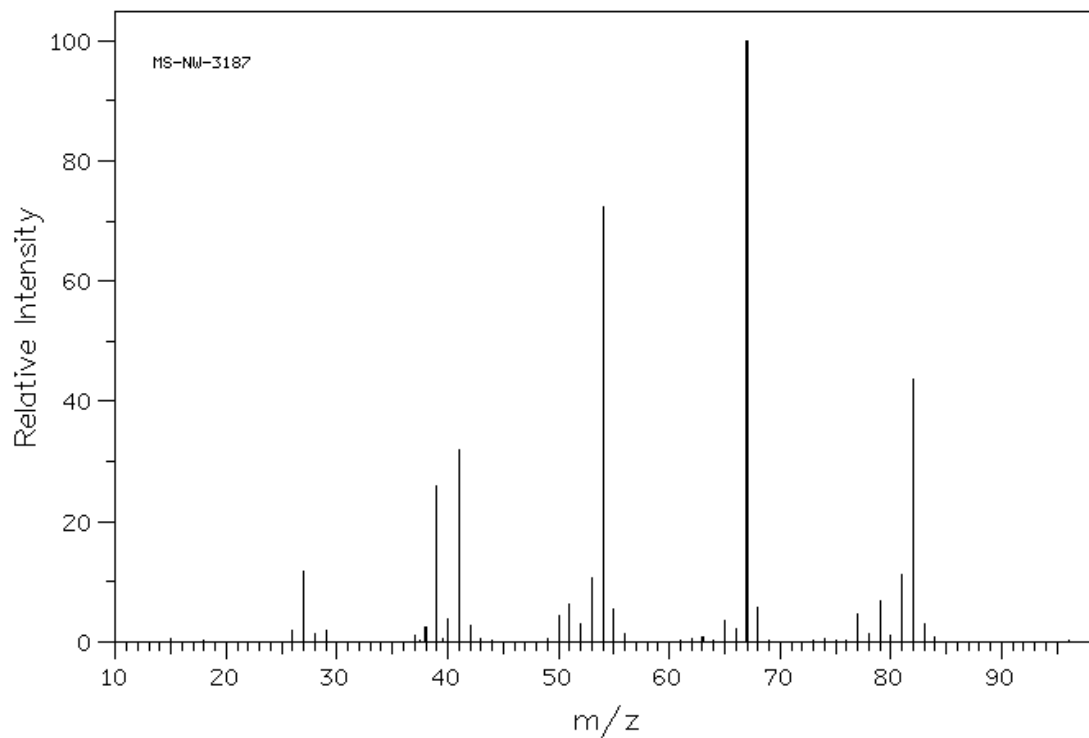
2-戊炔的碳谱图 in CDCl<sub>3</sub>



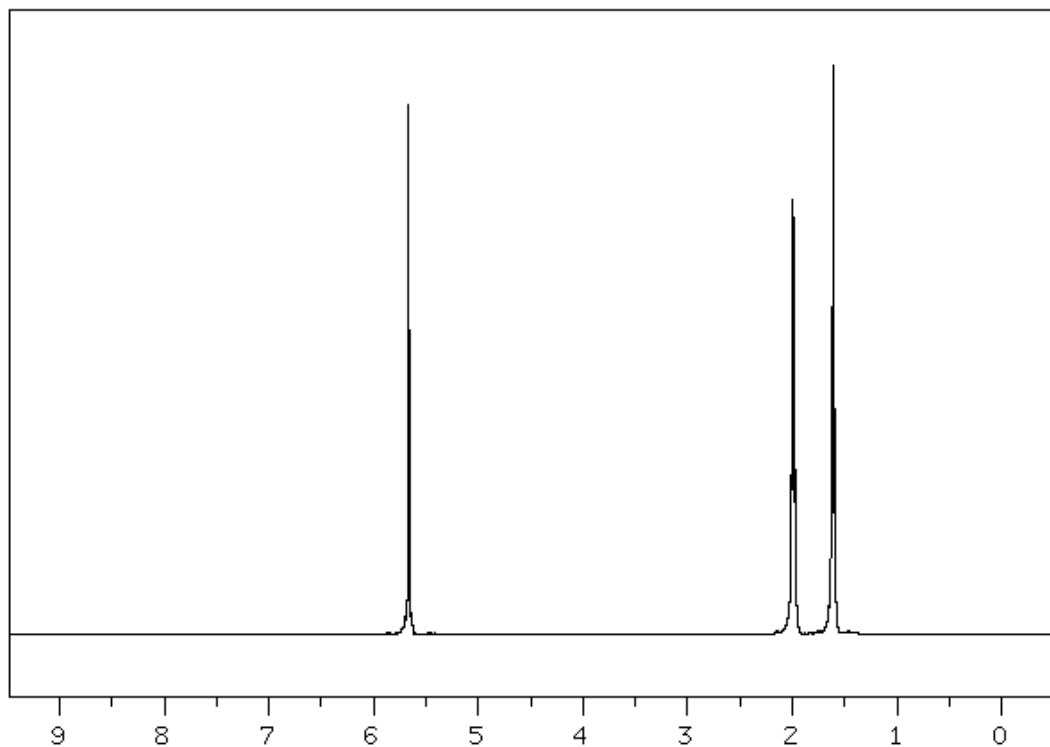
### 17.环己烯的谱图



环己烯的红外光谱



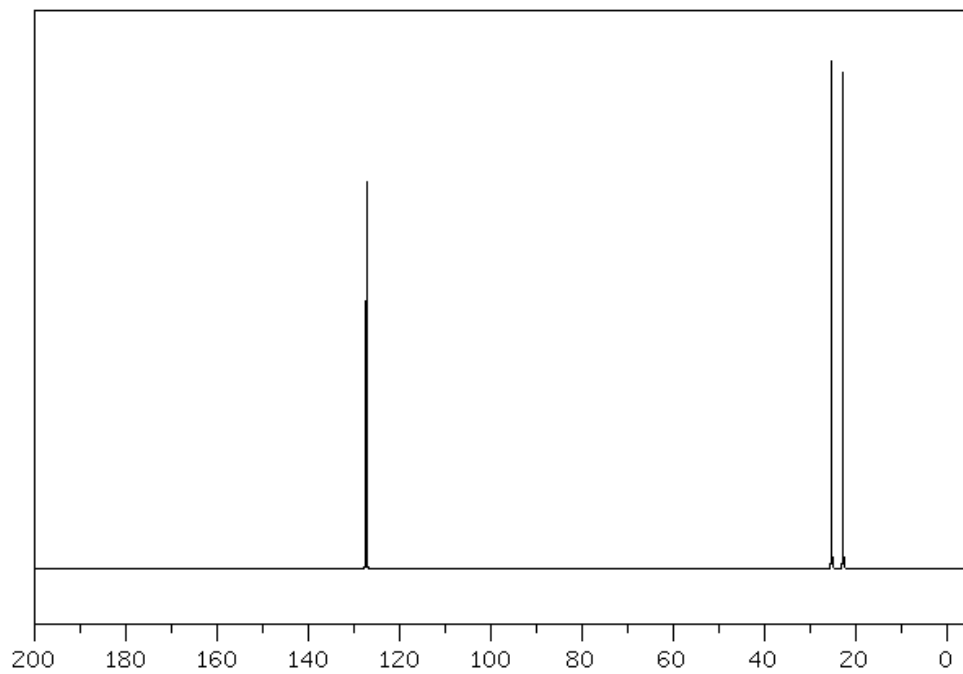
环己烯的质谱



HSP-40-559

ppm

环己烯的氢谱 400 MHz in CDCl<sub>3</sub>

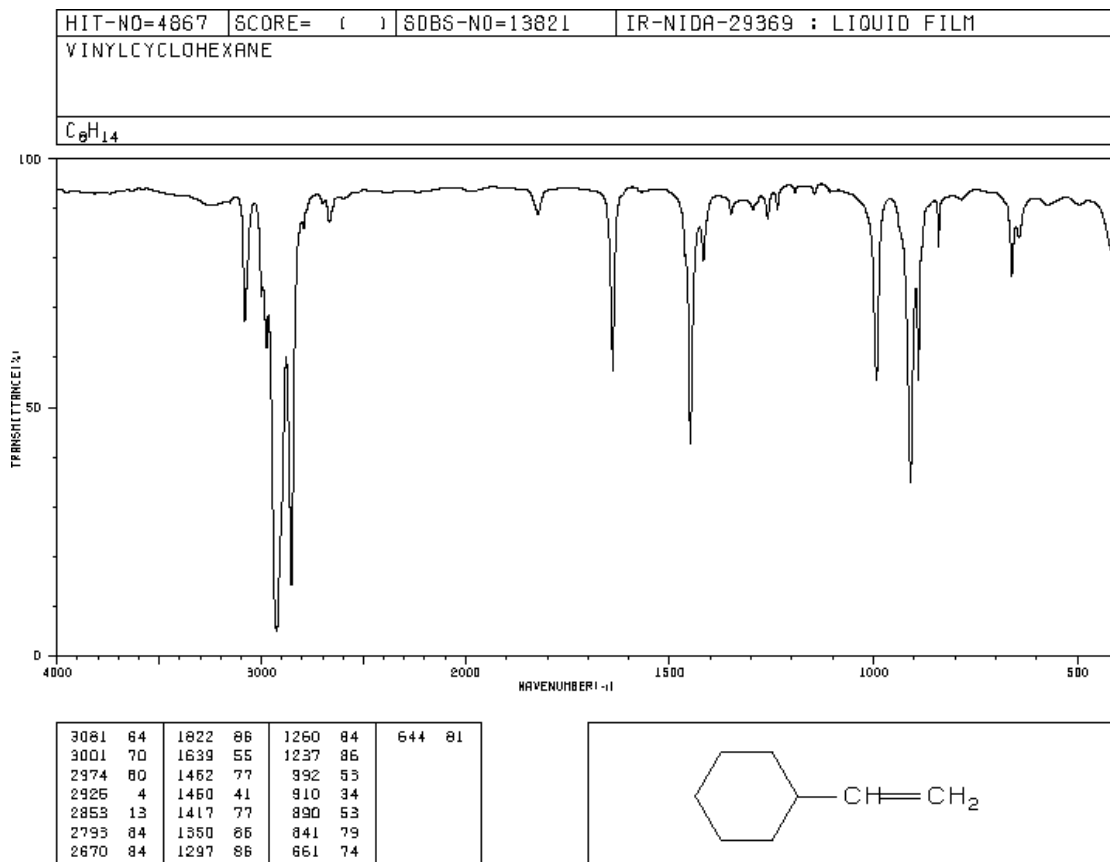


CDS-00-287

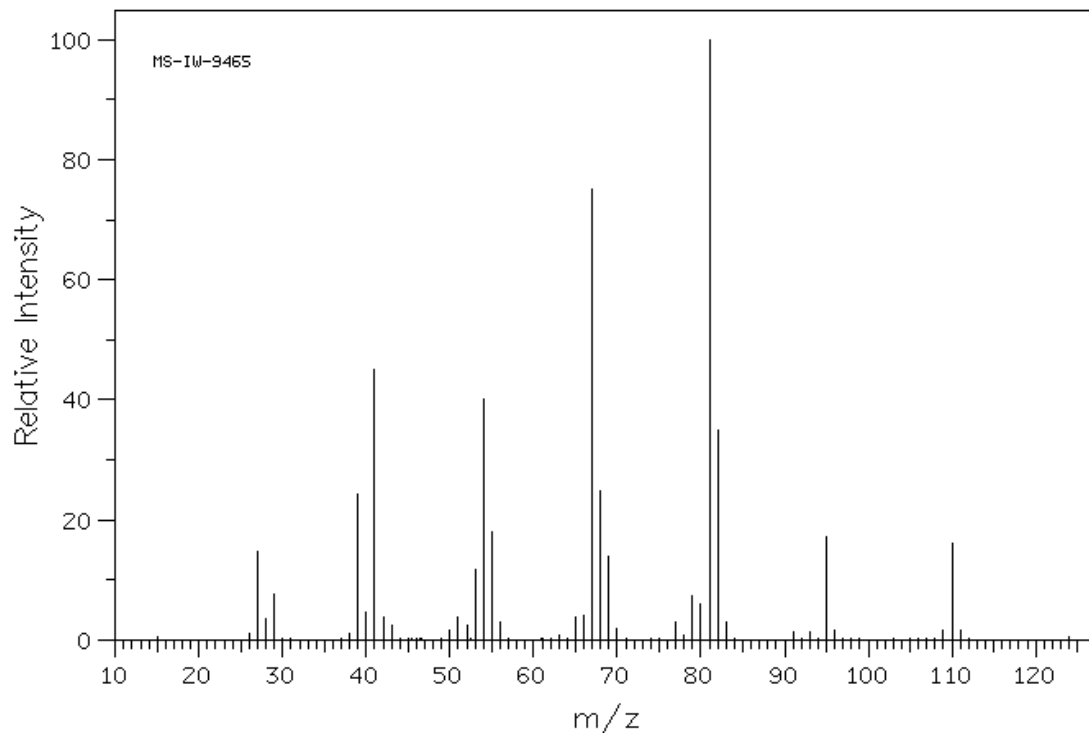
ppm

环己烯的碳谱 in CDCl<sub>3</sub>

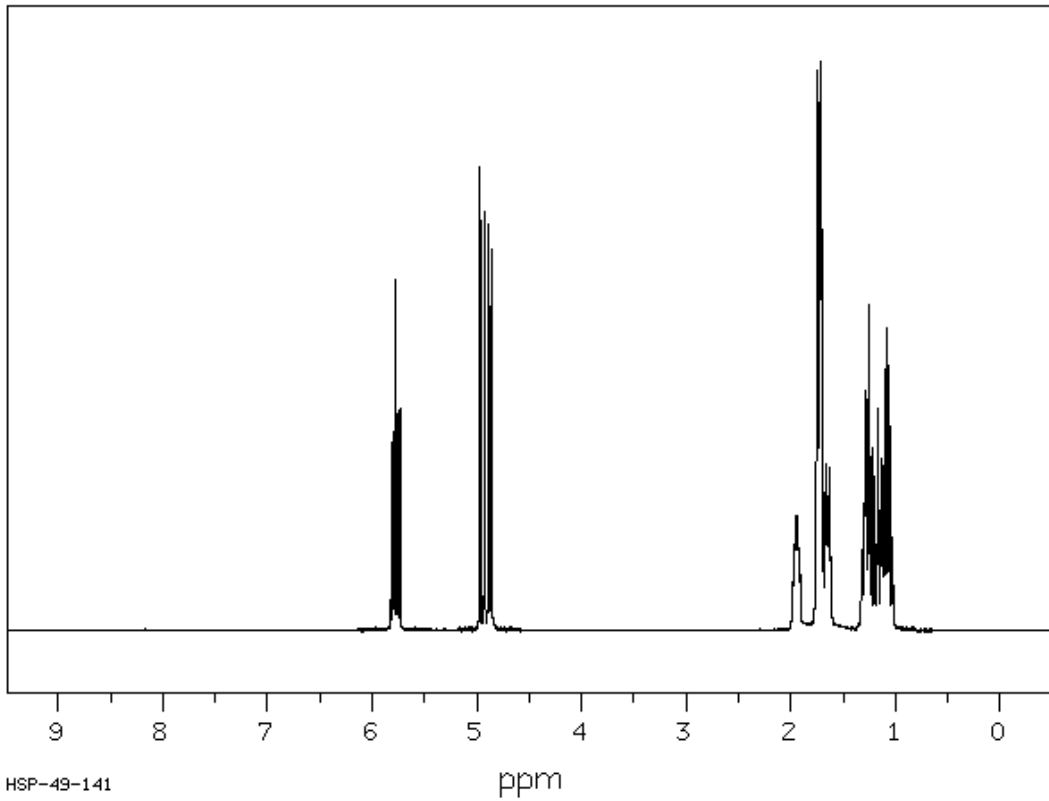
# 18 环己基乙烯的谱图



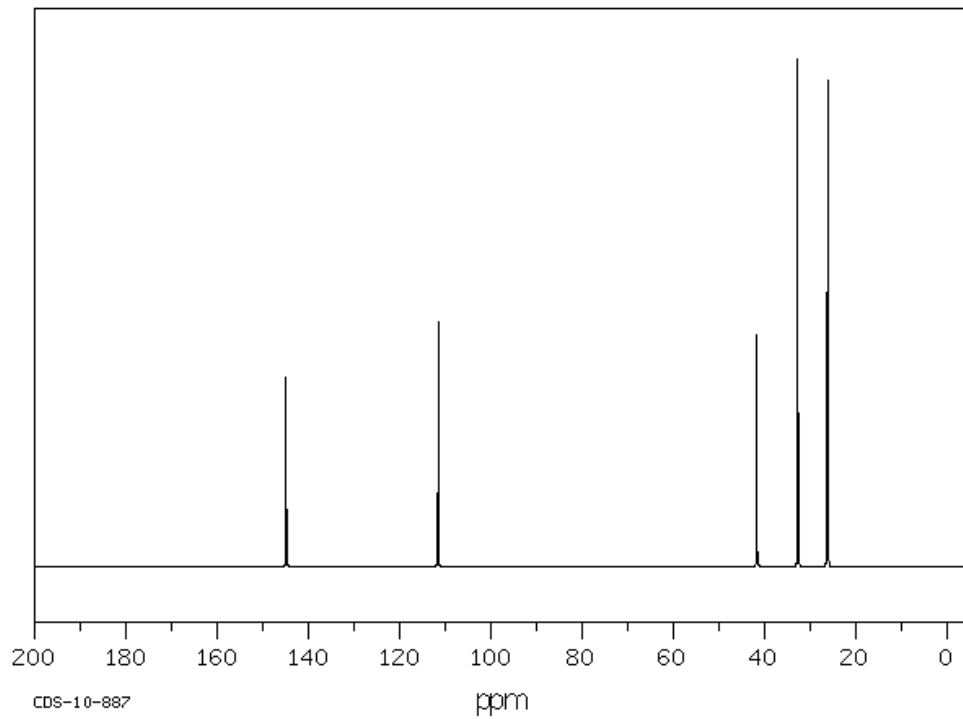
环己基乙烯的红外光谱



环己基乙烯的质谱

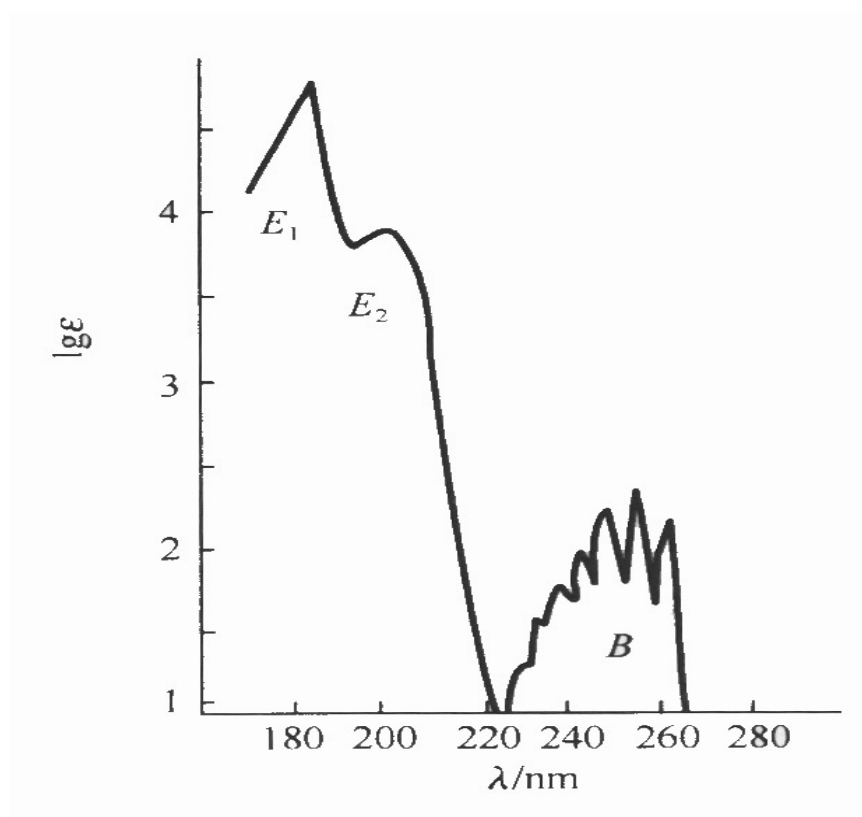


环己基乙烯的氢谱 400 MHz in CDCl<sub>3</sub>

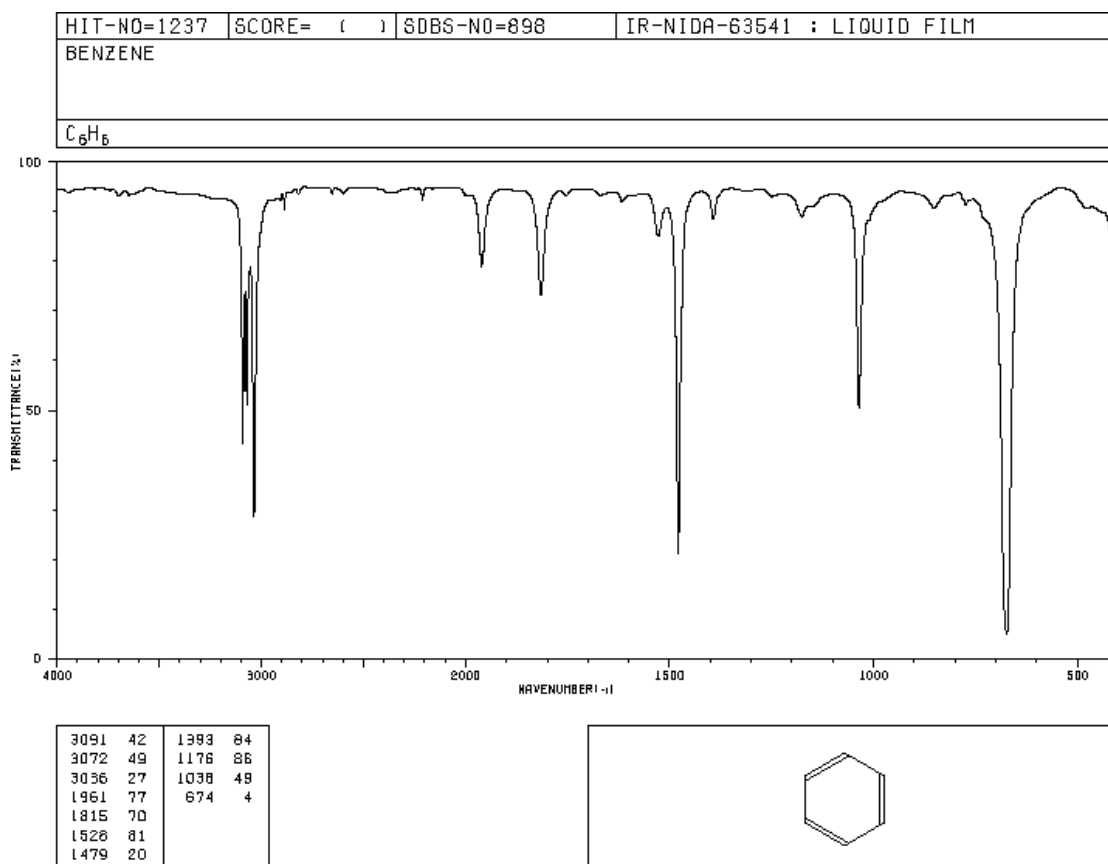


环己基乙烯的碳谱 in CDCl<sub>3</sub>

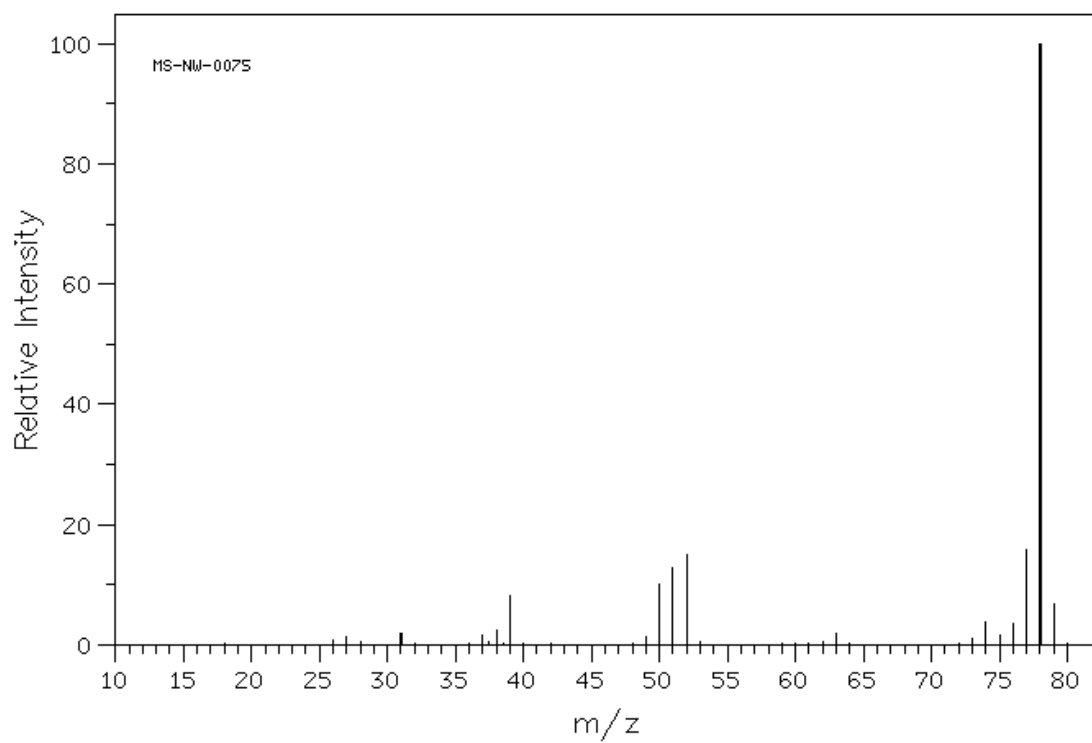
19. 苯的四大谱图:



