

Answer on Question #79464 – Chemistry – Other

Predict the appearance of the high-resolution ^{13}C spectrum of (proton not decoupled)

(a) methyl formate.

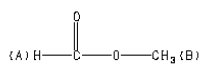
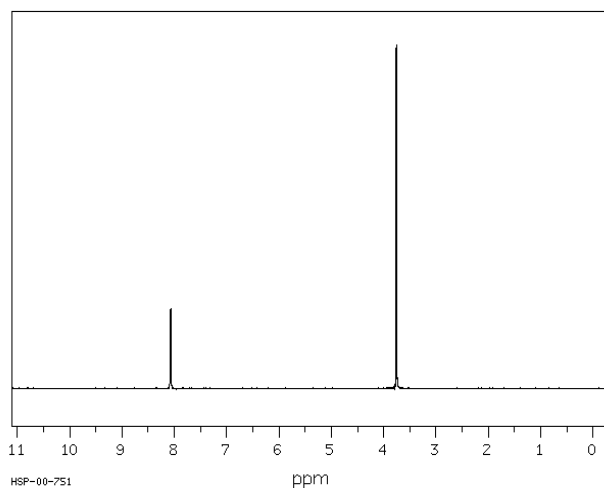
(b) acetaldehyde.

(c) acetone.

Note that ^{13}C - ^1H coupling constants are generally in the range of 100 to 200 Hz.

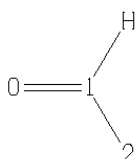
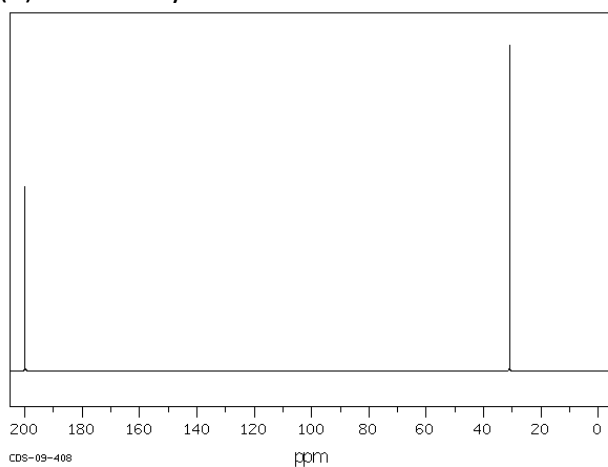
Solution:

(a) methyl formate.



A	8.071
B	3.760

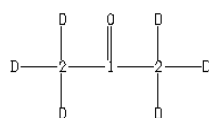
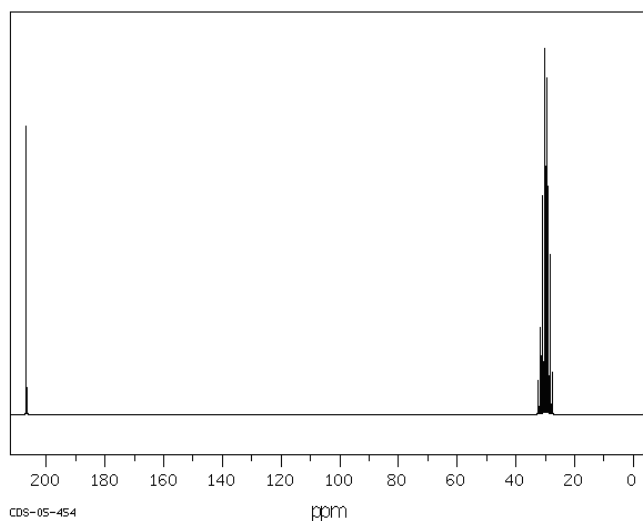
(b) acetaldehyde.



ppm Int. Assign.

199.93	566	1
30.89	1000	2

(c) acetone.



ppm	Int.	
206.80	787	1
32.29	93	1) 2
31.52	235	1) 2
30.78	596	1) 2
30.00	1000	1) 2
29.22	918	1) 2
28.44	437	1) 2
27.66	115	1) 2

Answer provided by www.AssignmentExpert.com