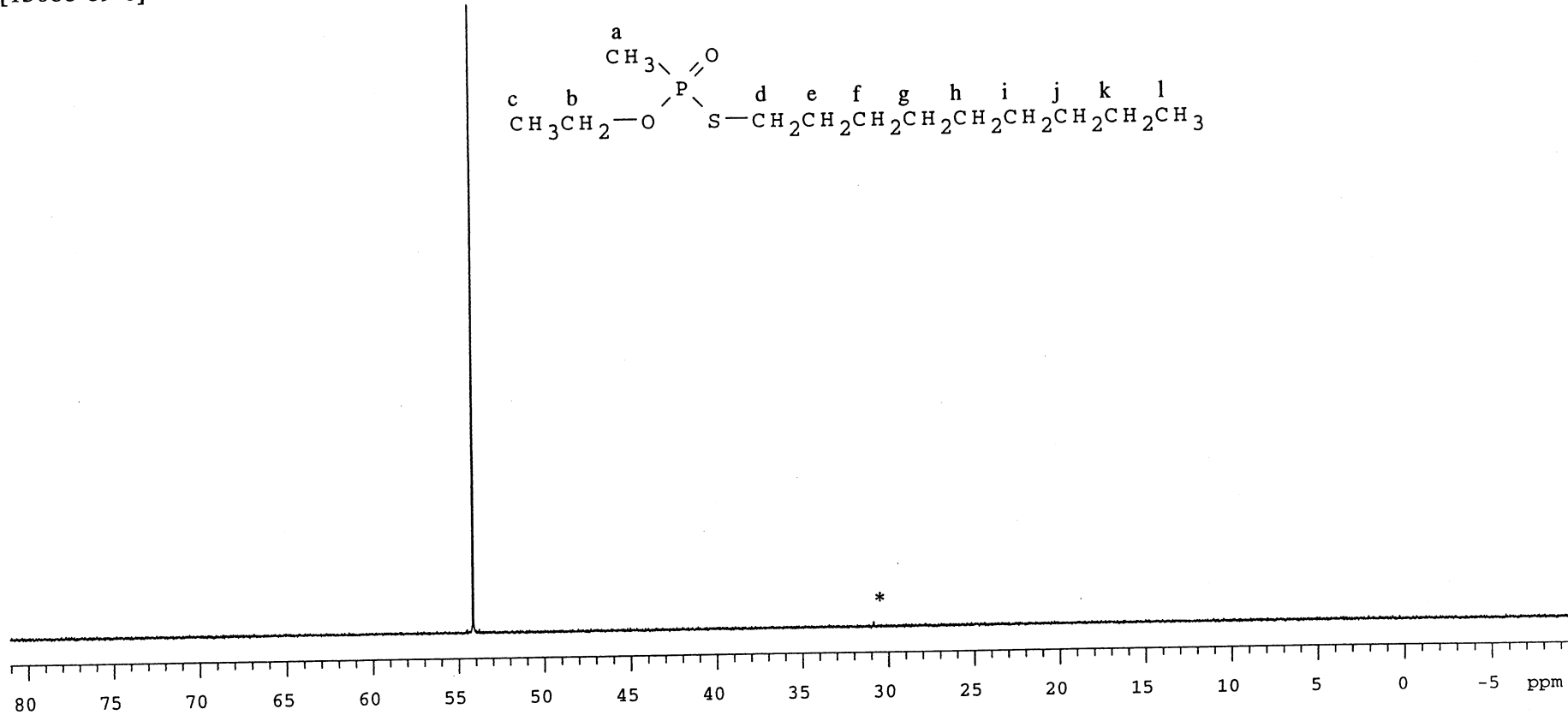
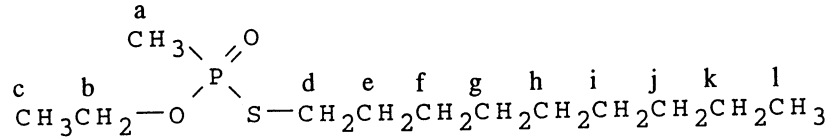


$^{31}\text{P}\{^1\text{H}\}$ NMR

O-Ethyl S-nonyl methylphosphonothiolate

[13088-89-6]



Solvent: CDCl_3
Concentration: 28.2 mg/ 1.0 ml
Reference substance: ext. $\text{P}(\text{OH})_4\text{ClO}_4$
Sample temperature: 29.0 °C
Resonance frequency: 161.984 MHz
Spectral width: 14705.9 Hz
Data points (FID; spec.): 64 k; 64 k

Flip angle; Pulse width: 45 °; 4.6 μs
No. of scans; Rep. time: 32; 18.2 s
Weighting; Line broad.: exp.; 1.0 Hz
Spectral resolution: 0.7 Hz (P)
Instrument: Bruker AMX-400
Source reference: 930706-740
Signature: *Markku Mesilaakso*
Markku Mesilaakso

nuc. δ [ppm]
P 54.17

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

5 - 3 - 1 4 9

OPCW Code:05-3-0149(p1/1)