

## Supporting Information

### Synthesis and Structural Characterization of Monophosphine- Cyclopalladated Ferrocenylpyrimidine Complexes and Reusable Catalytic System for Amination of Hindered Aryl Chlorides in PEG-400

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Hong-Ji Ma, Bao-Ming Ji\*

*College of Chemistry and Chemical Engineering, Luoyang Normal University,  
Luoyang, Henan 471022, China*

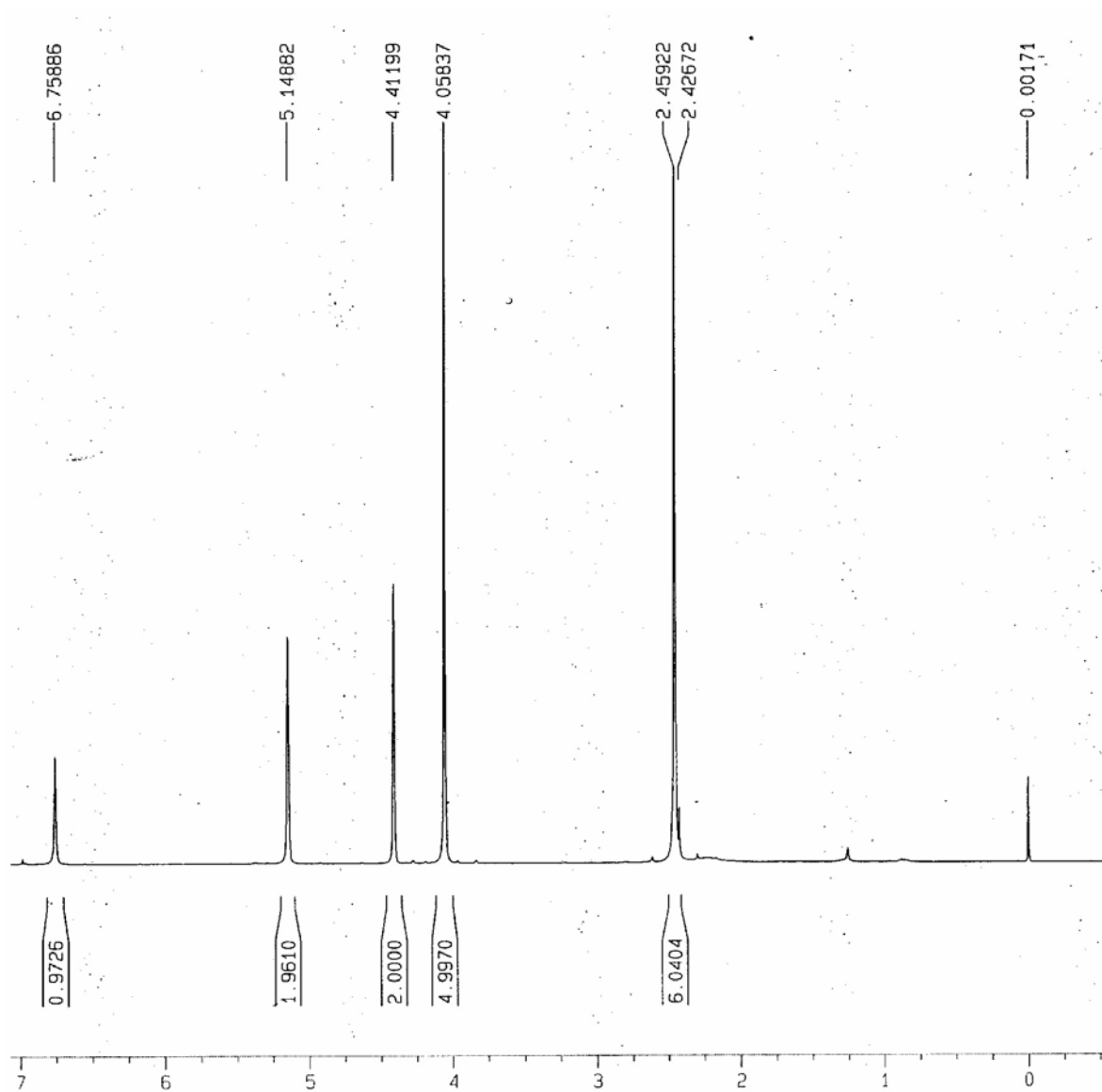
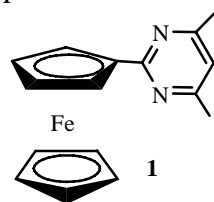
\*To whom correspondence should be addressed. E-mail address: xubohan@163.com,  
lyhxxjbm@126.com.

