



BENZYL BUTYL METHYLPHOSPHONATE

CAS number :
 MF : $C_{12}H_{19}O_3P$
 Solvent/Lock : $CDCl_3/CDCl_3$
 Nucleus : ^{13}C
 Apparatus : Bruker AMX 360
 Frequency : 90.56 MHz
 Temperature : 23°C
 Concentration : ≈ 40 mg/ml

Reference : TMS internal
 Spectral width : 1510 Hz
 Pulse Width : $4 \mu s (90^\circ)$
 Repetition Time : 1 s
 Data points : FID = 32K, SPC = 32K
 Line Broadening : No
 Peak Width 1/2 height : peak 18.71 ppm 0.9 Hz

a : $\delta = 11.28$ ppm ; $J_{P-a} = 144.3$ Hz
 b : $\delta = 66.96$ ppm ; $J_{P-b} = 6.0$ Hz
 c : $\delta = 136.51$ ppm ; $J_{P-c} = 6.0$ Hz
 d, e : $\delta = 128.58$ & 127.84 ppm ;
 f : $\delta = 128.35$ ppm
 g : $\delta = 65.33$ ppm ; $J_{P-g} = 6.5$ Hz
 h : $\delta = 32.45$ ppm ; $J_{P-h} = 6.3$ Hz
 i : $\delta = 18.71$ ppm ; j : $\delta = 13.59$ ppm