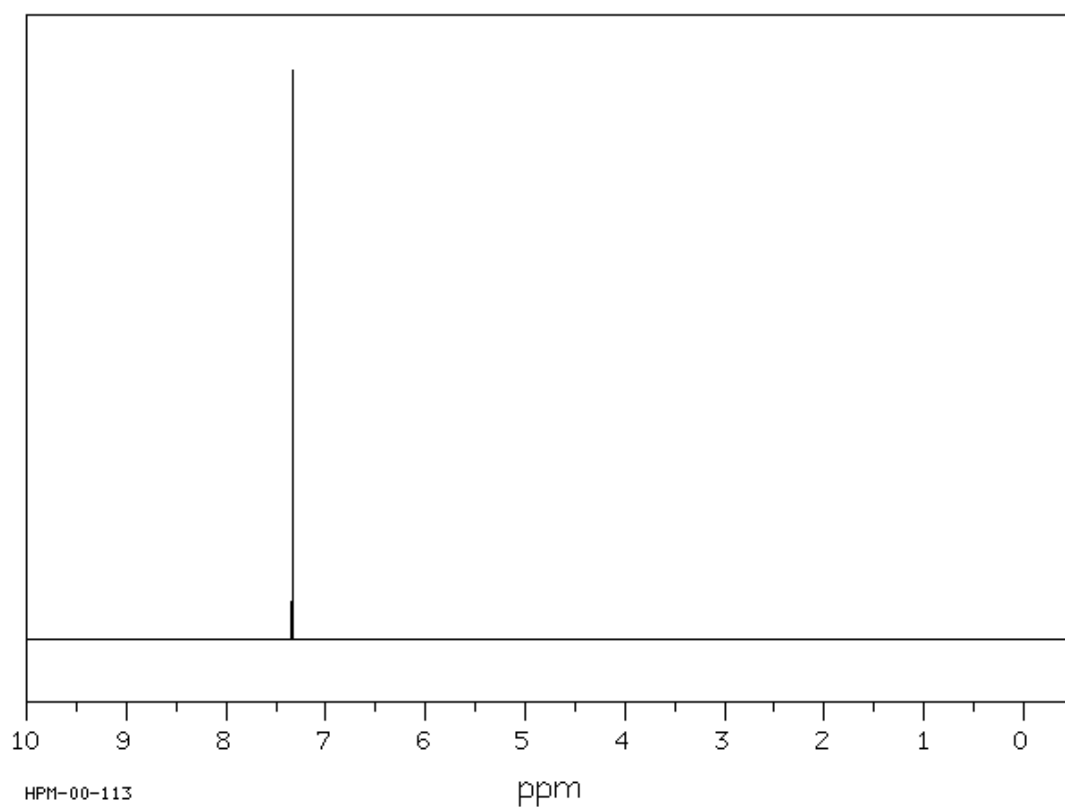
苯的紫外光谱



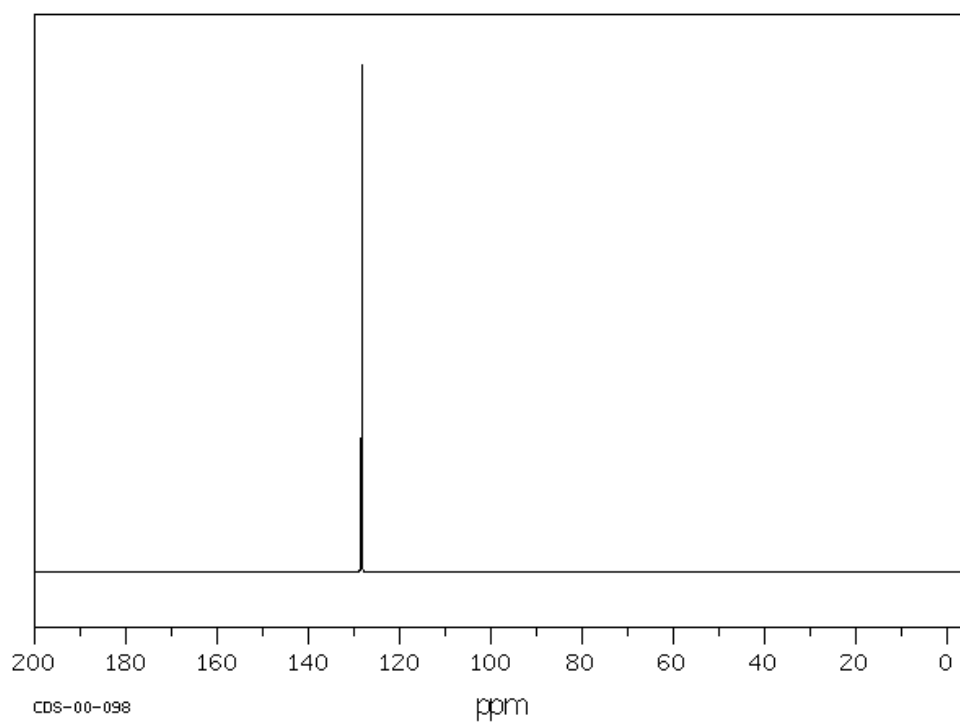
苯的红外光谱图



苯的质谱图

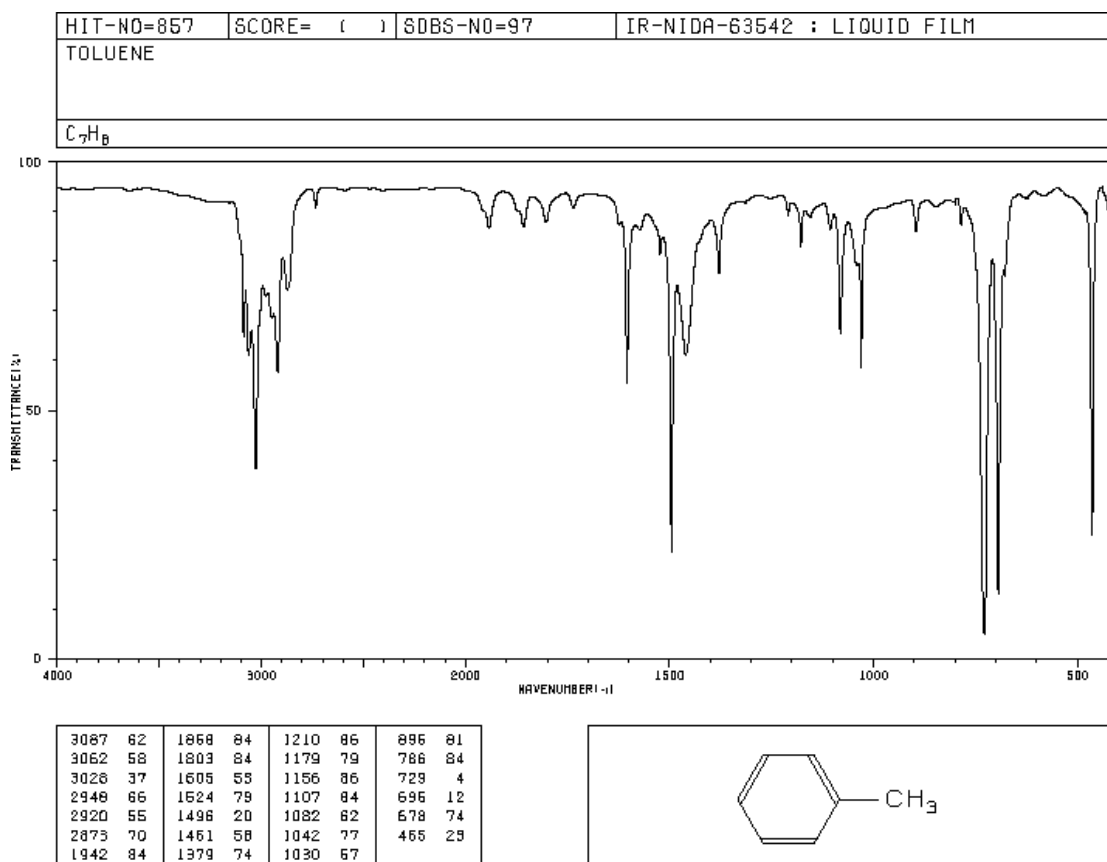


苯的氢谱 parameter in  $\text{CDCl}_3$

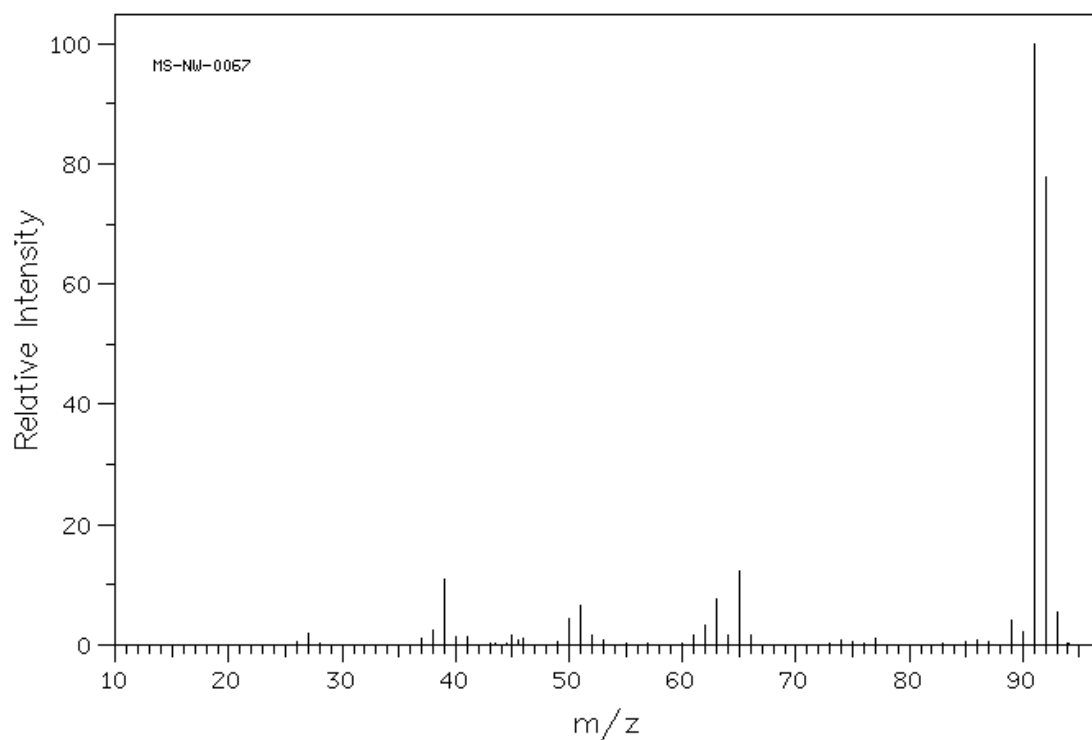


苯的碳谱 in  $\text{CDCl}_3$

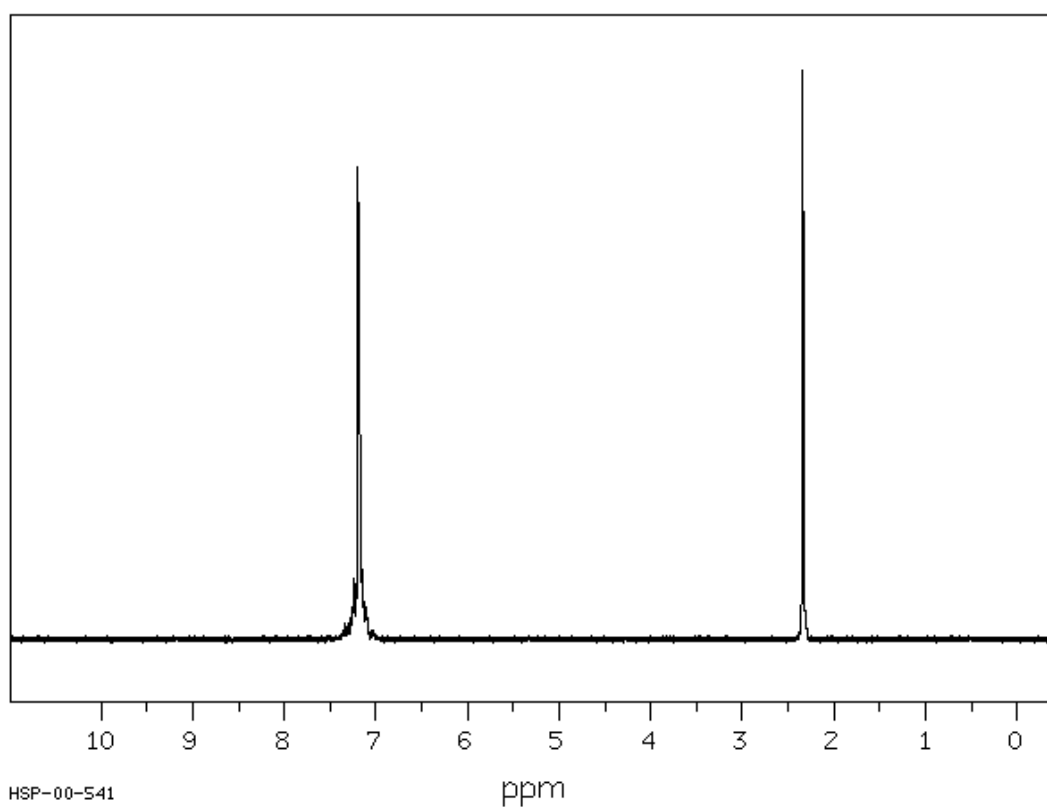
20. 甲基苯的谱图



甲基苯的红外光谱图

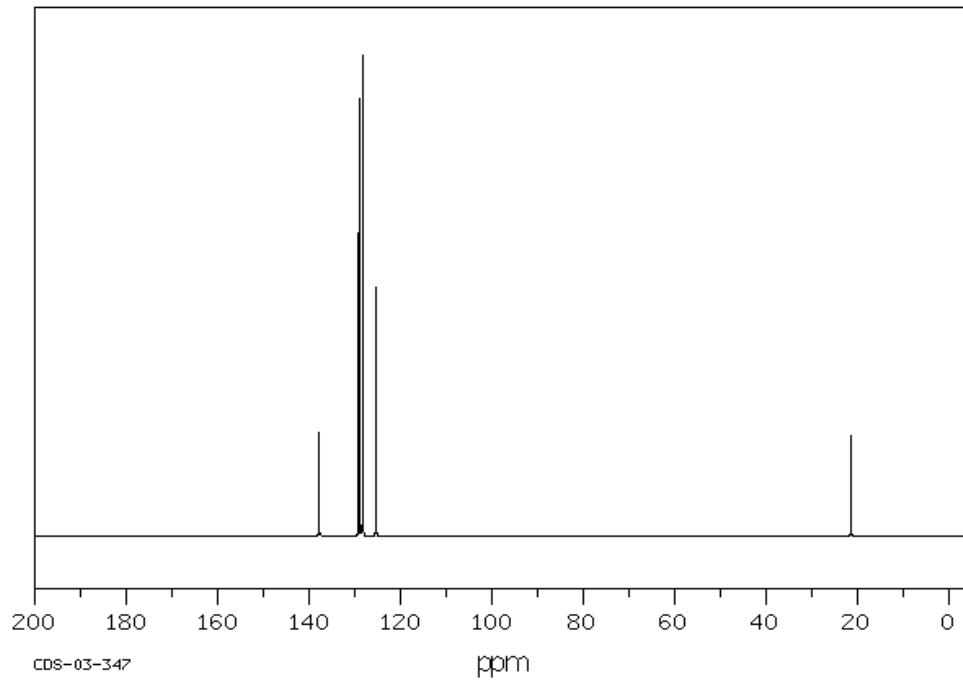


甲基苯的质谱图



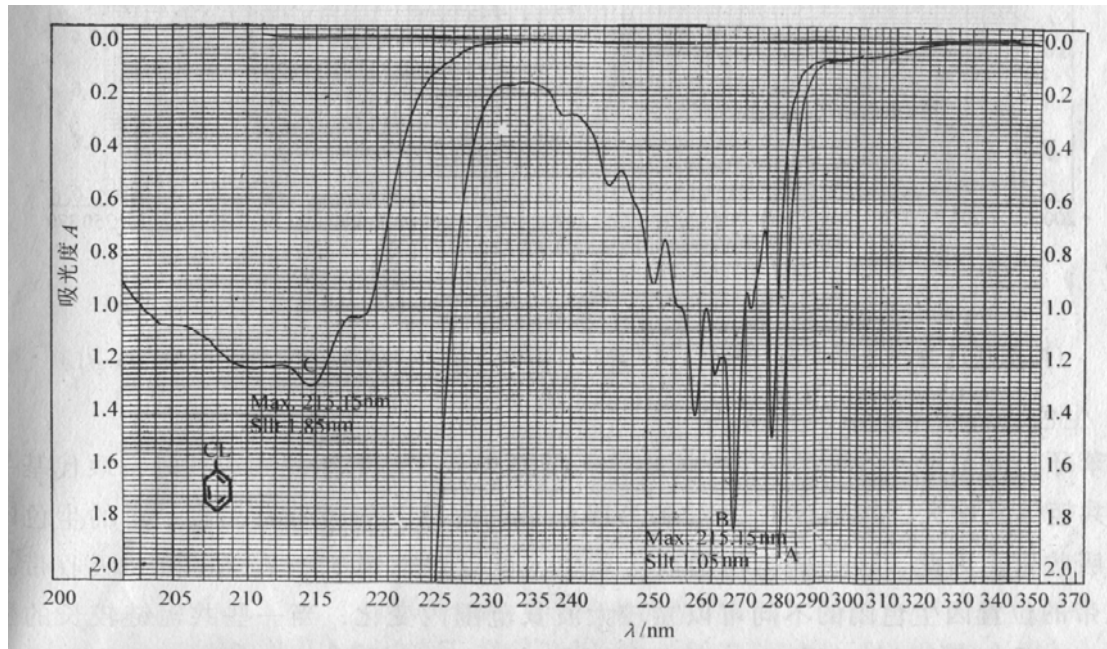
甲基苯的氢谱 90 MHz in CDCl<sub>3</sub>



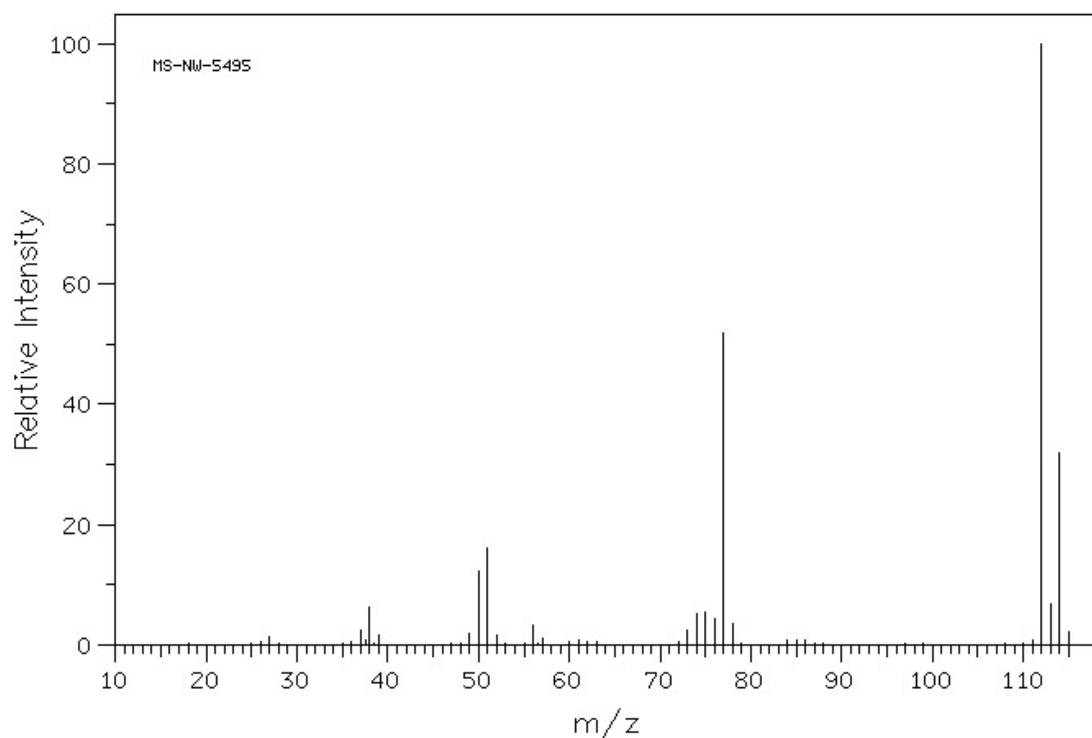


甲基苯的碳谱 in  $\text{CDCl}_3$