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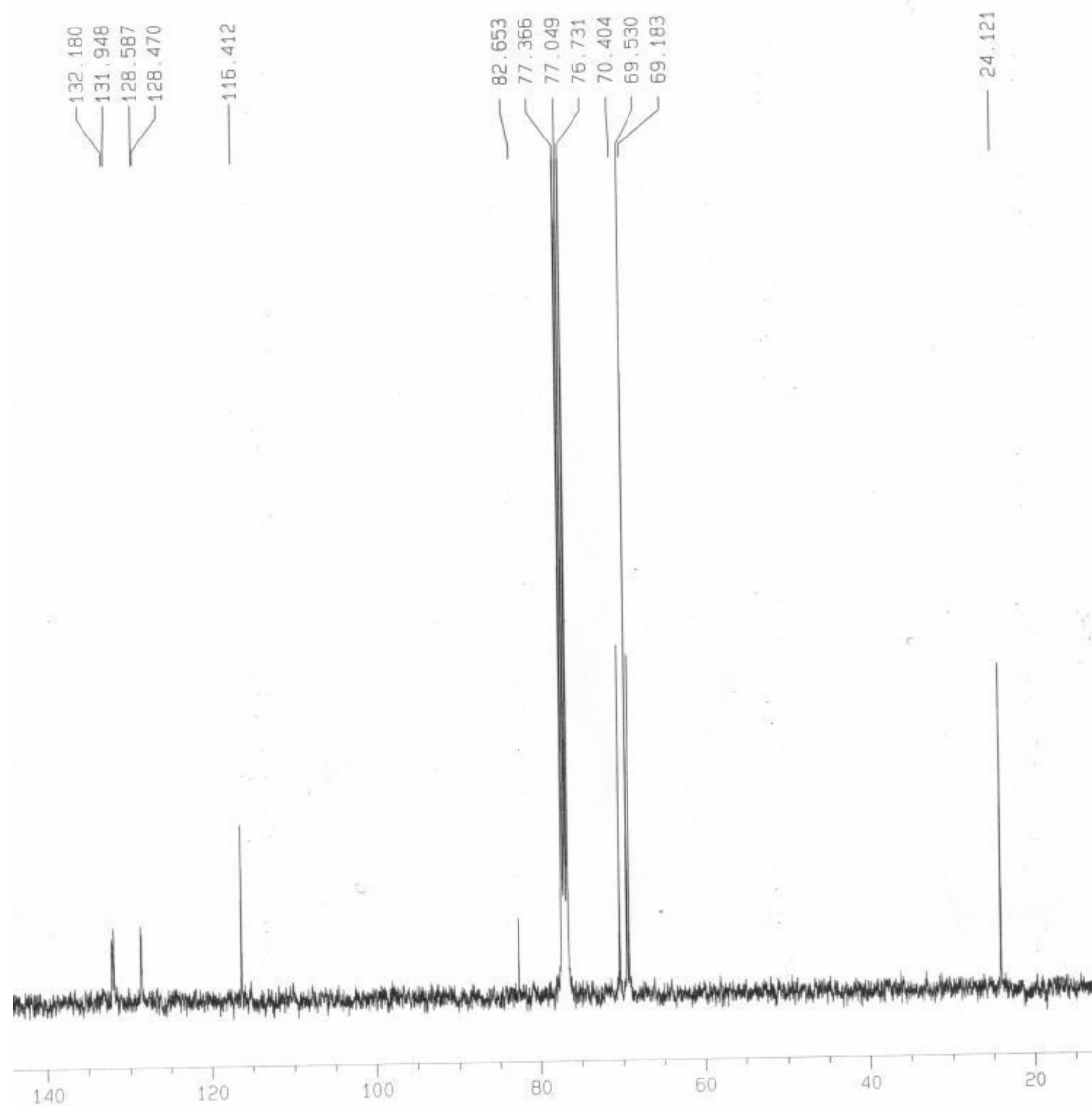
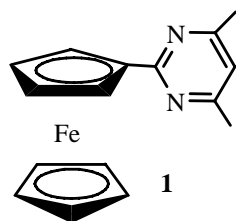
$^1\text{H}$  NMR, and  $^{13}\text{C}\{^1\text{H}\}$  NMR spectra of compounds **1** and **3-6**

