

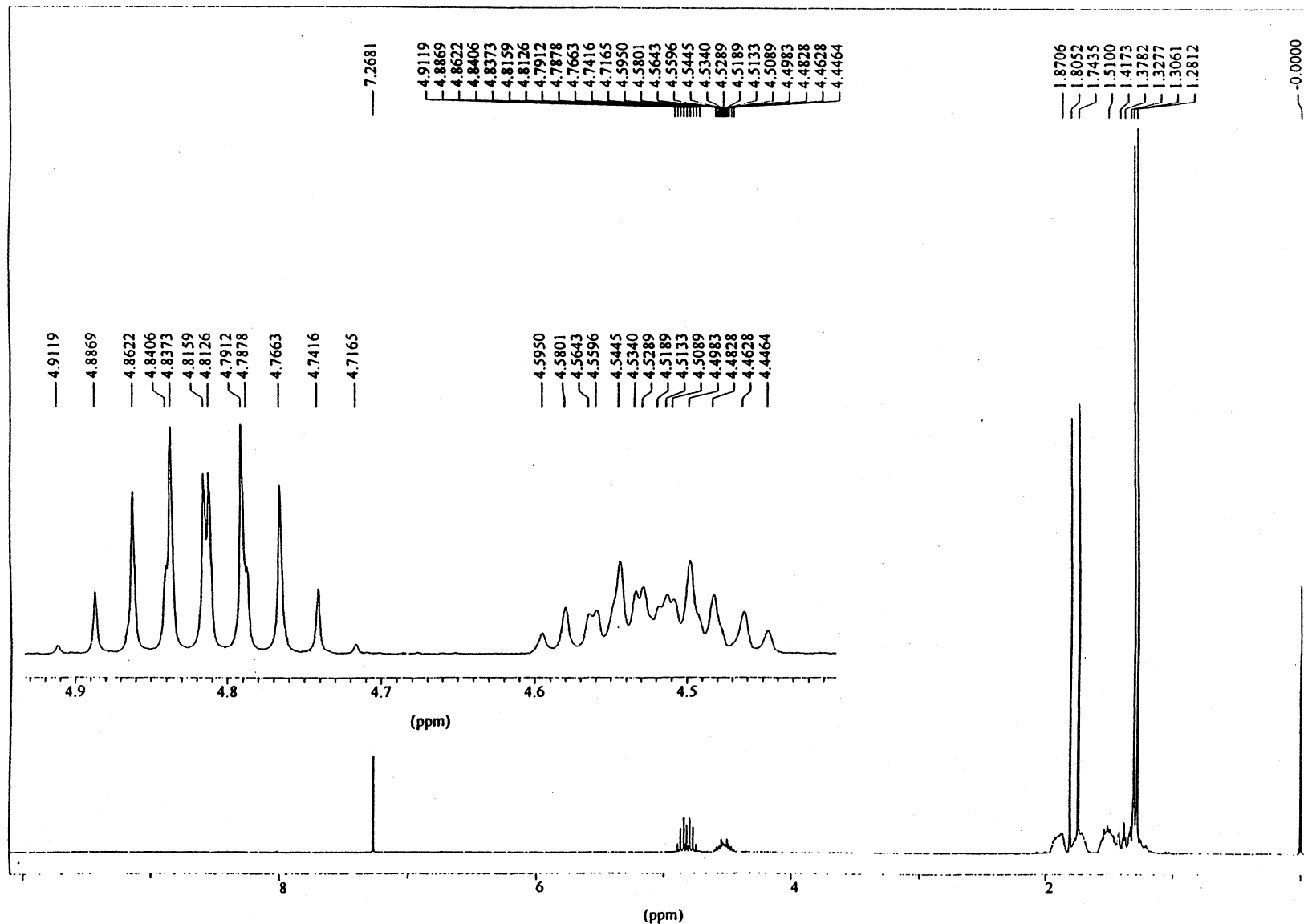
# CYCLOHEXYL ISOPROPYL METHYLTHIOPHOSPHONATE

CAS RN 62507-66-8

14-3-10

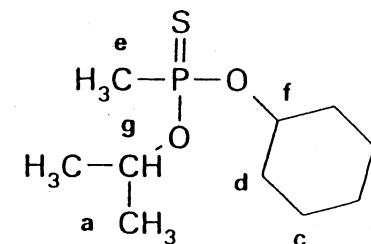
Instrument: Bruker AC-250  
Nucleus:  $^1\text{H}$   
Frequency: 250.13 Hz

Solvent:  $\text{CDCl}_3$   
Concentration: 23 mg/ml  
Temperature: 23°C  
Reference: TMS (int.)  
Spectral width: 2873.6 Hz  
Pulse width: 4.7  $\mu\text{s}$  (45°)  
Repetition time: 12.4 s  
Data points  
FID/Spectrum: 64 K/64 K  
Scans: 64  
Line broadening: 0.05 Hz (exp.)  
Resolution: 0.4 Hz (TMS)



## Assignments

- a:  $\delta = 1.29(\text{d}); J_{a-g} = 6.2 \text{ Hz}$
- b,c,d:  $\delta = 1.2 - 2.0$
- e:  $\delta = 1.77(\text{d}); J_{e-p} = 15.4 \text{ Hz}$
- f:  $\delta = 4.52 (\text{dtt}); J_{f-p} = 11.6 \text{ Hz}, J_{f,d}(\text{trans}) = 8.9 \text{ Hz}, J_{f,d}(\text{cis}) = 3.8 \text{ Hz}$
- g:  $\delta = 4.81(\text{d, sept.}); J_{g-p} = 11.5 \text{ Hz}, J_{g-a} = 6.2 \text{ Hz}$



OPCW Code: 14-3-10 (p1/1)