21. 氯苯的四大谱图；

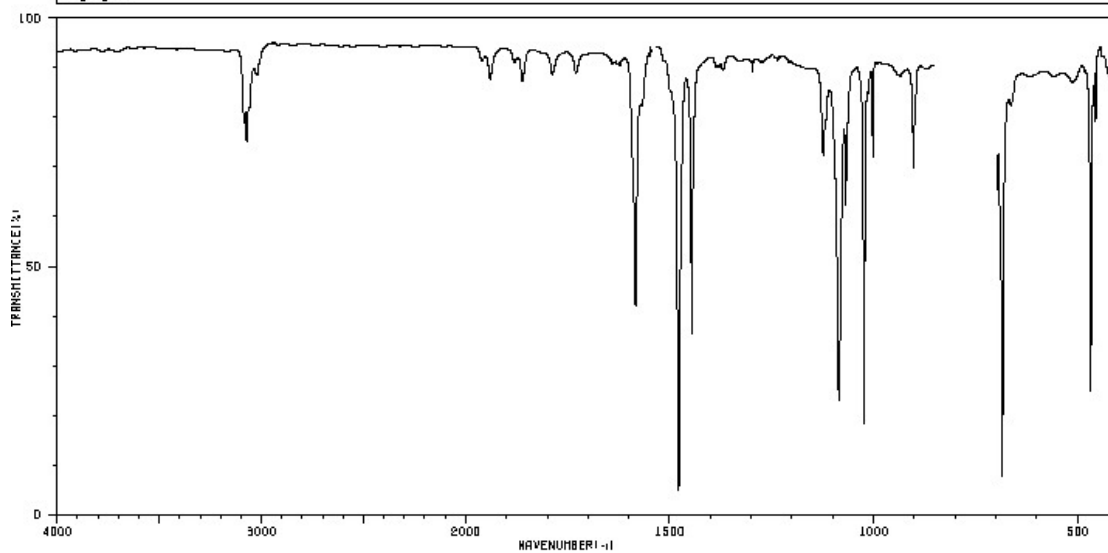


氯苯的紫外光谱



氯苯的质谱

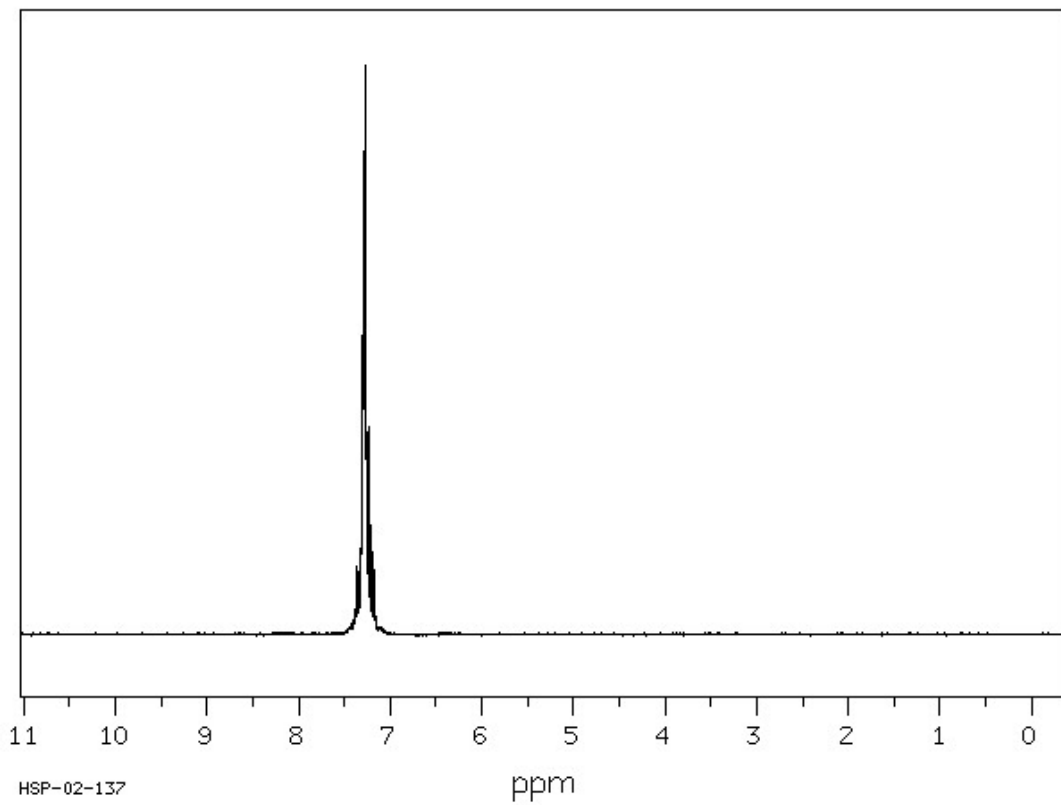
HIT-NO=1451	SCORE= ( )	SDBS-NO=2109	IR-NIDA-08657 : CCL4 SOLUTION
CHLOROBENZENE			
C <sub>6</sub> H <sub>5</sub> CL			



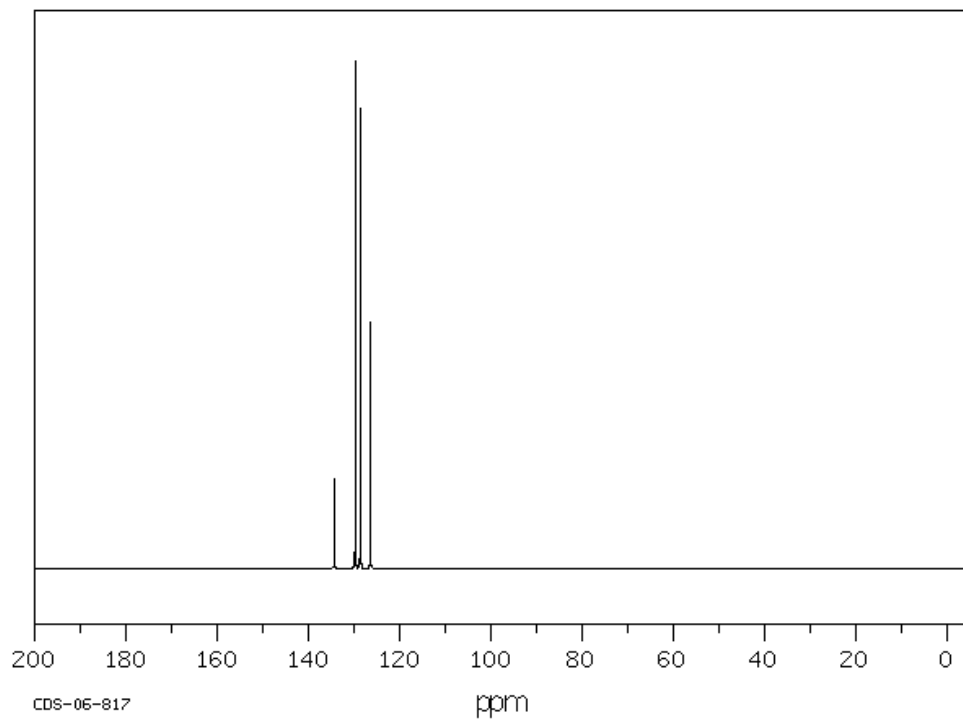
3086	77	1730	86	1370	86	1002	70	461	84
3072	72	1584	41	1298	86	935	84	456	77
3060	79	1542	95	1124	70	902	66		
3019	84	1537	96	1086	22	686	7		
1939	84	1532	95	1088	60	663	79		
1860	84	1478	4	1024	17	511	84		
1788	84	1446	36	1014	81	469	23		

