

Representative ^{13}C Chemical Shifts

<u>Type of carbon</u>	<u>Chemical Shift (δ), ppm</u>
1° alkyl, RCH_3	0-40
2° alkyl, RCH_2R	10-50
3° alkyl, RCHR_2	15-50
Alkyl halide / Amine	10-65
Alcohol or ether	50-90
Alkyne	60-90
Alkene	100-170
Aromatic	100-170
Nitrile	120-130
Amide carbonyl	150-180
Carboxylic acid carbonyl	160-185
Aldehyde or ketone carbonyl	182-215
Ester carbonyl	160-185