$^1\text{H}$  NMR, and  $^{13}\text{C}\{^1\text{H}\}$  NMR spectra of the coupled products

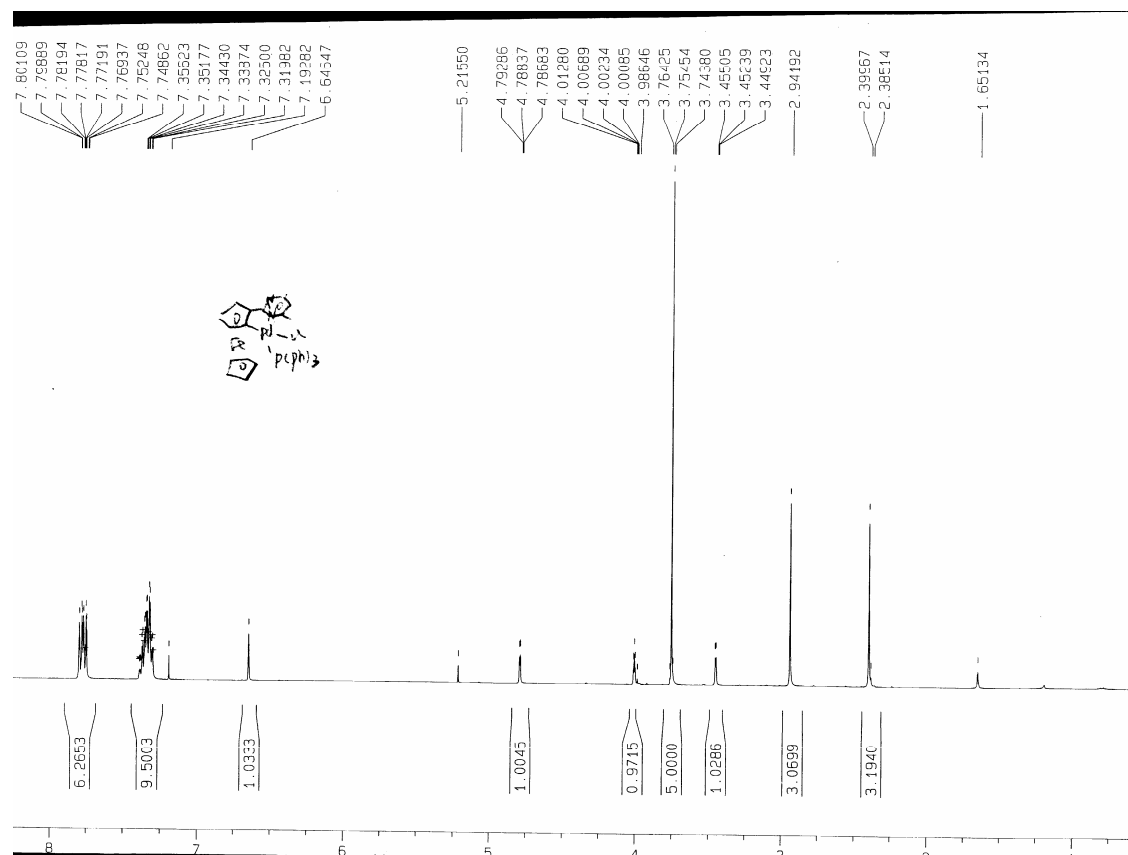
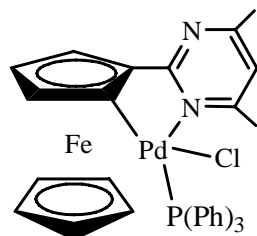
Compound **1**:  $^1\text{H}$  NMR



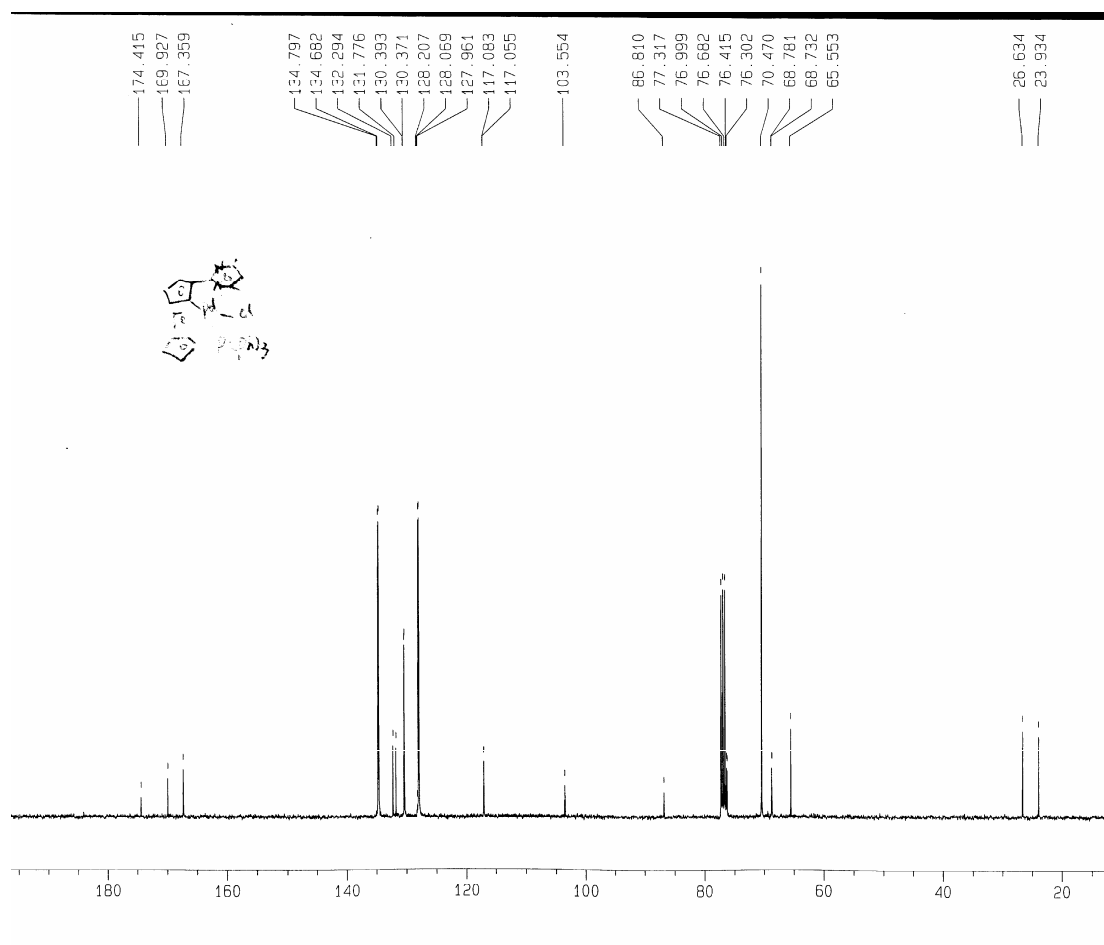
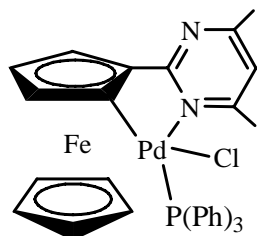
