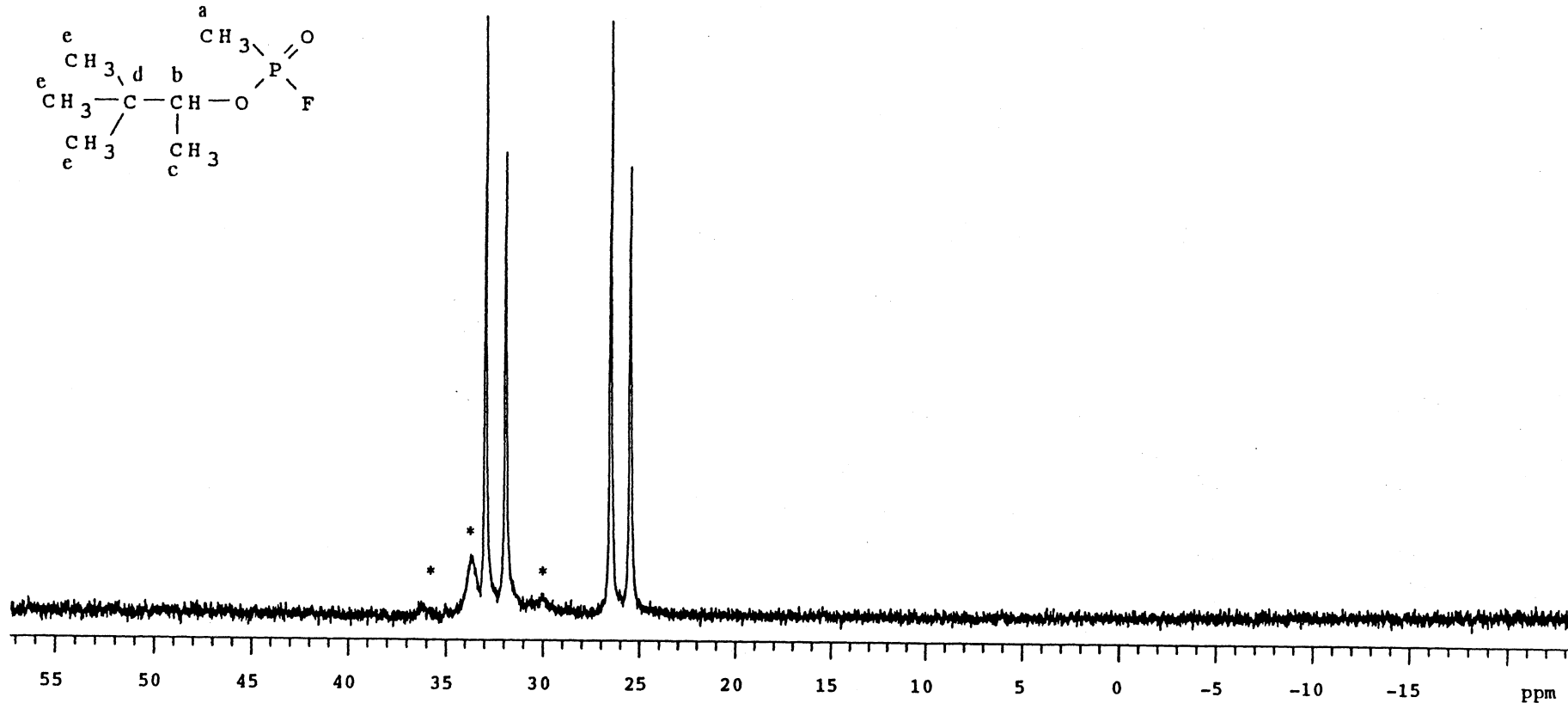
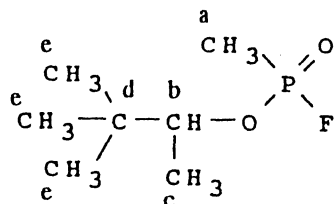


5-3-17

 $^{31}\text{P}\{^1\text{H}\}$ NMR

Pinacolyl methylphosphonofluoridate (Soman)

96-64-0



Solvent: CDCl_3
 Concentration: 18.6 mg/1.1 ml
 Reference substance: ext. $\text{P}(\text{OH})_4\text{ClO}_4$
 Sample temperature: 29.5°C
 Resonance frequency: 161.980 MHz
 Spectral width: 13157.9 Hz
 Data points (FID; spec.): 64 k; 64 k

Flip angle; Pulse width: 45° ; 4.6 μs
 No. of scans; Rep. time: 64; 18.5 s
 Weighting; Line broad.: exp.; 1.0 Hz
 Spectral resolution: 15.9 Hz (P)
 Instrument: Bruker AMX-400
 Source reference: 930212-448

nuc.	δ [ppm] ^(a)	J [Hz]	nuc.	δ [ppm] ^(b)	J [Hz]
P	29.76	1047.3 (F)	P	28.73	1046.7 (F)

(a) more abundant, (b) less abundant diastereomer.

 $\delta(\text{P}(\text{OH})_4\text{ClO}_4) = 0.66$ vs. $\delta(\text{H}_3\text{PO}_4) = 0.00$