



## BENZYLETHYL ETHYLPHOSPHONATE

CAS number : 4537-61-5  
 MF :  $C_{11}H_{17}O_3P$   
 Solvent/Lock :  $CDCl_3/CDCl_3$   
 Nucleus :  $^{13}C$   
 Apparatus : Bruker AMX360  
 Frequency : 90.56 MHz  
 Temperature : 23°C  
 Concentration :  $\approx 40$  mg/ml

Reference : TMS internal  
 Spectral width : 15150 Hz  
 Pulse Width :  $4 \mu s (90^\circ)$   
 Repetition Time : 1 s  
 Data points : FID = 32K, SPC = 32K  
 Line Broadning : No  
 Peak Width 1/2 height : peak 127.79 ppm 1.4 Hz

a :  $\delta = 19.00$  ppm ;  $J_{P-a} = 142.4$  Hz  
 b :  $\delta = 6.53$  ppm ;  $J_{P-b} = 6.9$  Hz  
 c :  $\delta = 66.92$  ppm ;  $J_{P-c} = 6.0$  Hz  
 d :  $\delta = 136.68$  ppm ;  
 e & f :  $\delta = 128.55$  &  $127.79$  ppm  
 g :  $\delta = 128.30$  ppm  
 h :  $\delta = 61.50$  ppm ;  $J_{P-h} = 6.5$  Hz  
 i :  $\delta = 16.41$  ppm ;  $J_{P-i} = 6.0$  Hz