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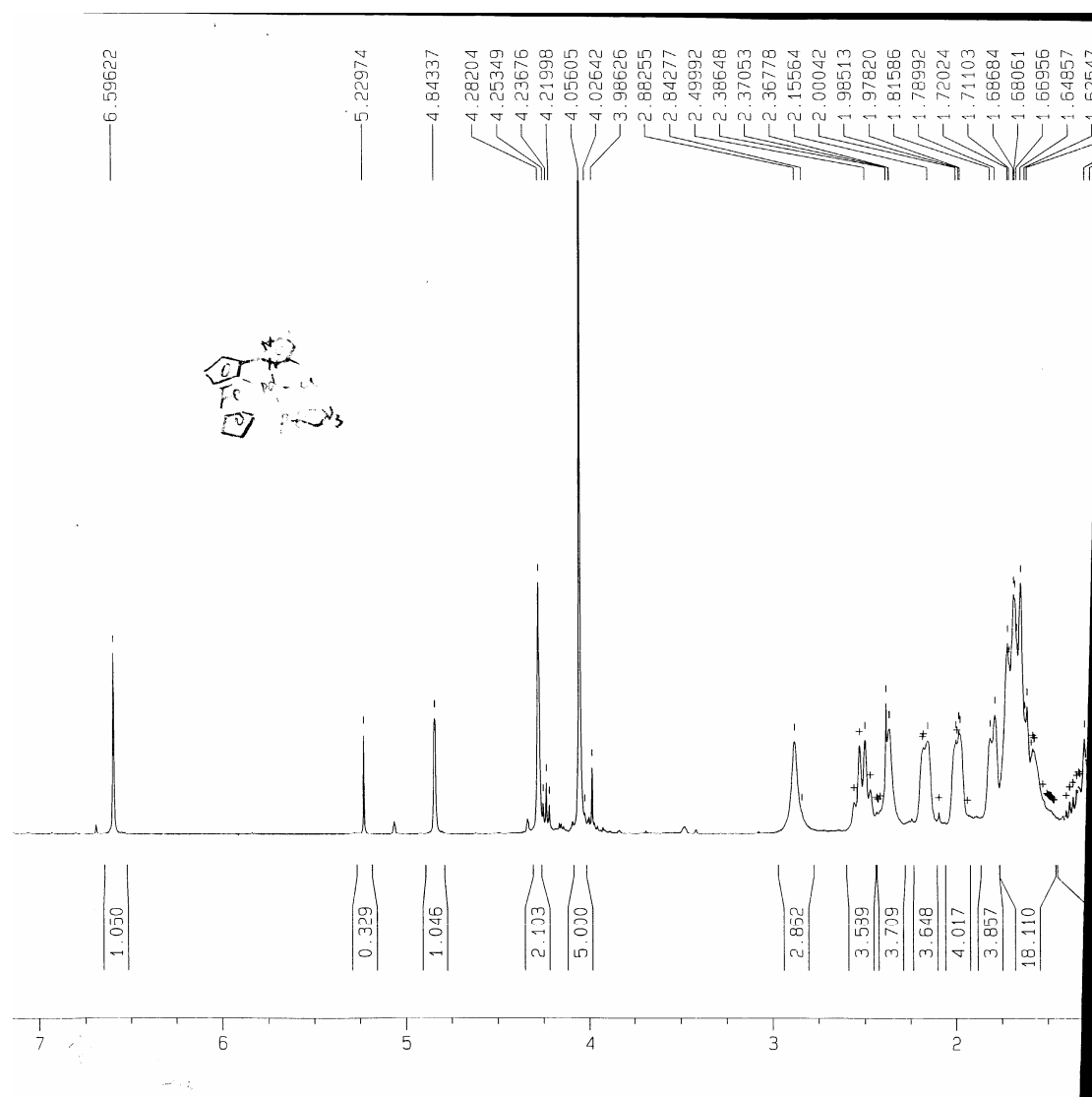
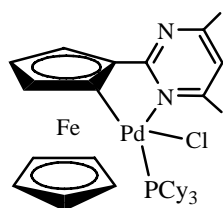
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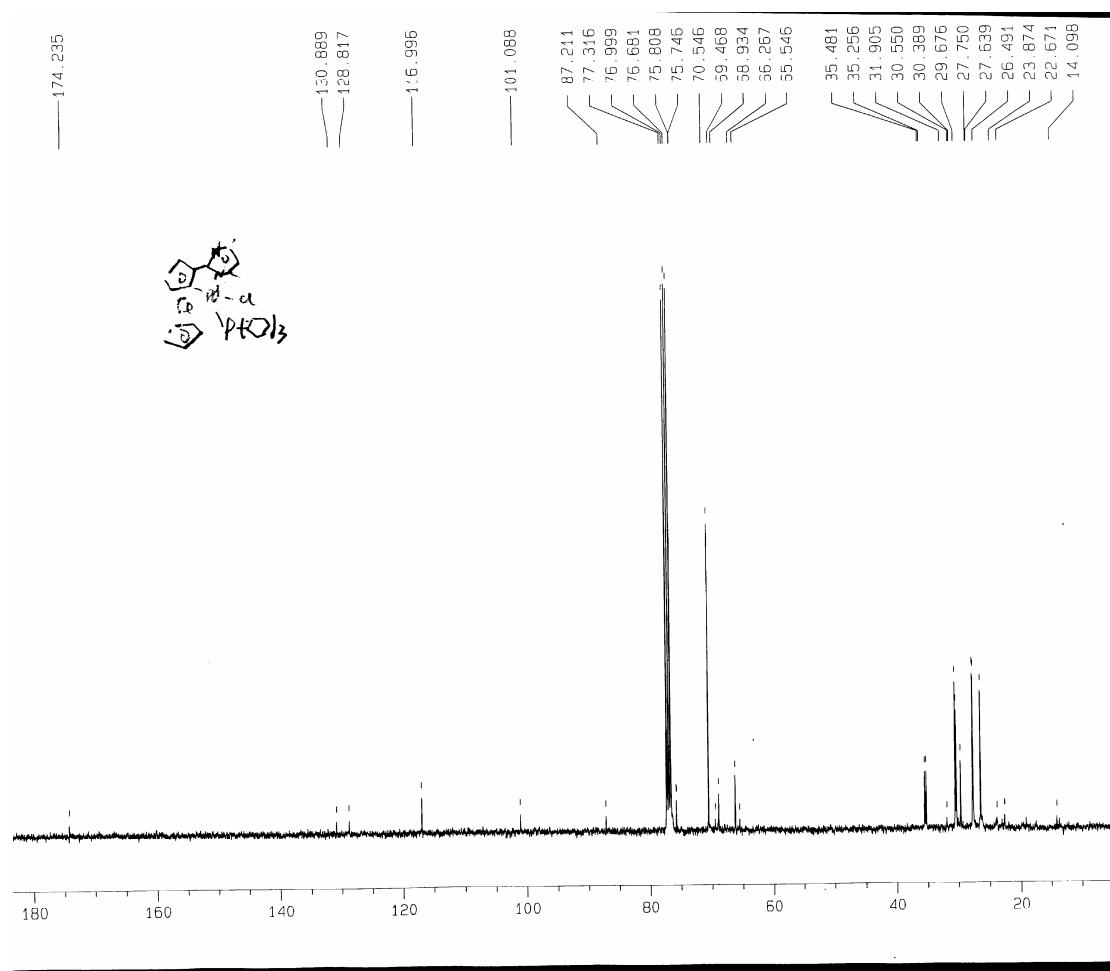
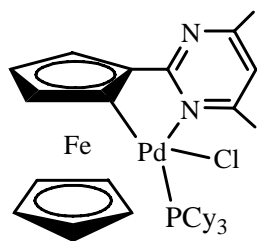