Cl

氯苯的红外光谱

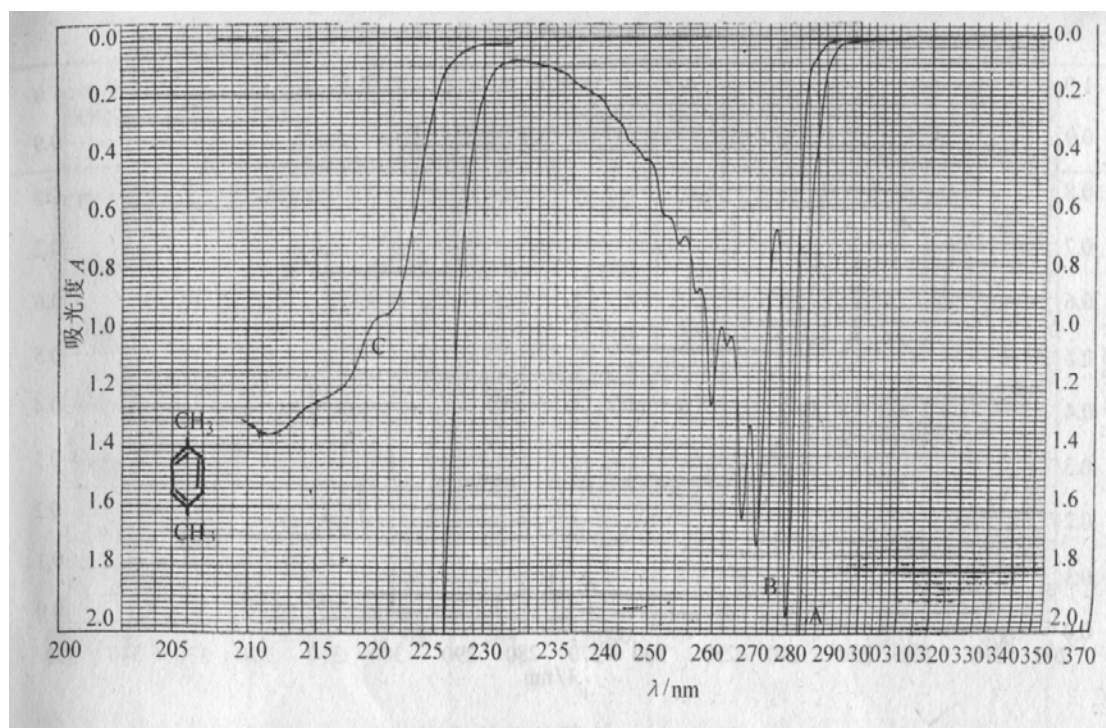


氯苯的氢谱 90 MHz in CDCl<sub>3</sub>

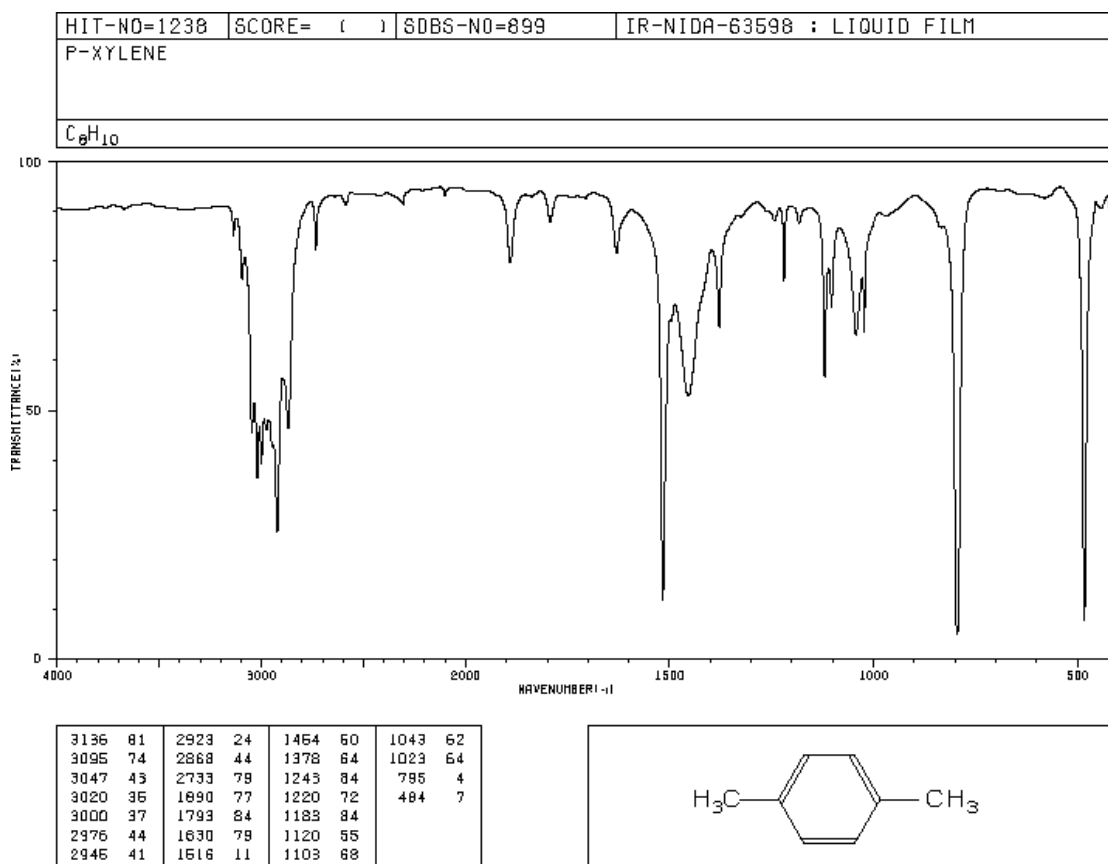


氯苯的氢谱 90 MHz in CDCl<sub>3</sub>

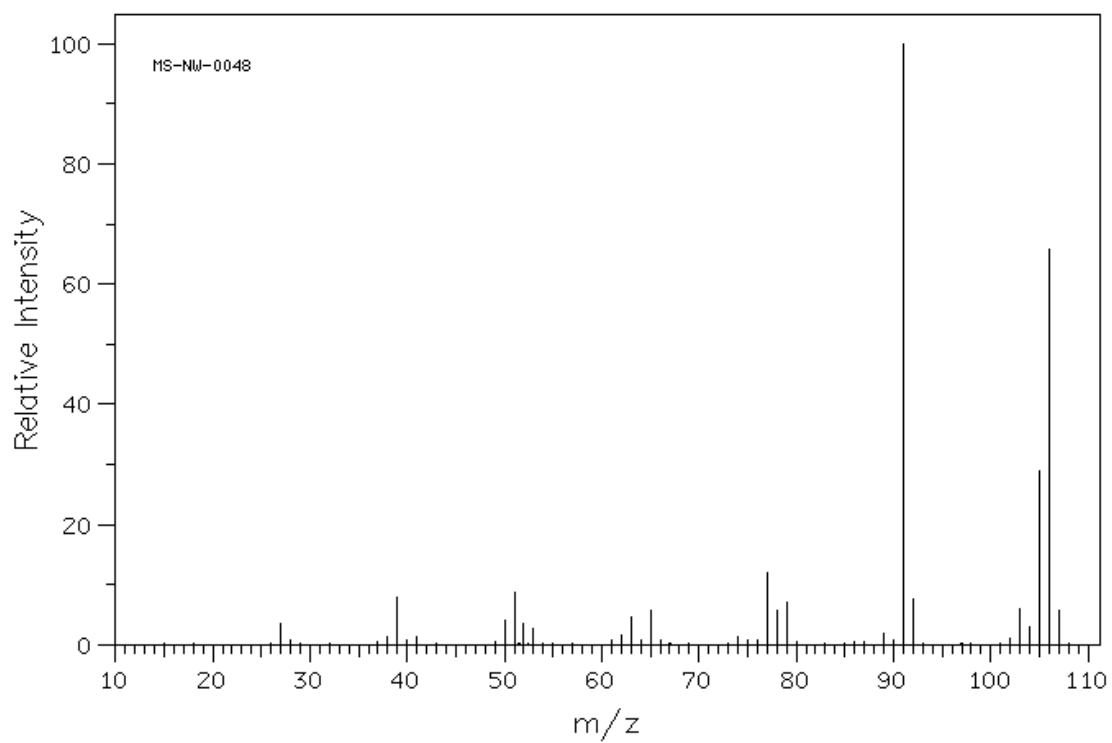
22. 对二甲苯的四大谱图:



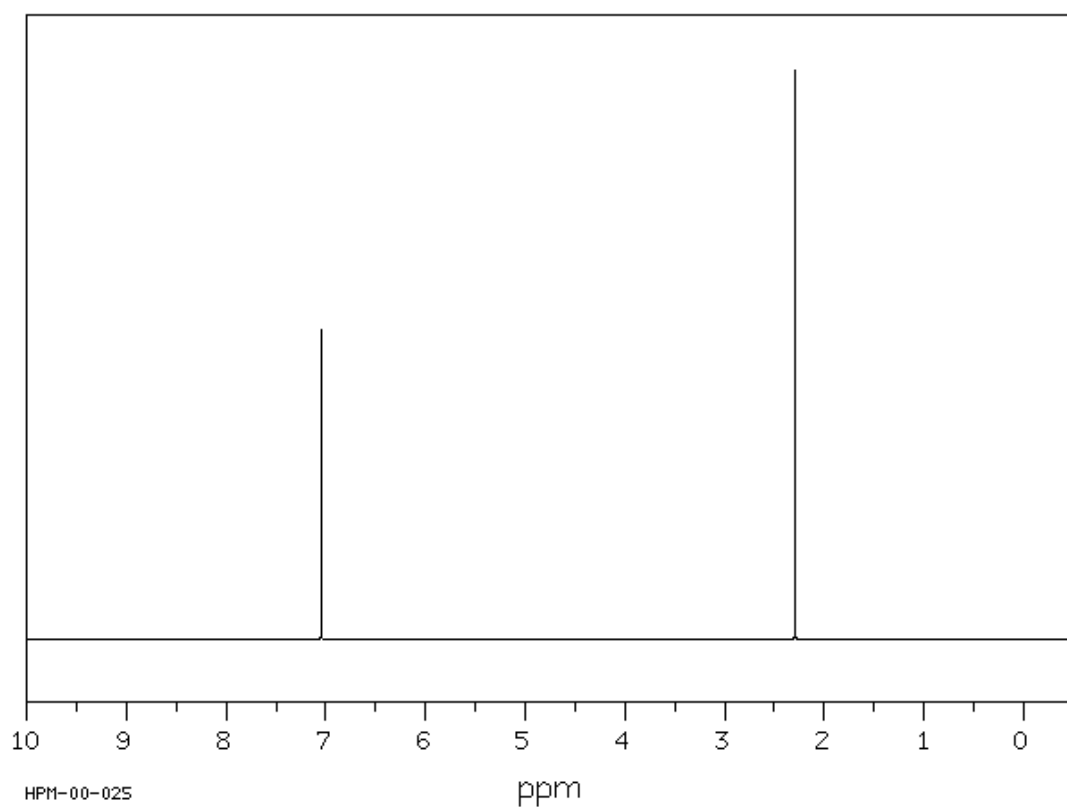
对二甲苯的紫外光谱



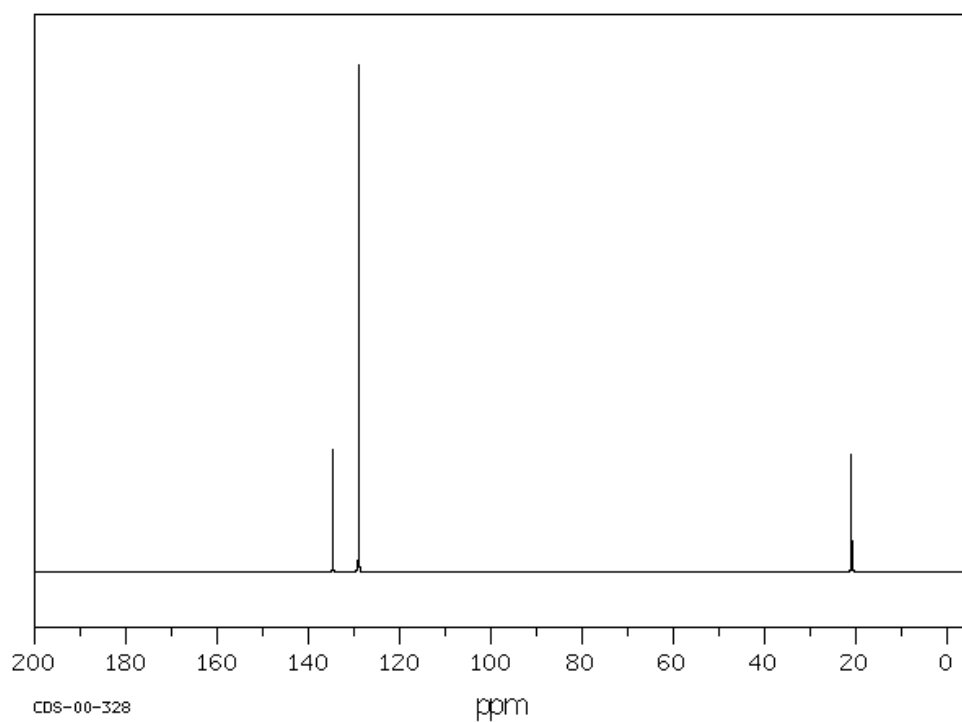
对二甲苯的红外光谱



对二甲苯的质谱

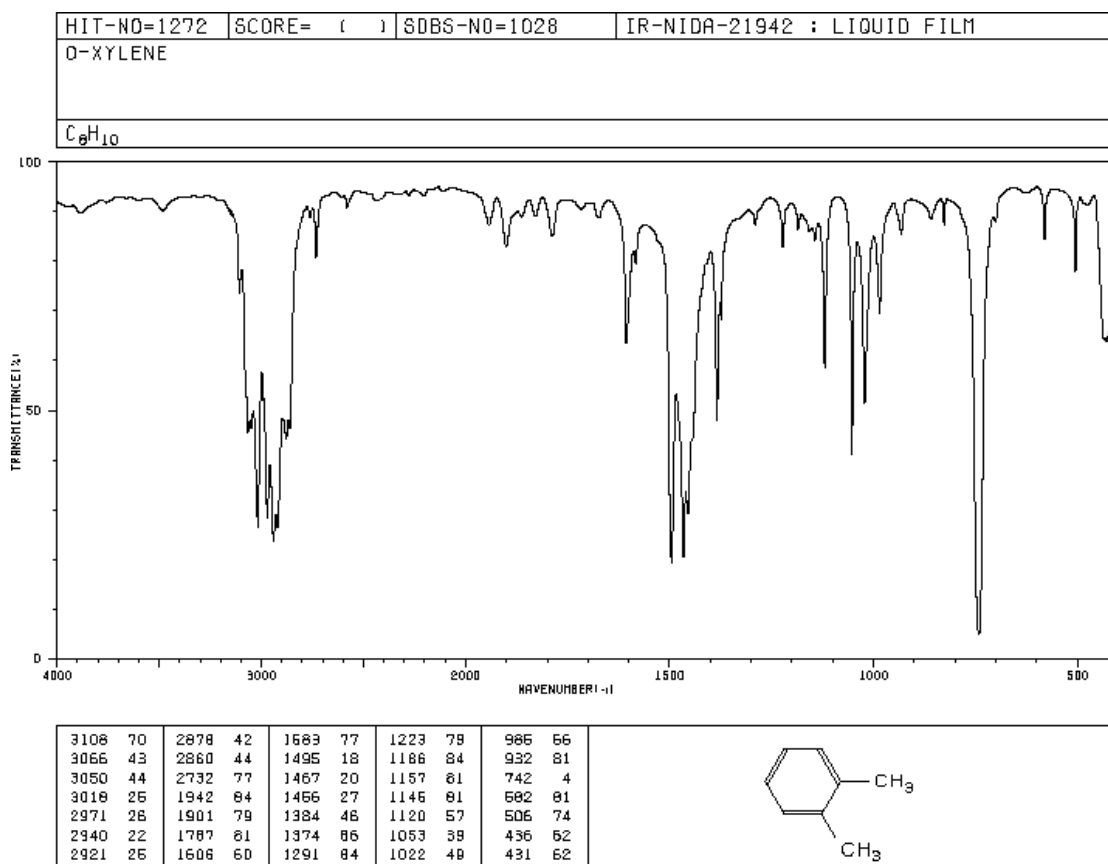


对二甲苯的氢谱 parameter in CDCl<sub>3</sub>

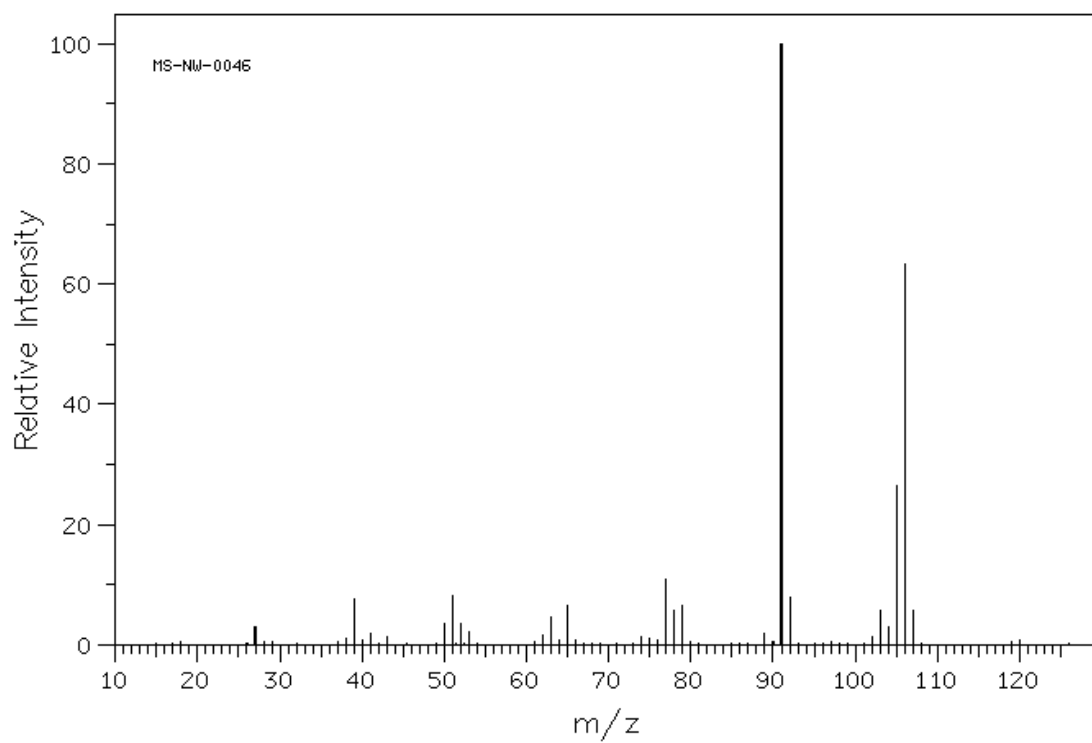


对二甲苯的碳谱 in  $\text{CDCl}_3$

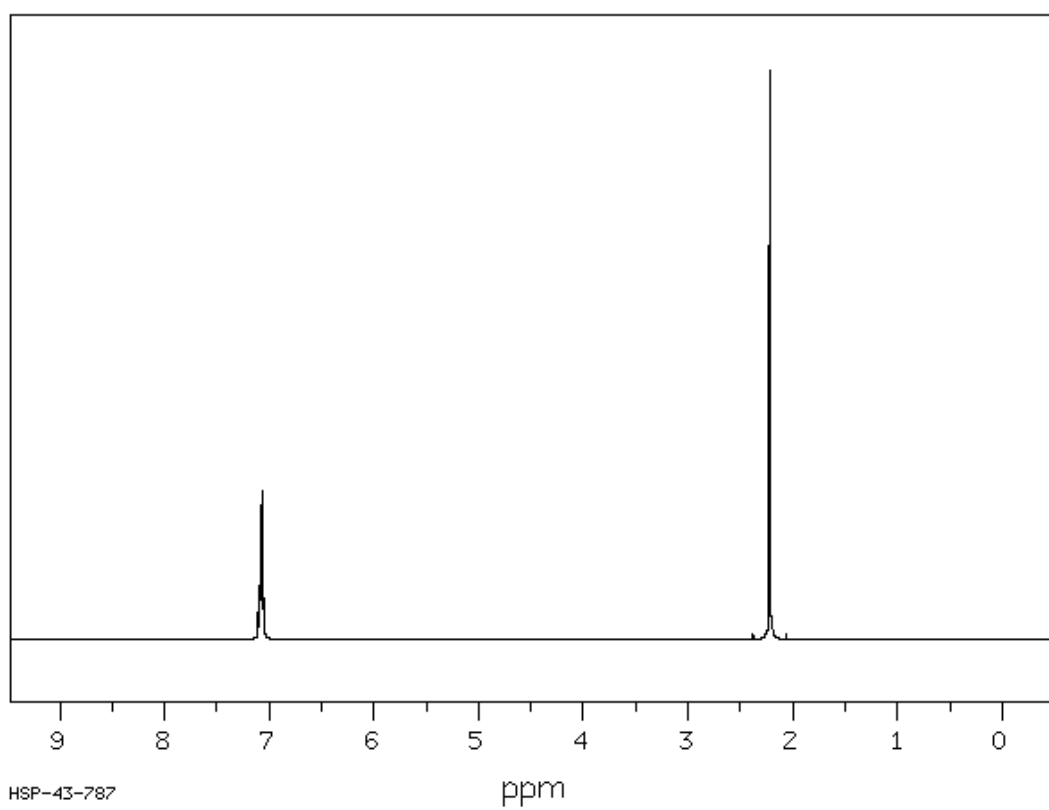
23. 邻二甲苯的谱图:



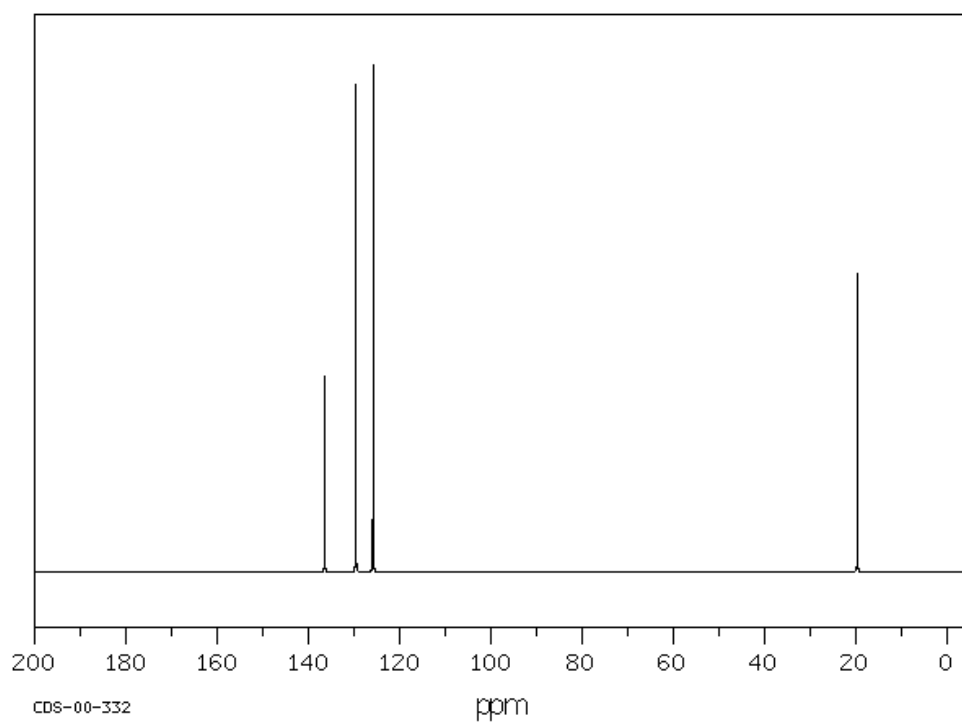
邻二甲苯的红外光谱



邻二甲苯的质谱

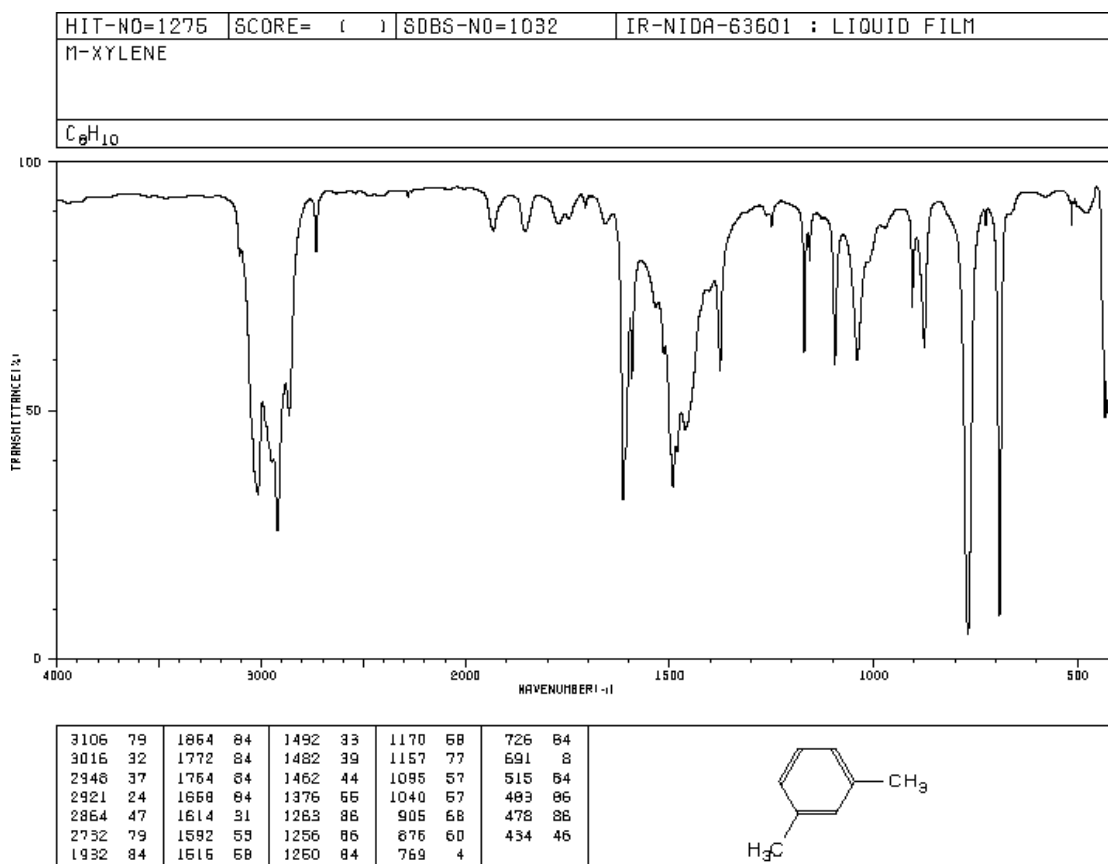


邻二甲苯的氢谱 400 MHz in CDCl<sub>3</sub>



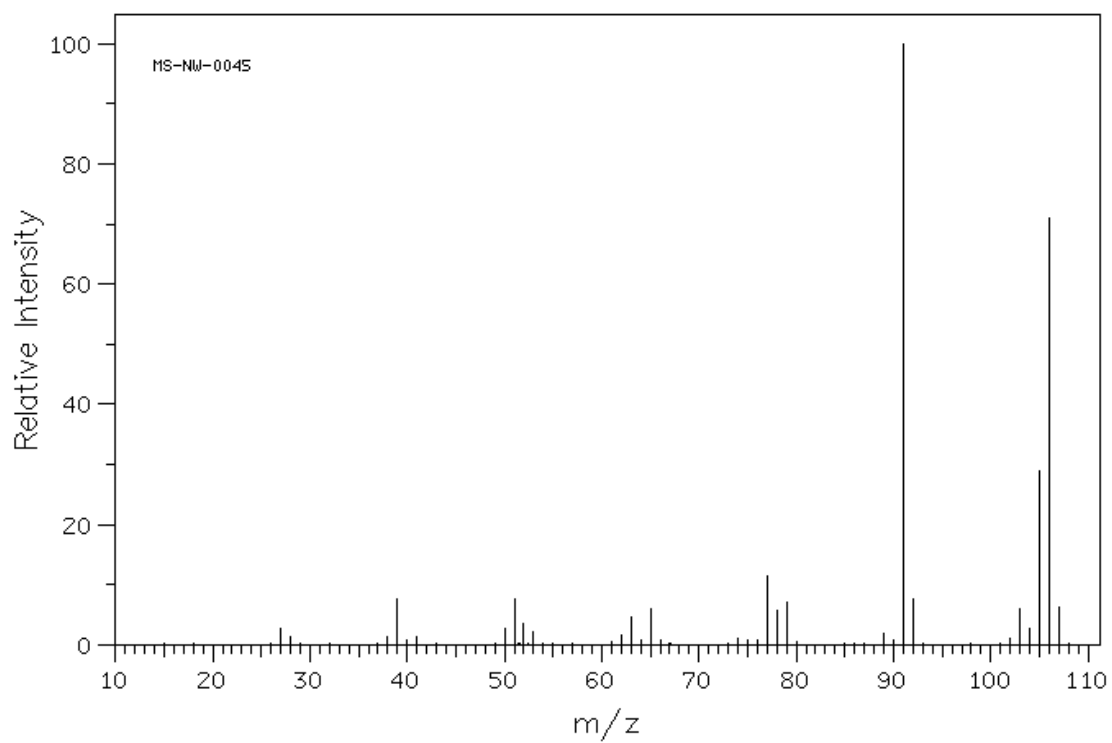
邻二甲苯的碳谱 in CDCl<sub>3</sub>

24. 间二甲苯的谱图:

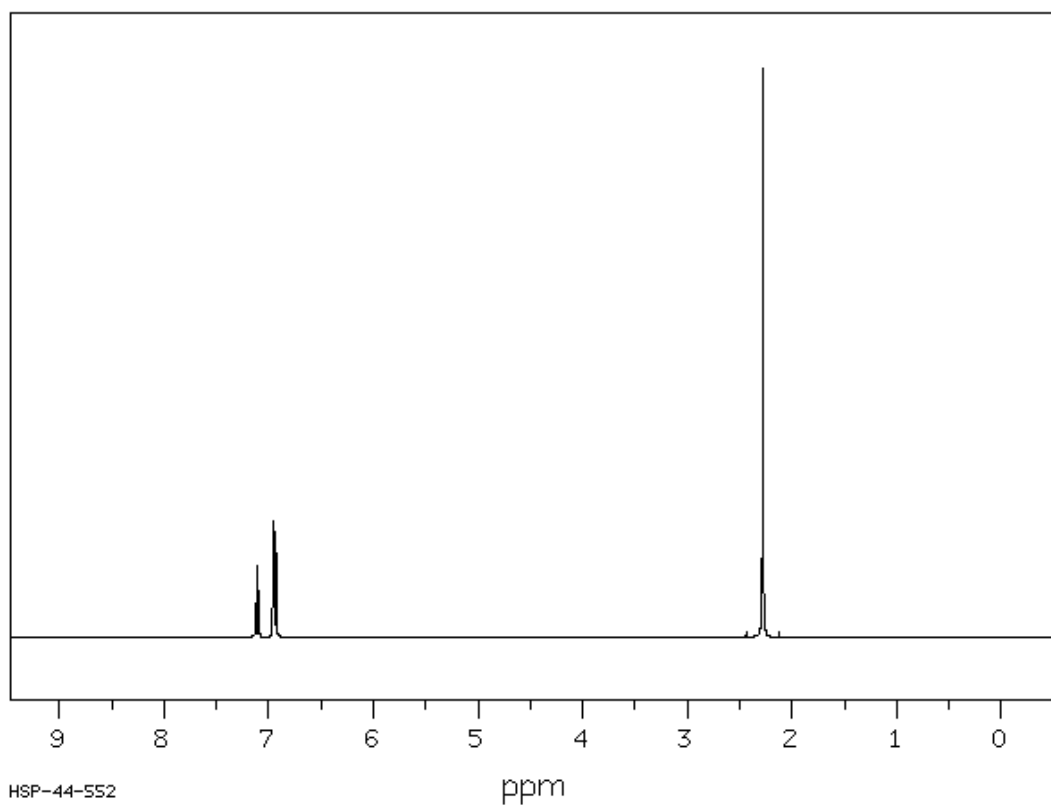


间二甲苯的红外光谱

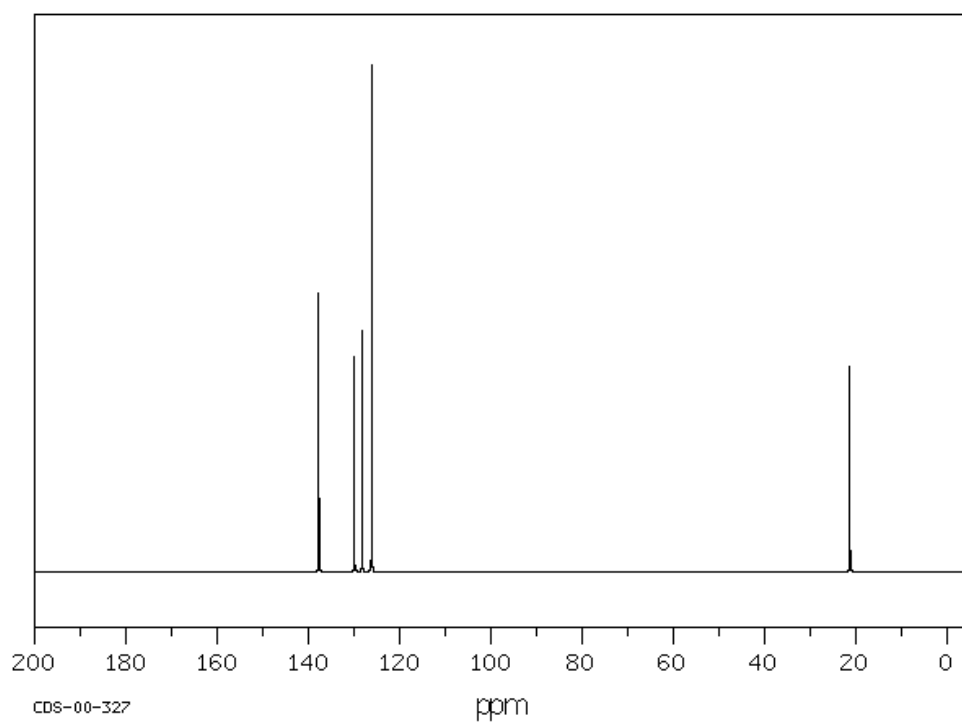




间二甲苯的质谱

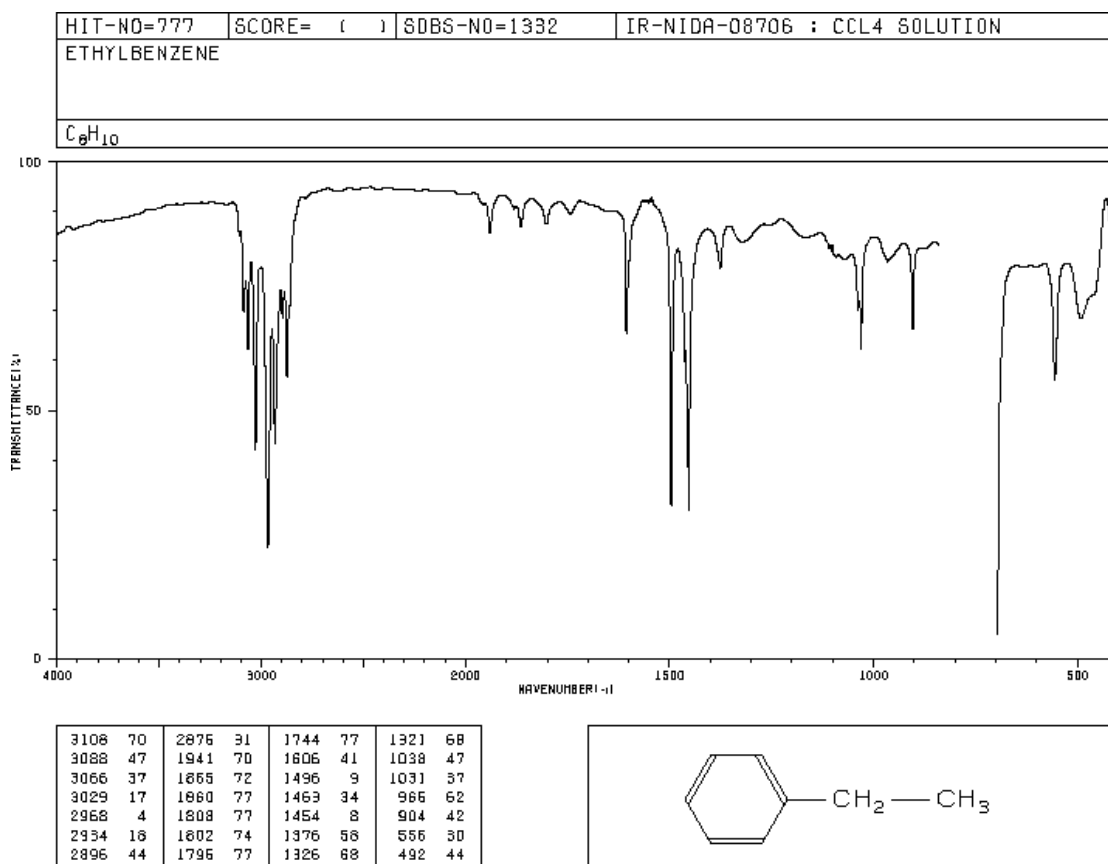


间二甲苯的氢谱 400 MHz in CDCl<sub>3</sub>

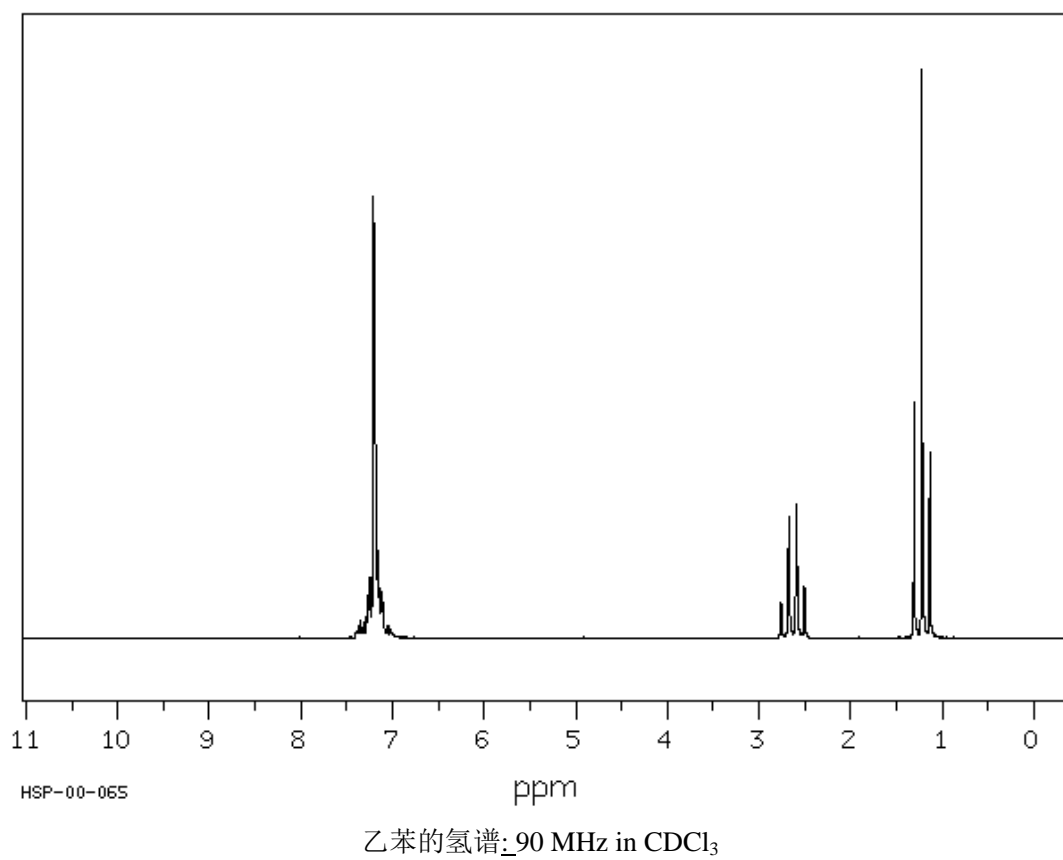
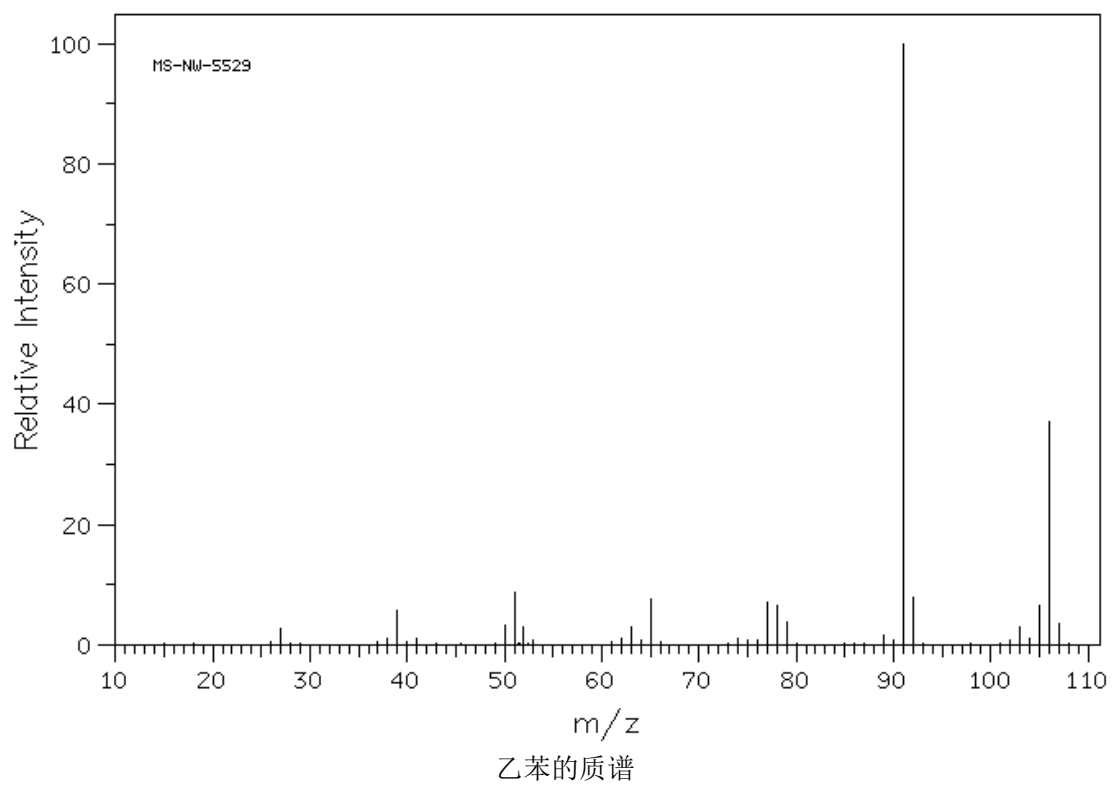


