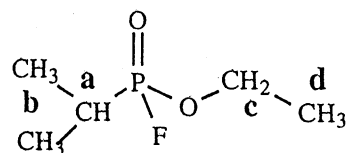


### ETHYL (1-METHYLETHYL)PHOSPHONOFUORIDATE



CAS number : 1426-08-0  
 MF : C<sub>5</sub>H<sub>12</sub>FO<sub>2</sub>P  
 Solvent/Lock : CDCl<sub>3</sub>/CDCl<sub>3</sub>  
 Nucleus : <sup>31</sup>P  
 Apparatus : Bruker DPX 360  
 Frequency : 145.78 MHz  
 Temperature : 23°C  
 Concentration : ≈ 40 mg/ml

Reference : H<sub>3</sub>PO<sub>4</sub> external  
 Spectral width : 9750 Hz  
 Pulse Width : 9 μs (90°)  
 Repetition Time : 1 s  
 Data points : FID = 64K, SPC = 64K  
 Line Broadening : No  
 Peak Width 1/2 height : peak 31.45 ppm 1.8 Hz

δ = 35.18 ppm ; J<sub>P-F</sub> = 1087.4 Hz  
 J<sub>P-a</sub> = 19.9 Hz ; J<sub>P-b</sub> = 19.8 Hz  
 J<sub>P-c</sub> = 9.5 & 9.3 Hz  
 (1-METHYLETHYL)PHOSPHONODIFLUORIDATE  
 δ = 29.77 ppm ; J<sub>F-P</sub> = 1156.5 Hz ; J<sub>P-a</sub> = 20.0 Hz  
 J<sub>P-b</sub> = 21.4 Hz