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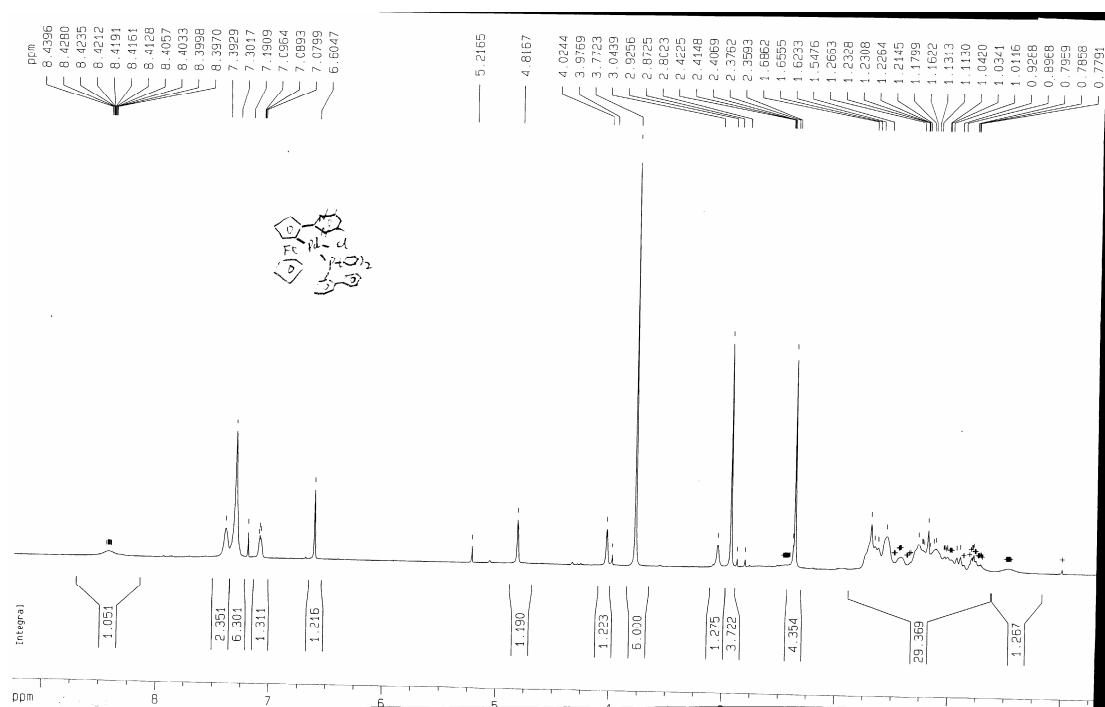
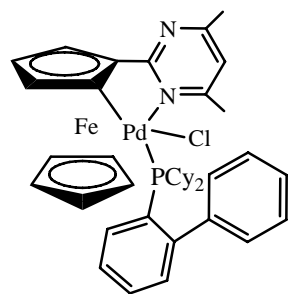
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Compound 4:  $^{13}\text{C}\{^1\text{H}\}$  NMR