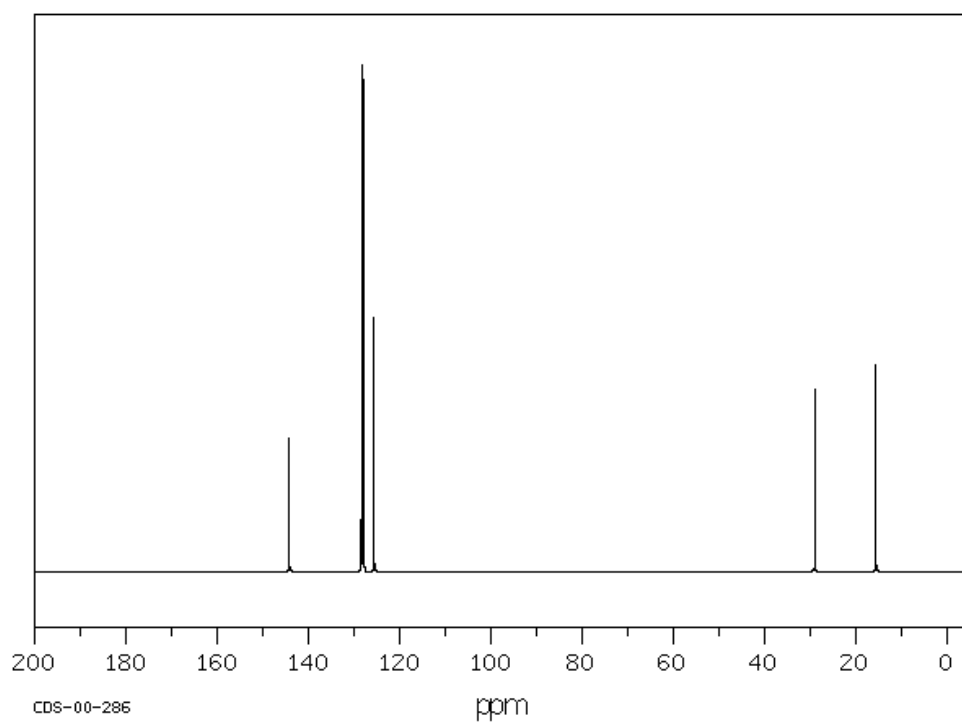
间二甲苯的碳谱 in CDCl<sub>3</sub>

25. 乙苯的谱图:



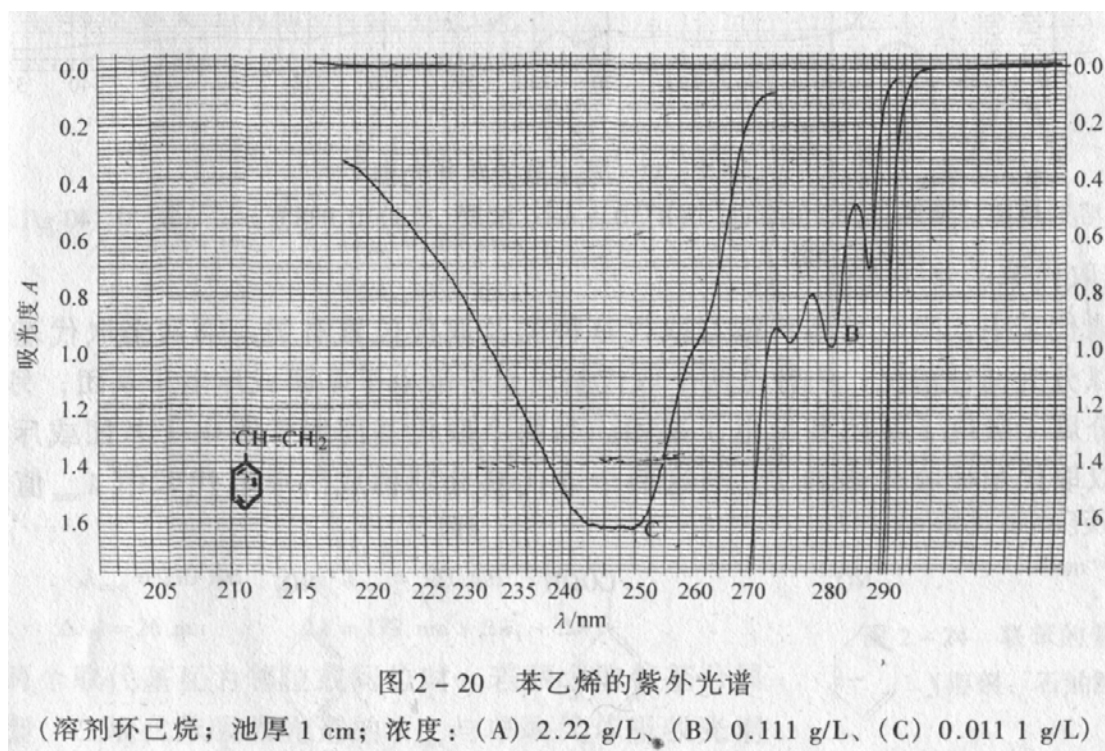
乙苯的红外光谱





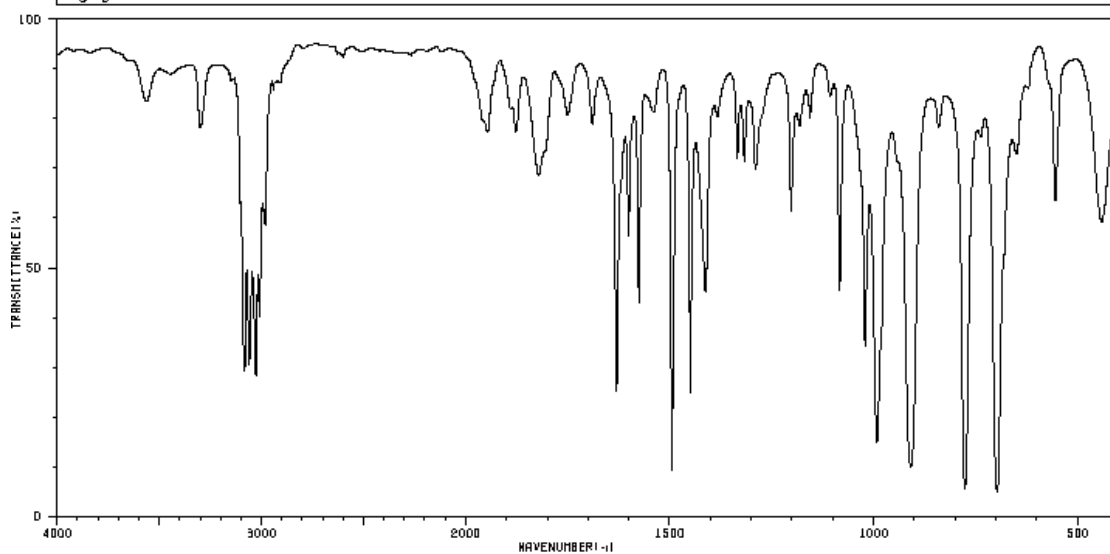
乙苯的碳谱 in  $\text{CDCl}_3$

## 26. 苯乙烯的四大谱图

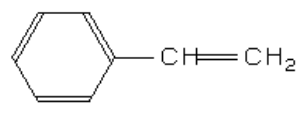


苯乙烯的紫外光谱

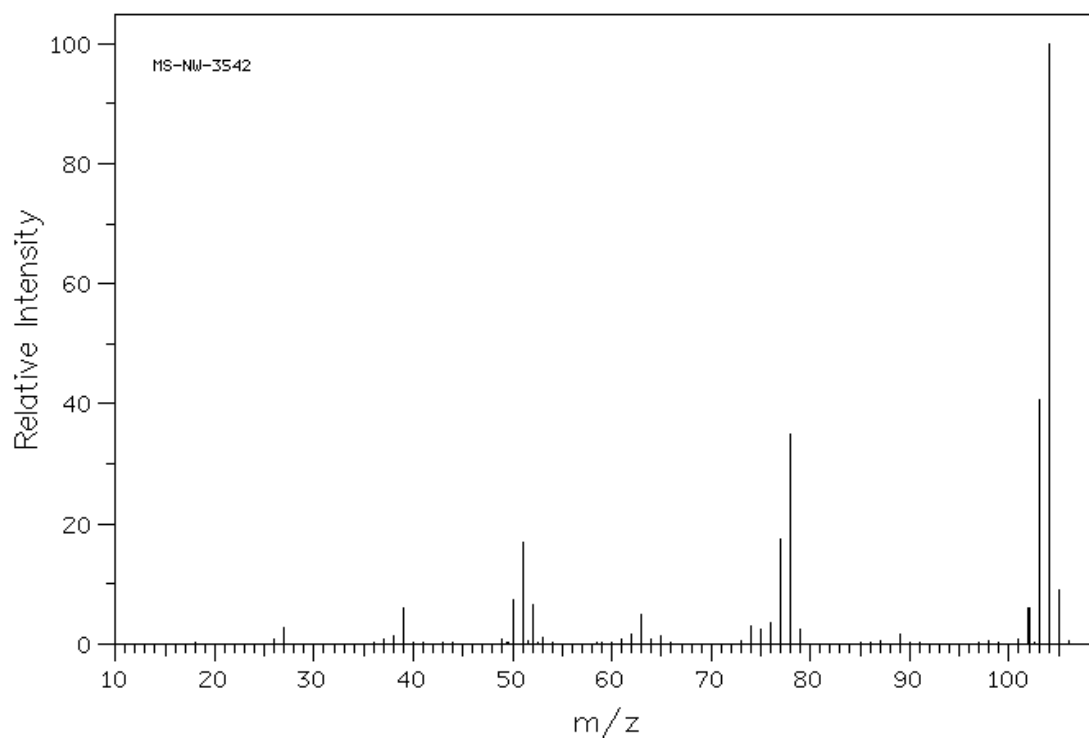
HIT-NO=2170	SCORE= ( )	SDBS-NO=3044	IR-NIDA-10290 : LIQUID FILM
STYRENE			
C <sub>8</sub> H <sub>8</sub>			



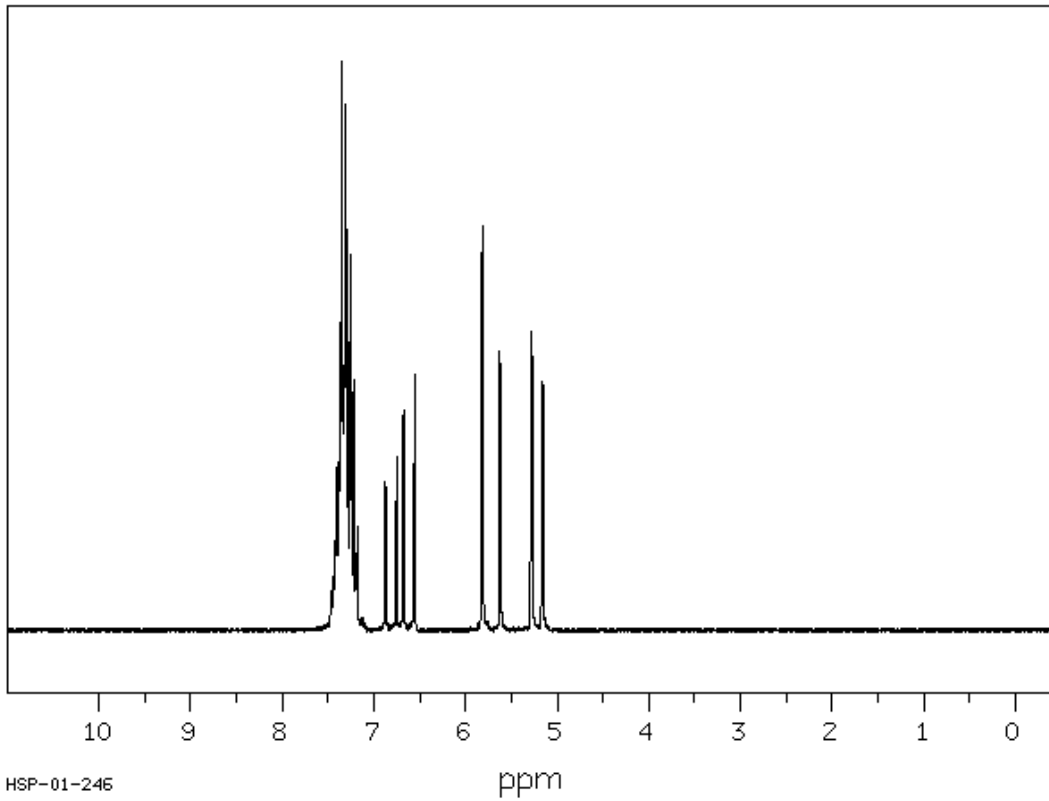
3299	74	1946	74	1495	9	1202	58	841	74
3082	28	1876	74	1449	23	1182	74	777	5
3060	29	1821	66	1412	45	1156	77	756	72
3027	27	1689	77	1389	77	1083	49	698	4
3009	38	1630	24	1334	70	1021	33	650	70
2980	57	1601	59	1317	88	992	14	555	50
1956	77	1576	41	1290	66	909	9	442	57



