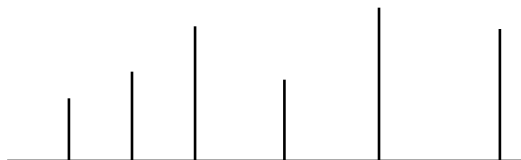


Assignment of the Number of Hydrogens Directly Bonded to Individual Carbons

Broadband ^1H -Decoupled ^{13}C :

All carbon resonances appear. The number of resonances matches the number of chemically distinct carbon atoms, unless multiple resonances are coincidental.



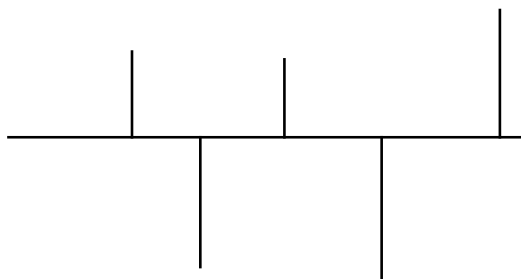
DEPT 90:

Only CH (methine) resonances appear strongly. CH_2 (methylene) and CH_3 (methyl) resonances may appear, but only very weakly. Quaternary resonances do not appear.



DEPT 135:

Methine resonances appear phased in one direction. Methyl resonances appear phased in the same direction as the methine resonances. Methylene resonances appear phased in the opposite direction to the methine and methyl resonances. Quaternary resonances do not appear.



Overall assignment:

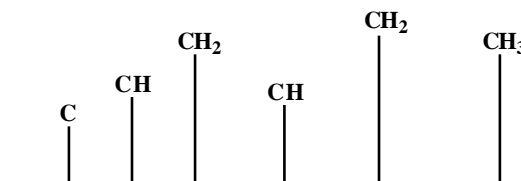


Figure 36. Distortionless Enhancement by Polarization Transfer (DEPT) spectroscopy.