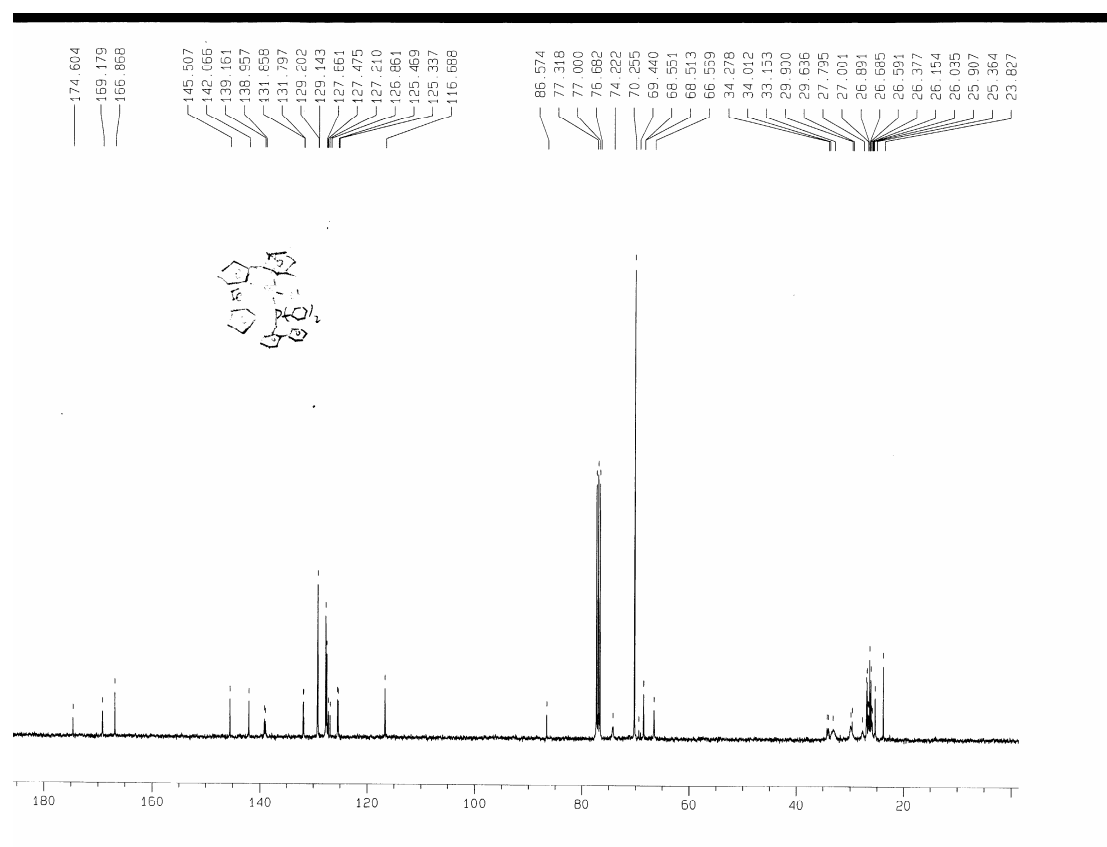
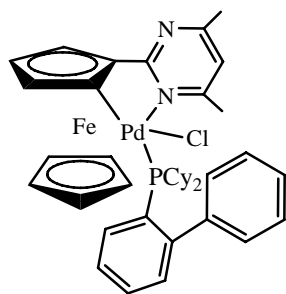


Compound 5:  $^1\text{H}$  NMR

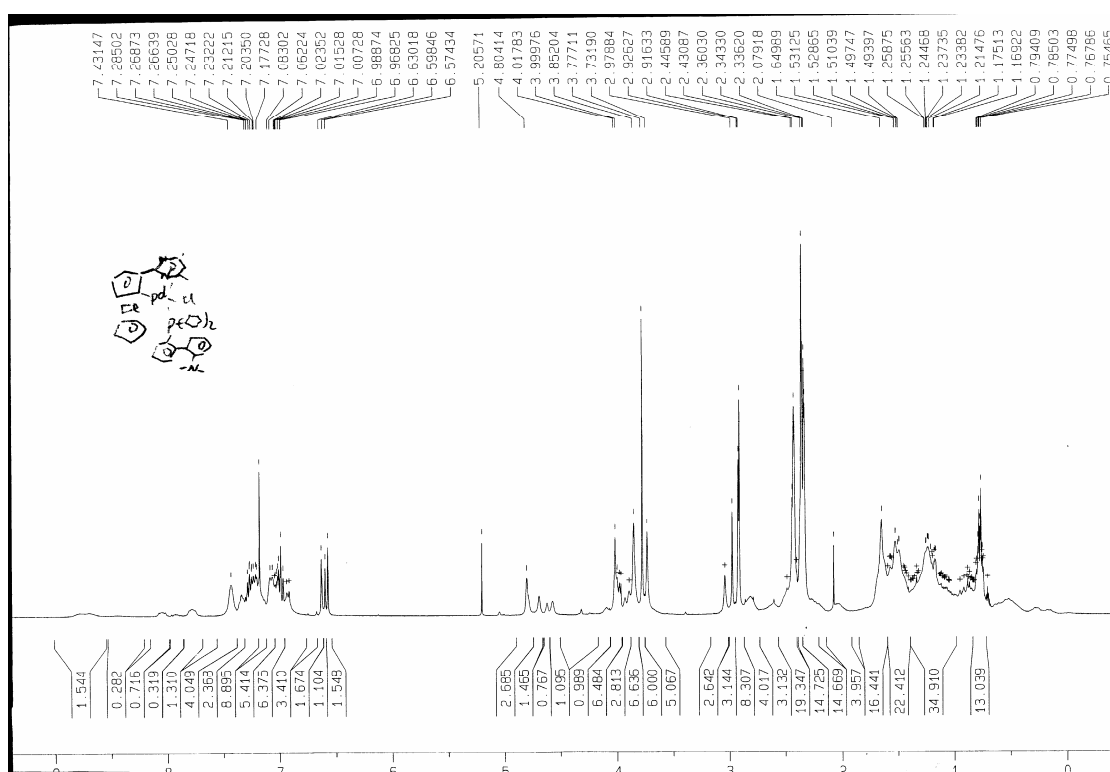
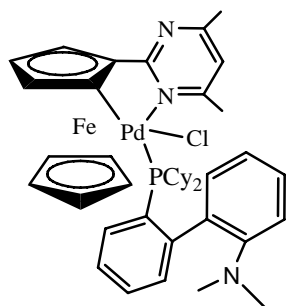




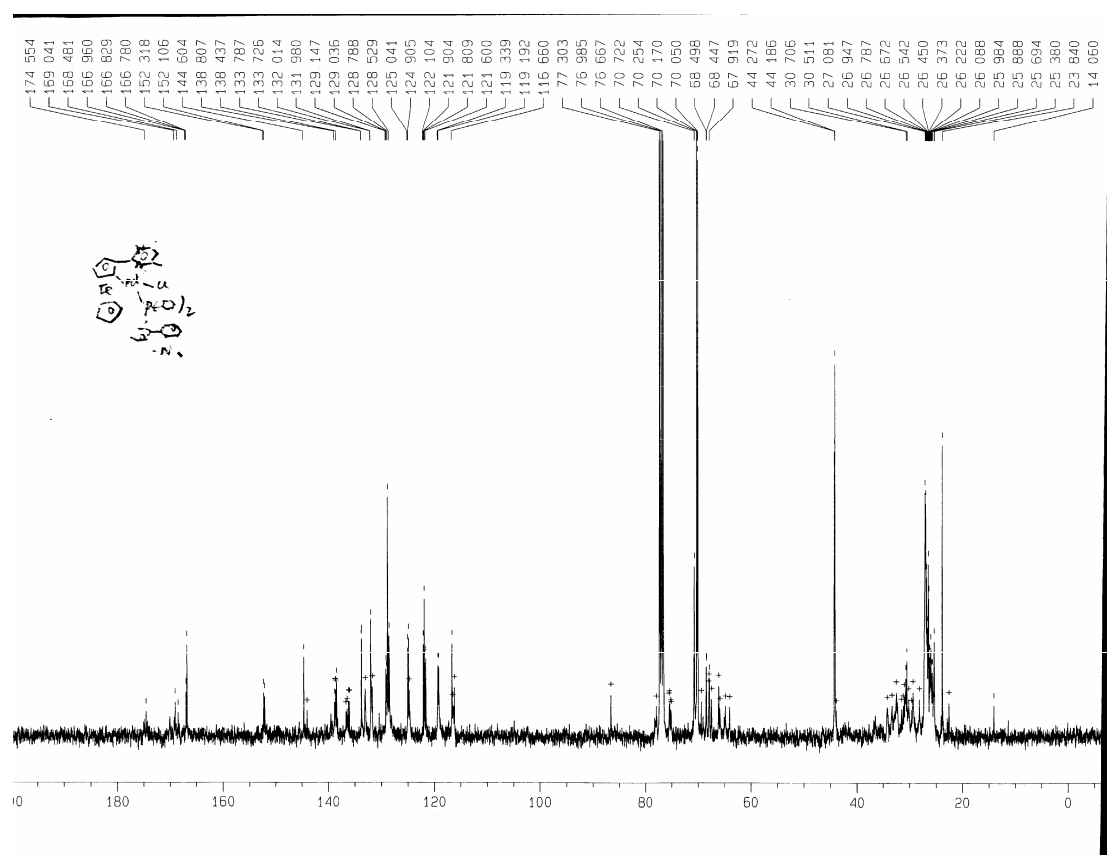
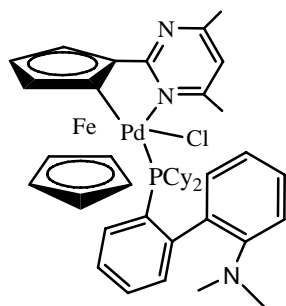