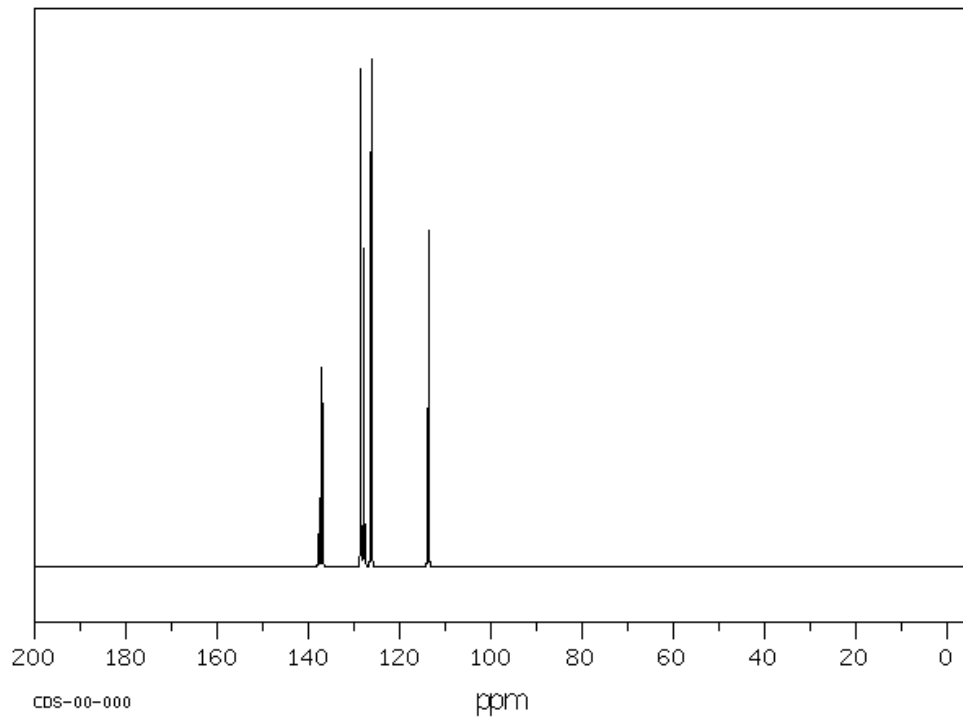
苯乙烯的红外光谱



苯乙烯的质谱

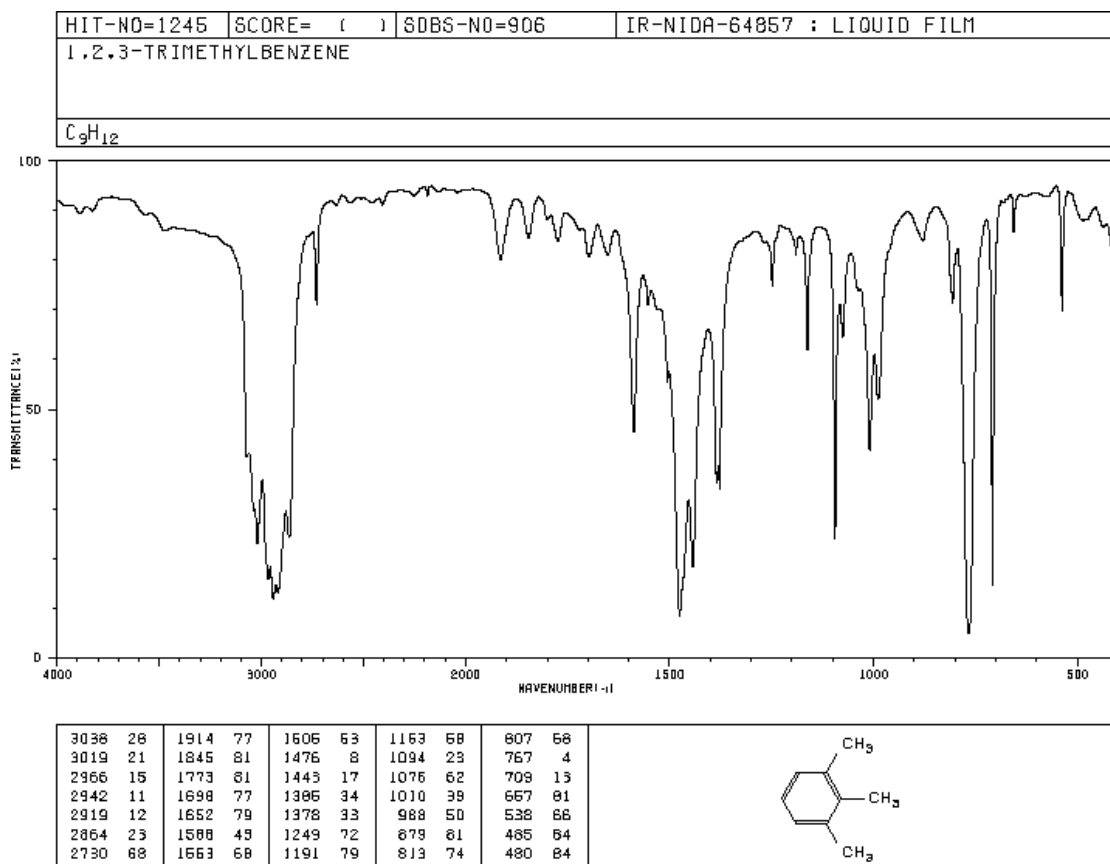


苯乙烯的氢谱 90 MHz in  $\text{CDCl}_3$

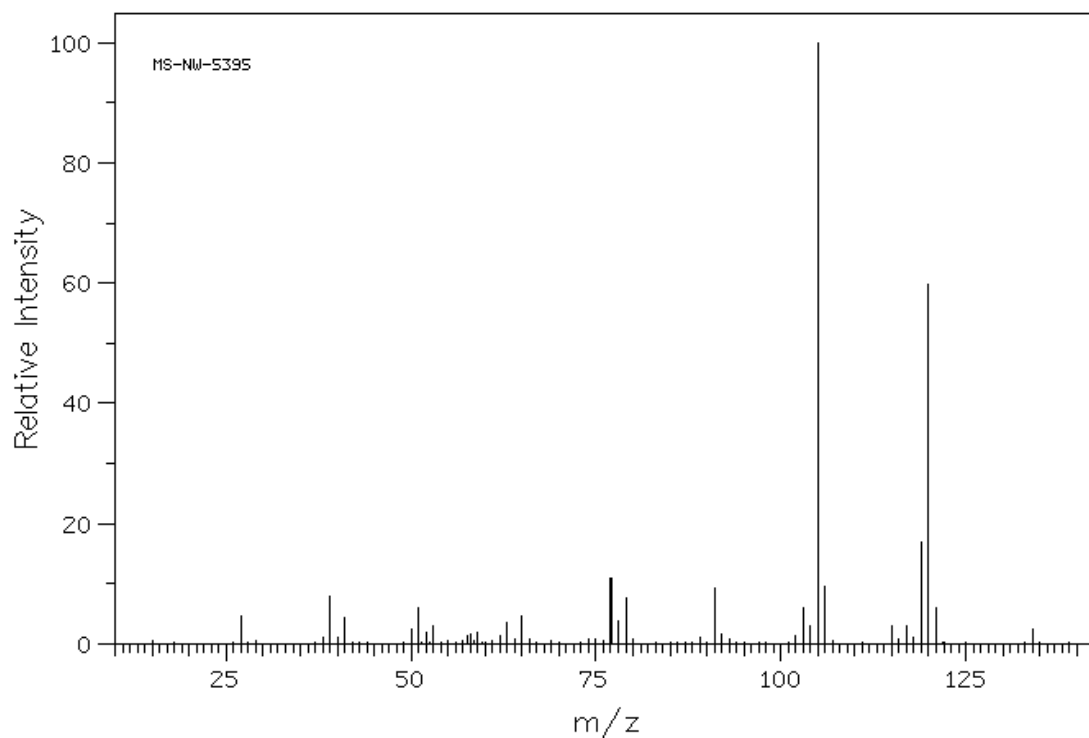


苯乙烯的碳谱 in  $\text{CDCl}_3$

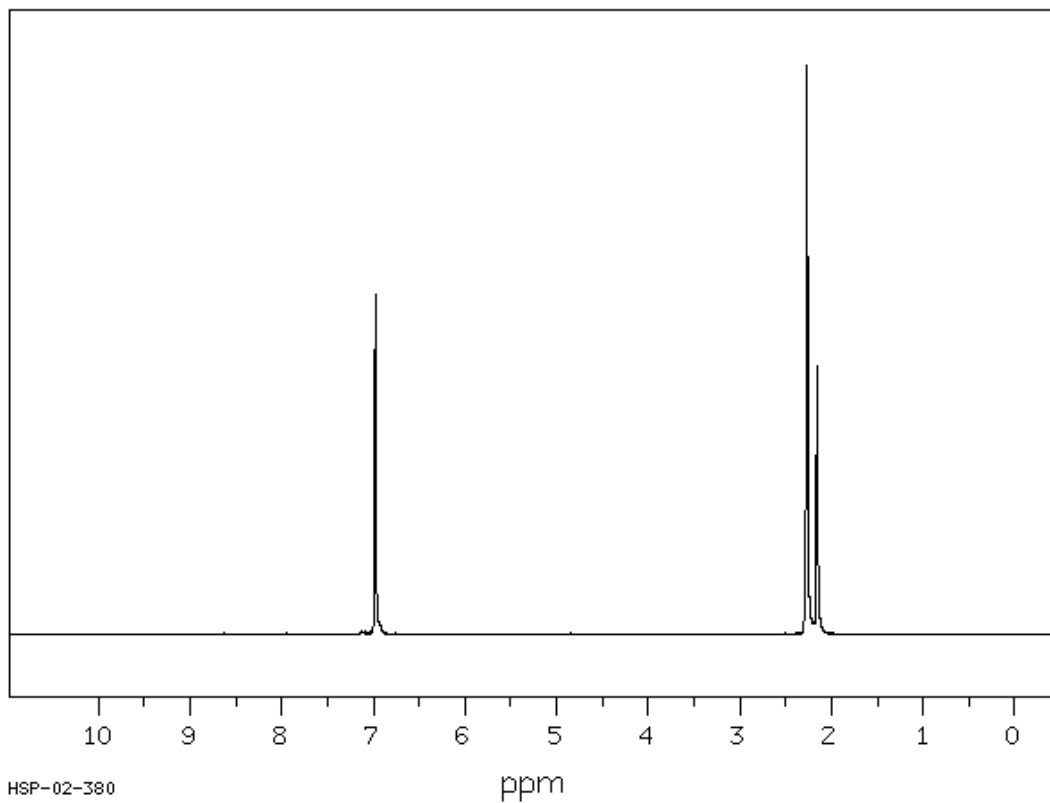
27. 1, 2, 3-三甲基苯的谱图:



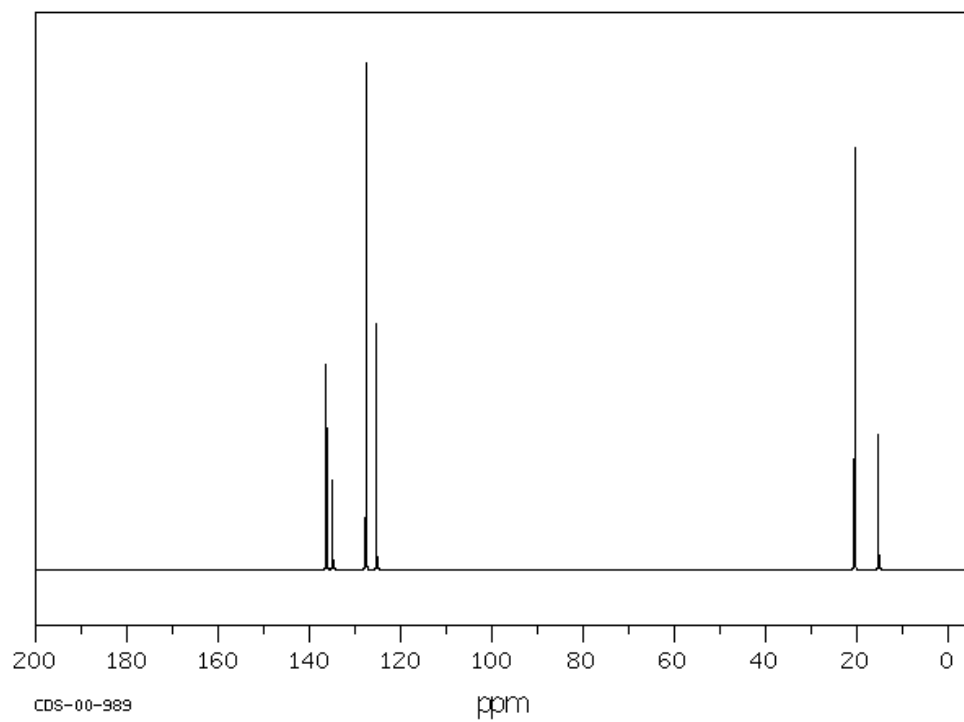
1, 2, 3-三甲基苯的红外光谱



1, 2, 3-三甲基苯的质谱



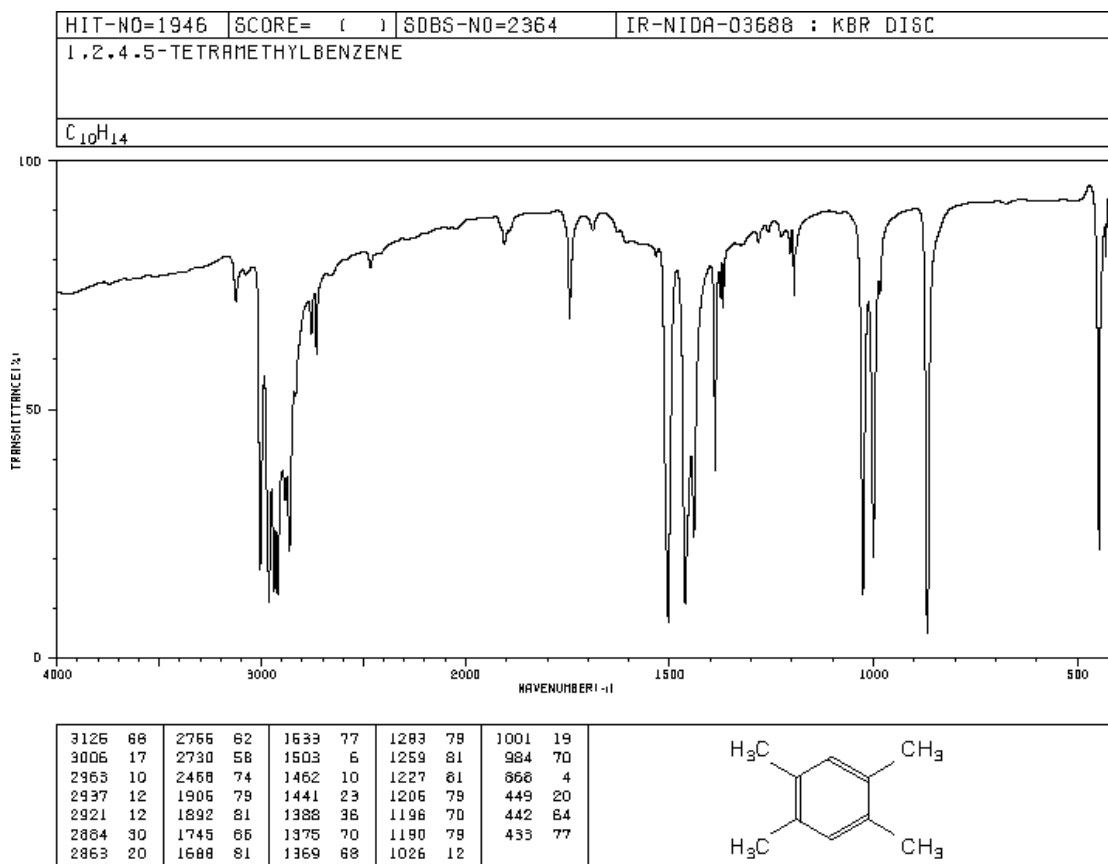
1, 2, 3-三甲基苯的氢谱 90 MHz in CDCl<sub>3</sub>



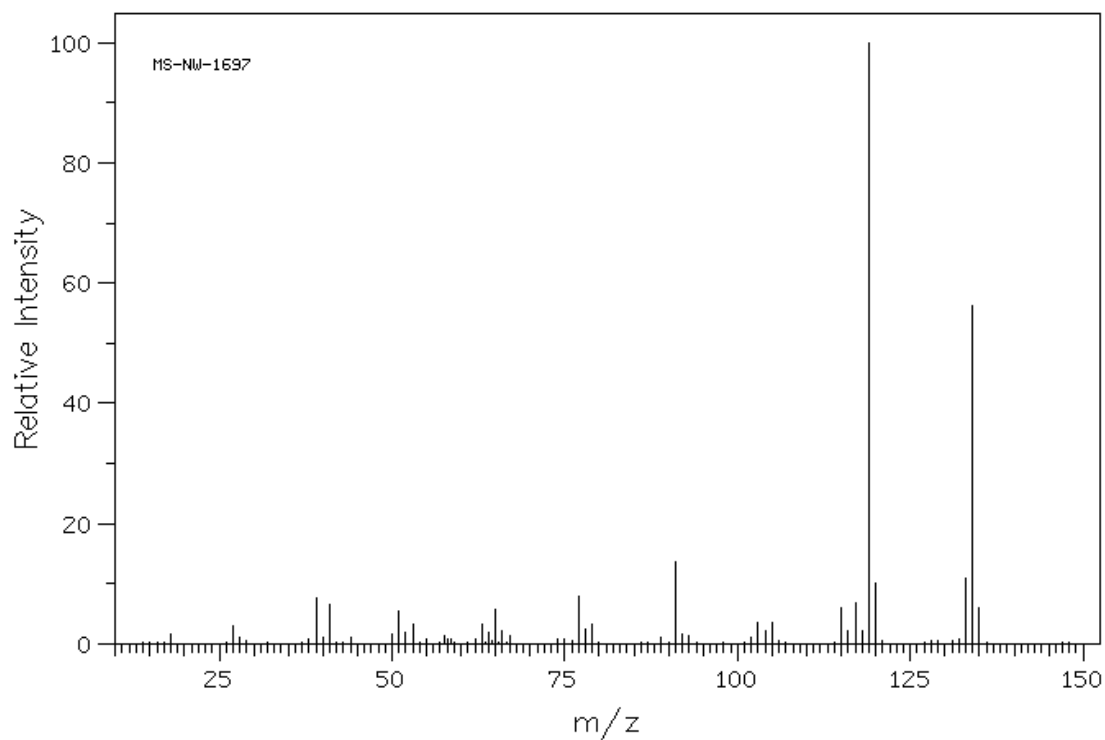
1, 2, 3-三甲基苯的碳谱 in CDCl<sub>3</sub>



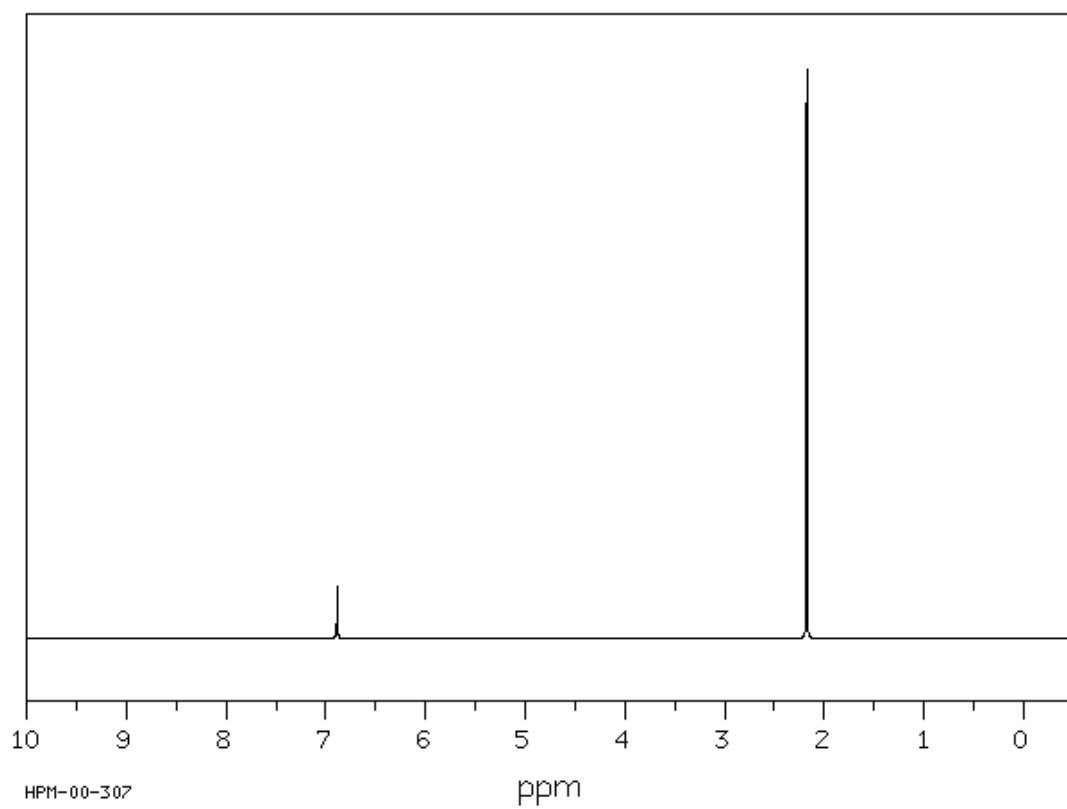
28. 1, 2, 4, 5-四甲基苯的谱图:



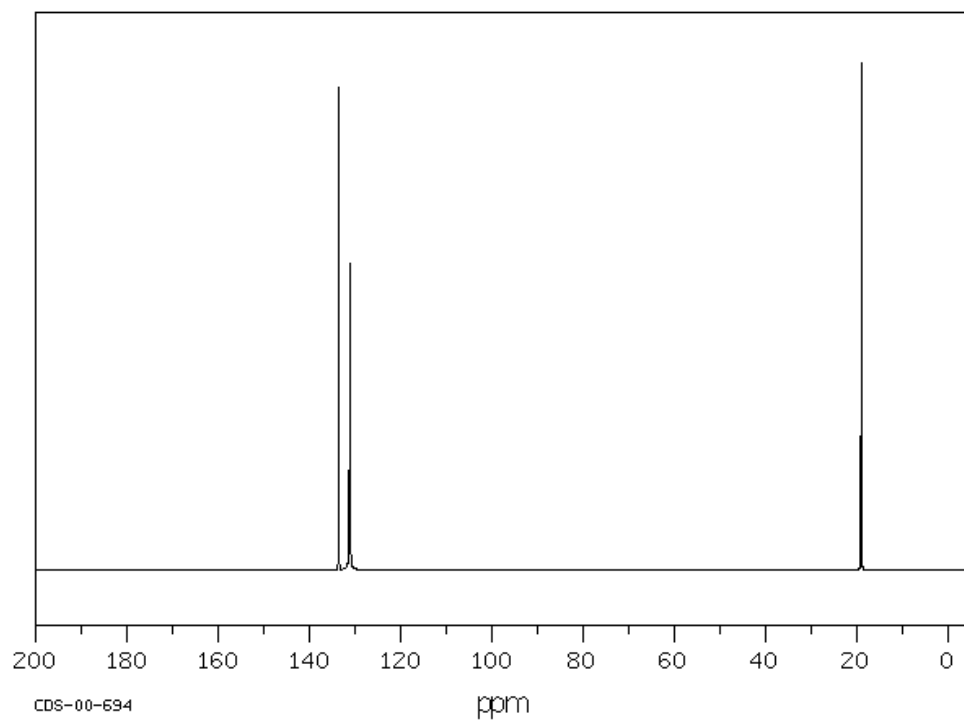
1, 2, 4, 5-四甲基苯的红外光谱



1, 2, 4, 5-四甲基苯的质谱

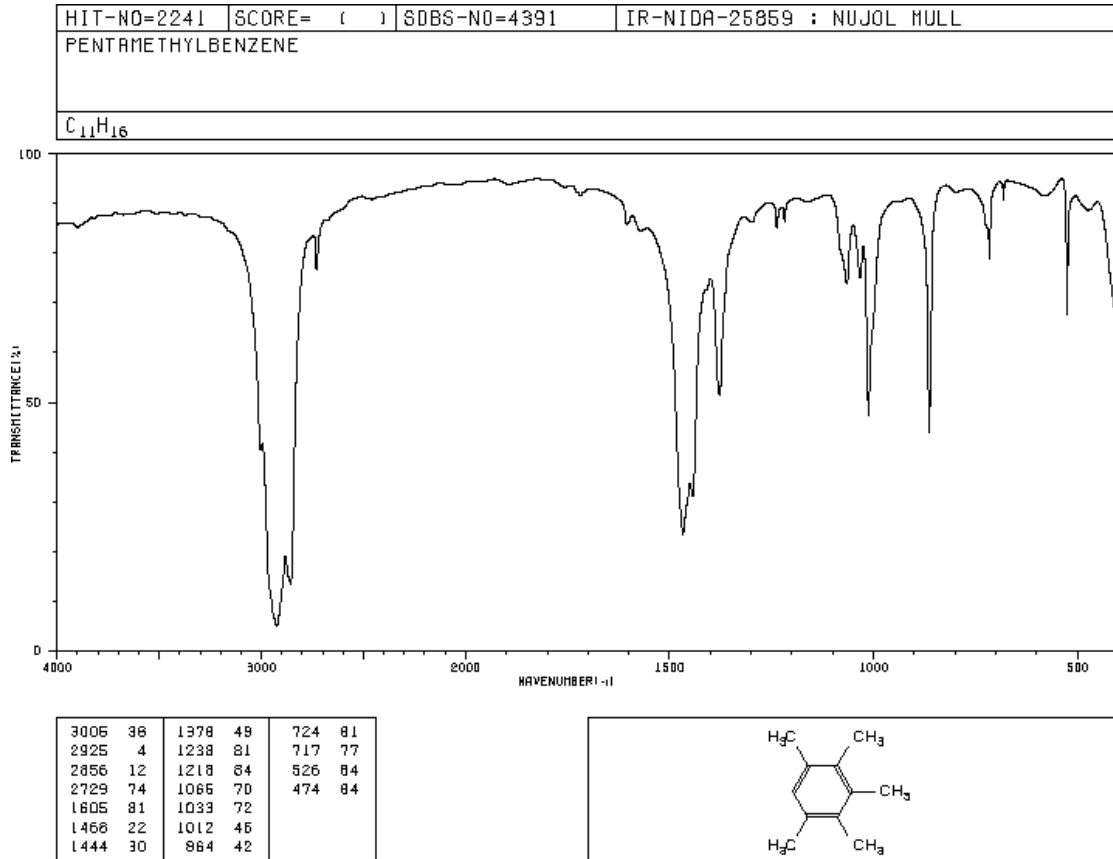


1, 2, 4, 5-四甲基苯的氢谱 90 MHz in CDCl<sub>3</sub>

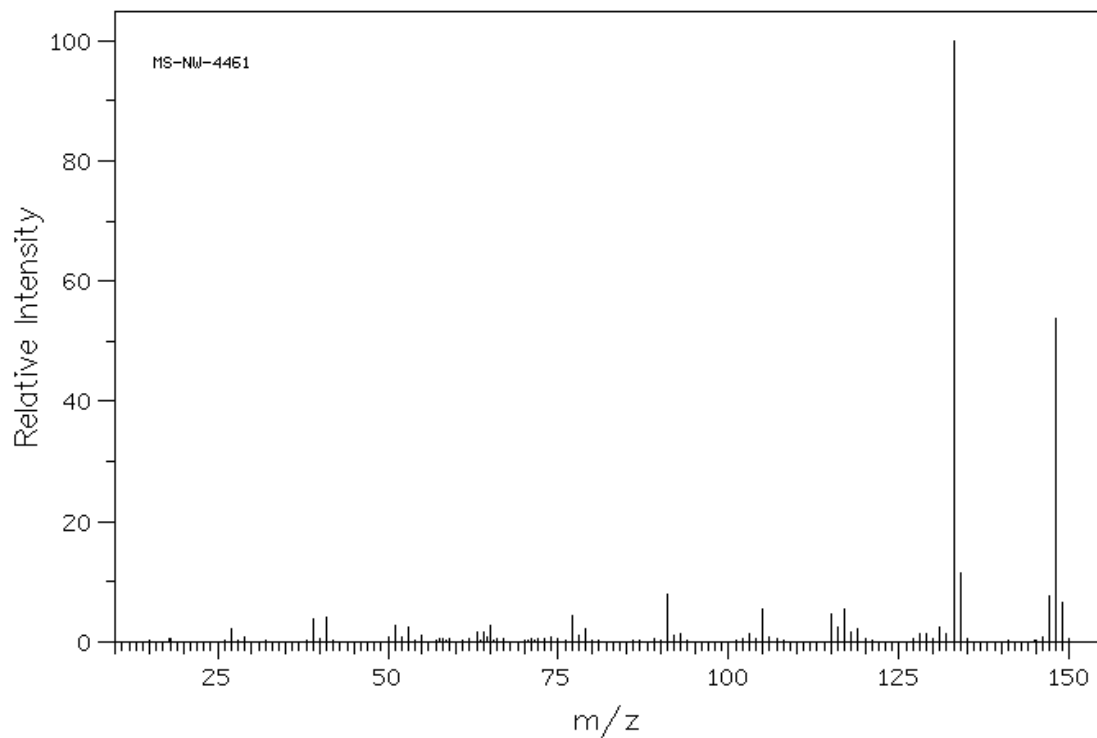


1, 2, 4, 5-四甲基苯的碳谱 90 MHz in CDCl<sub>3</sub>

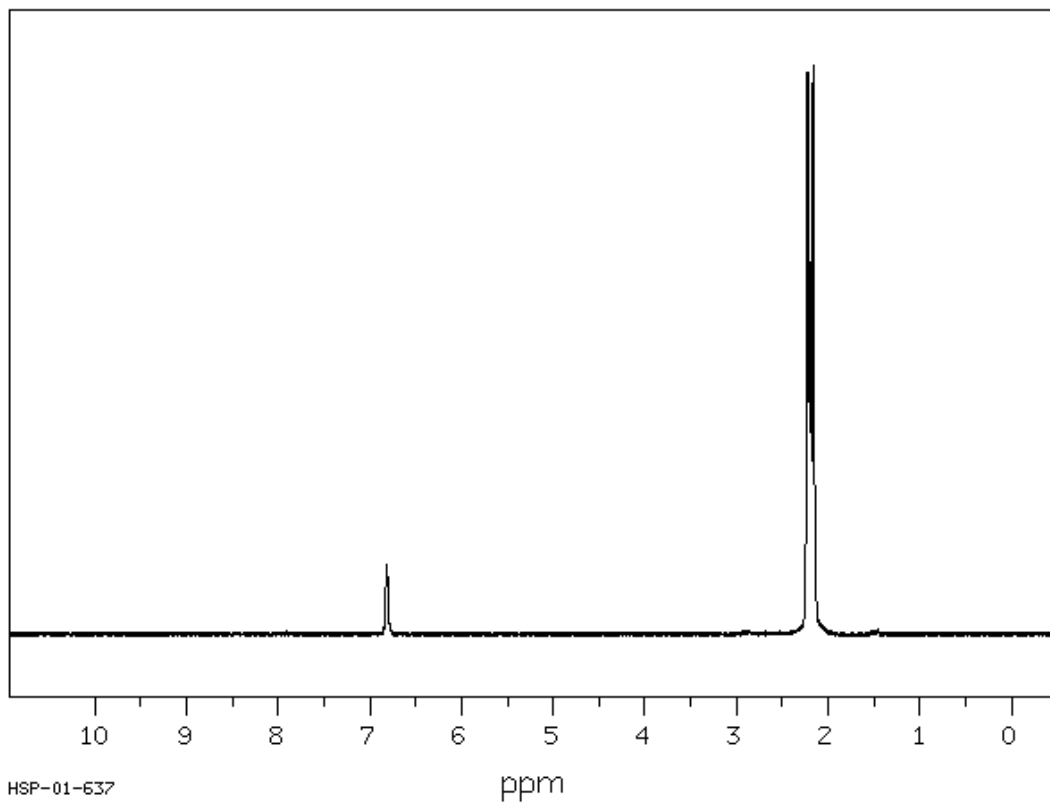
29. 五甲苯的谱图:



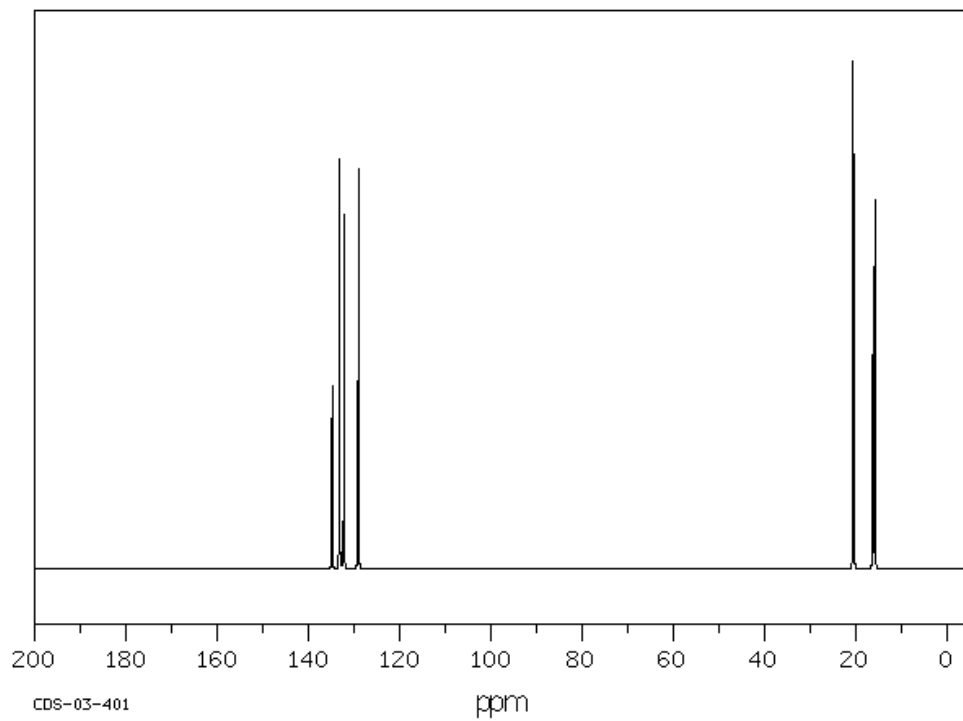
五甲苯的红外光谱



五甲苯的质谱

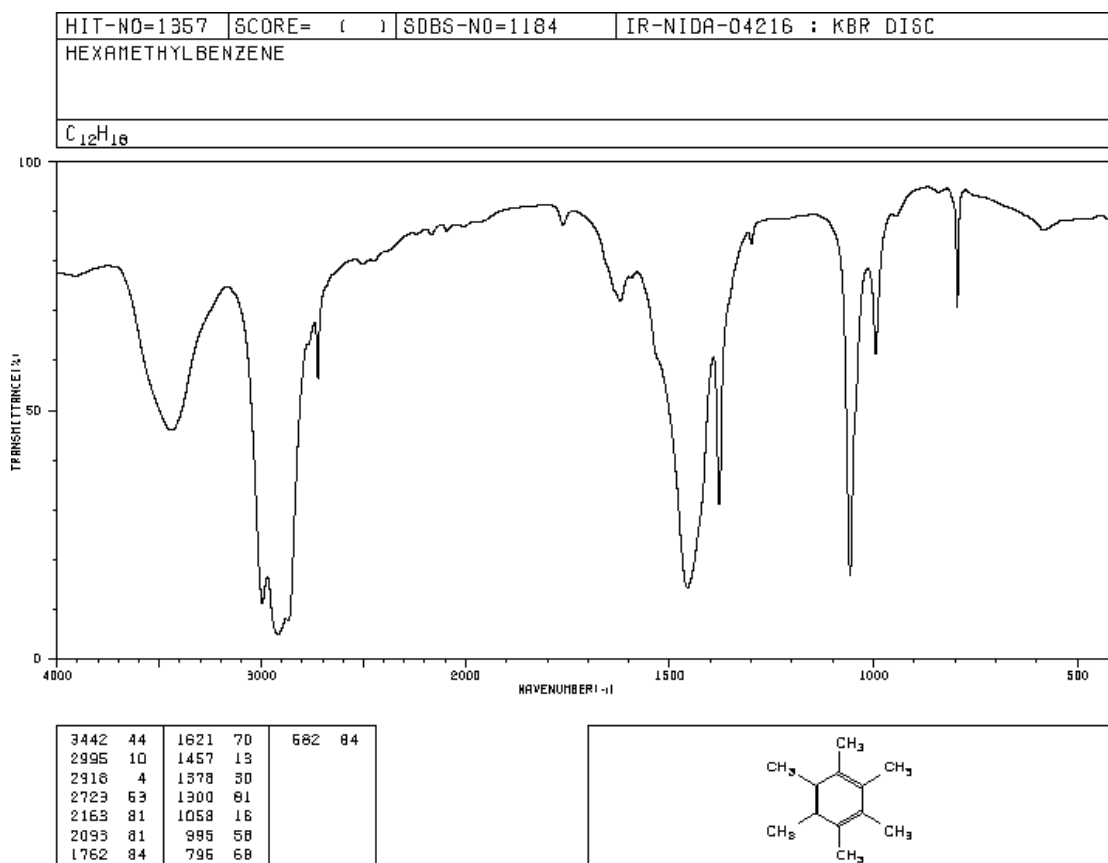


五甲苯的氢谱 90 MHz in  $\text{CDCl}_3$

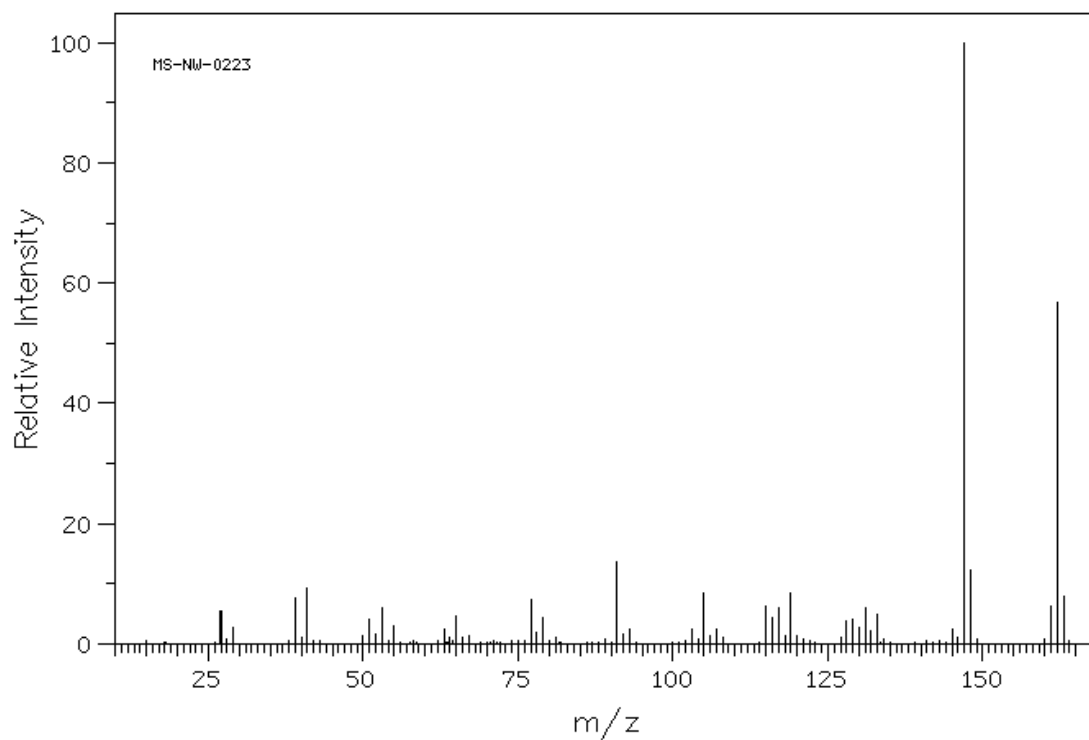


五甲苯的碳谱 in  $\text{CDCl}_3$

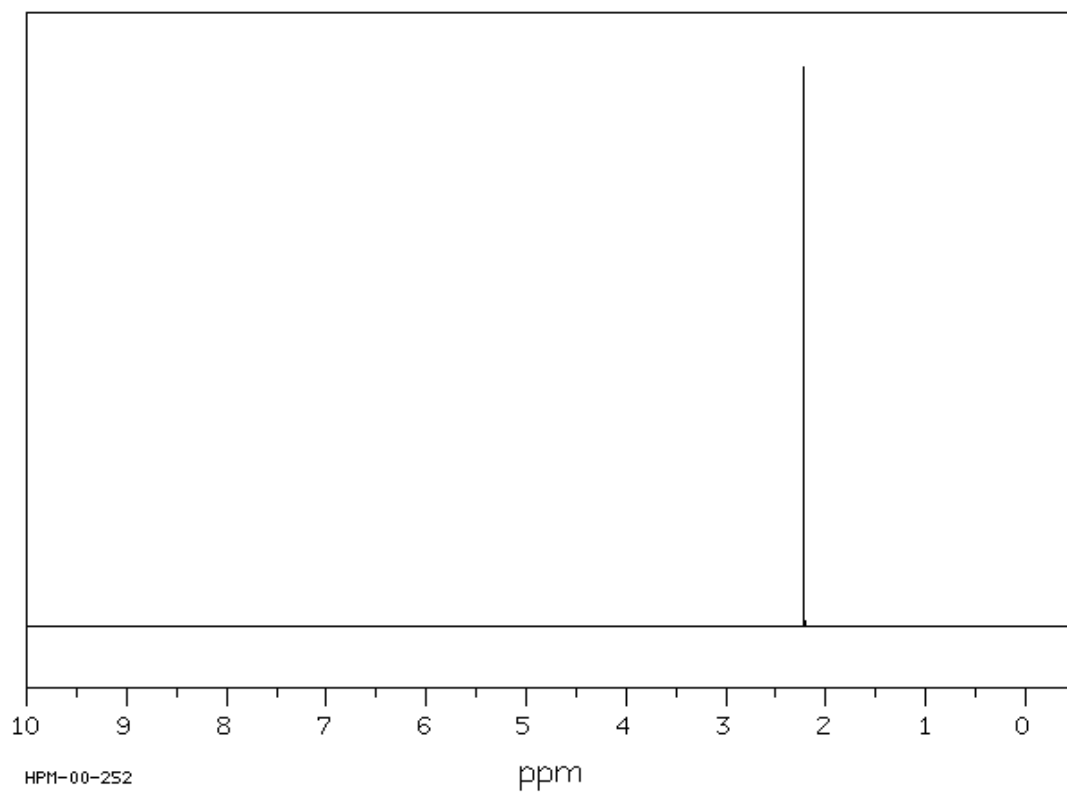
30. 六甲苯的谱图:



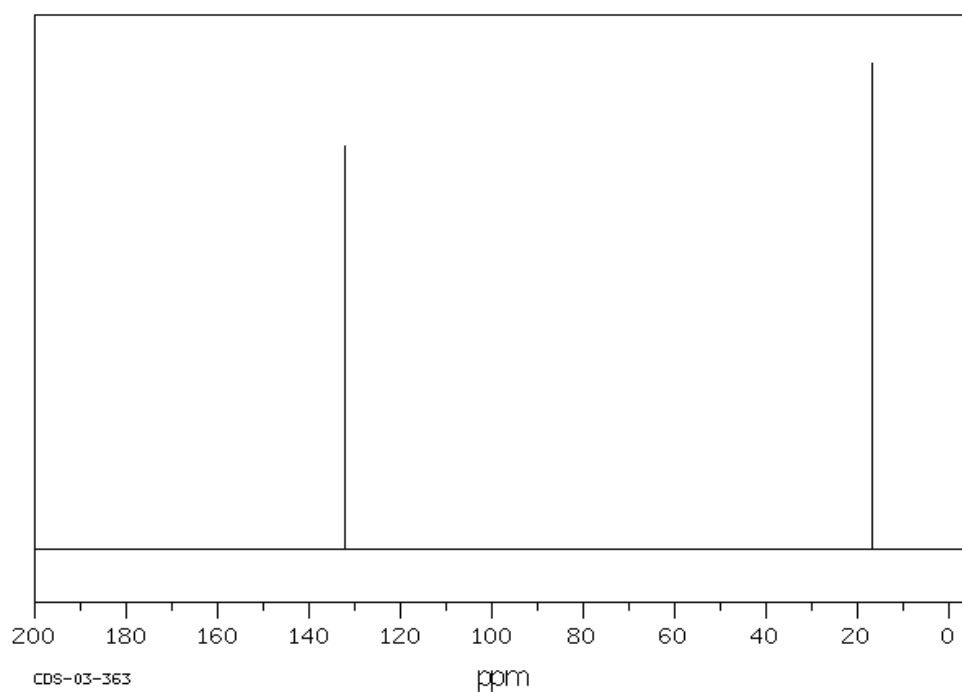
六甲苯的红外光谱



六甲苯的质谱



六甲苯的氢谱 90 MHz in  $\text{CDCl}_3$



六甲苯的碳谱 in  $\text{CDCl}_3$

备注：1. 紫外光谱从于《有机结构波谱分析》李润卿主编：天津大学出版社书中扫描。

2. 其余的图谱从

[http://www.aist.go.jp/RIODB/SDBS/cgi-bin/direct\\_frame\\_top.cgi?lang=eng](http://www.aist.go.jp/RIODB/SDBS/cgi-bin/direct_frame_top.cgi?lang=eng) 下载