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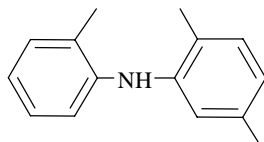
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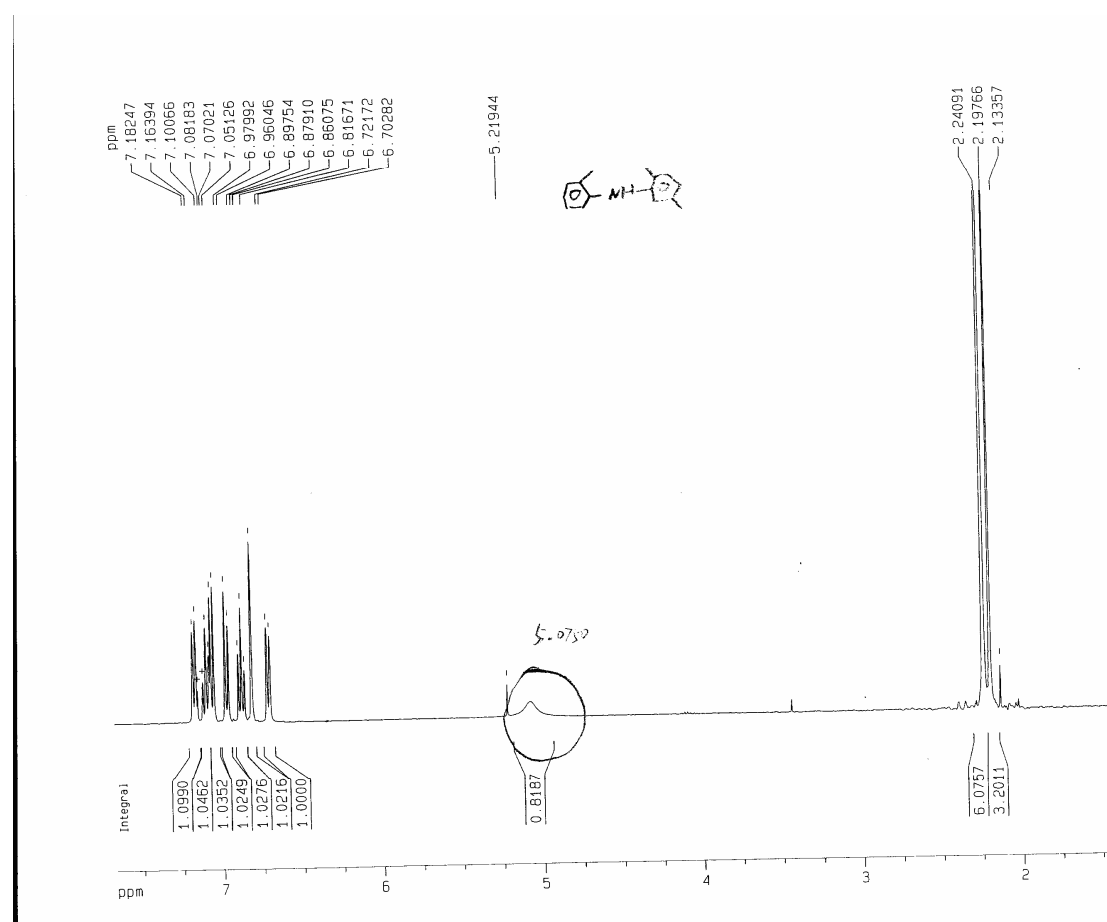
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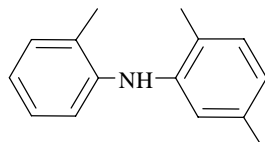
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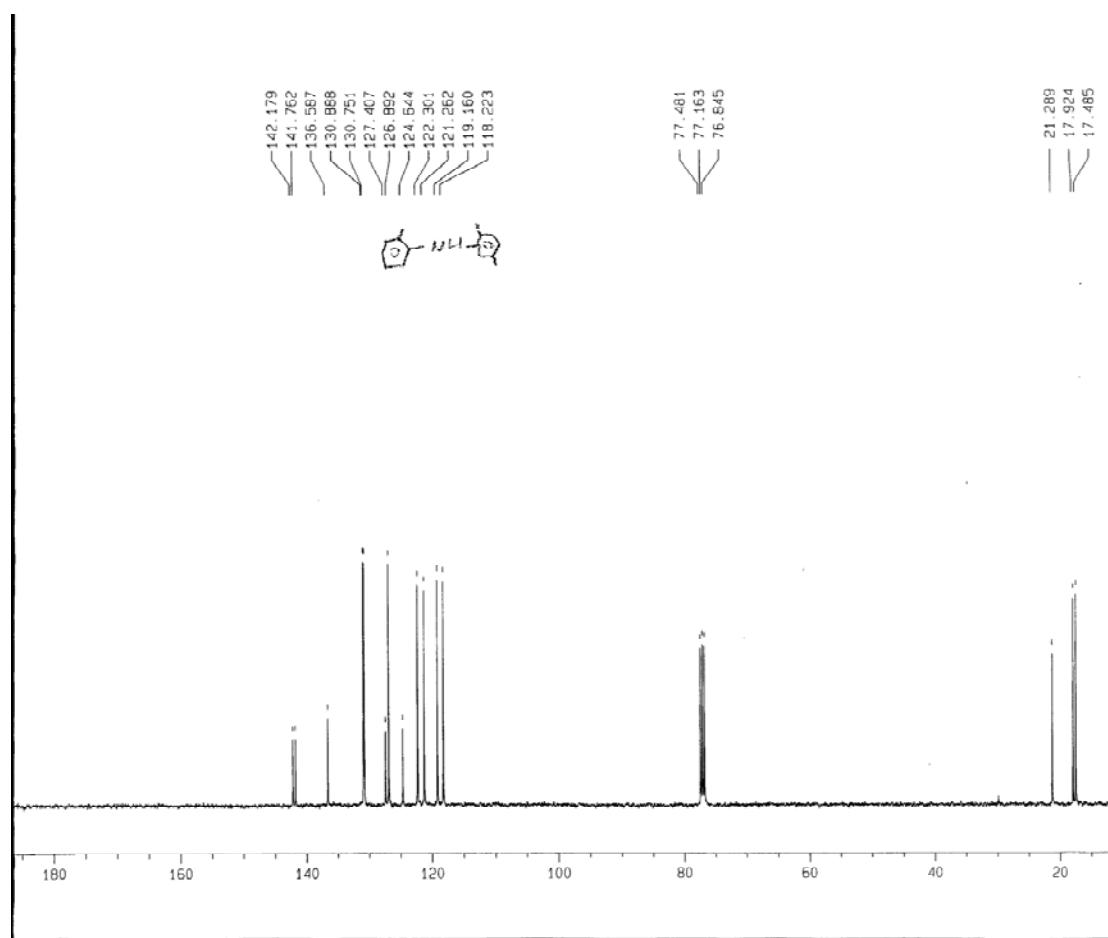
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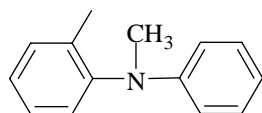
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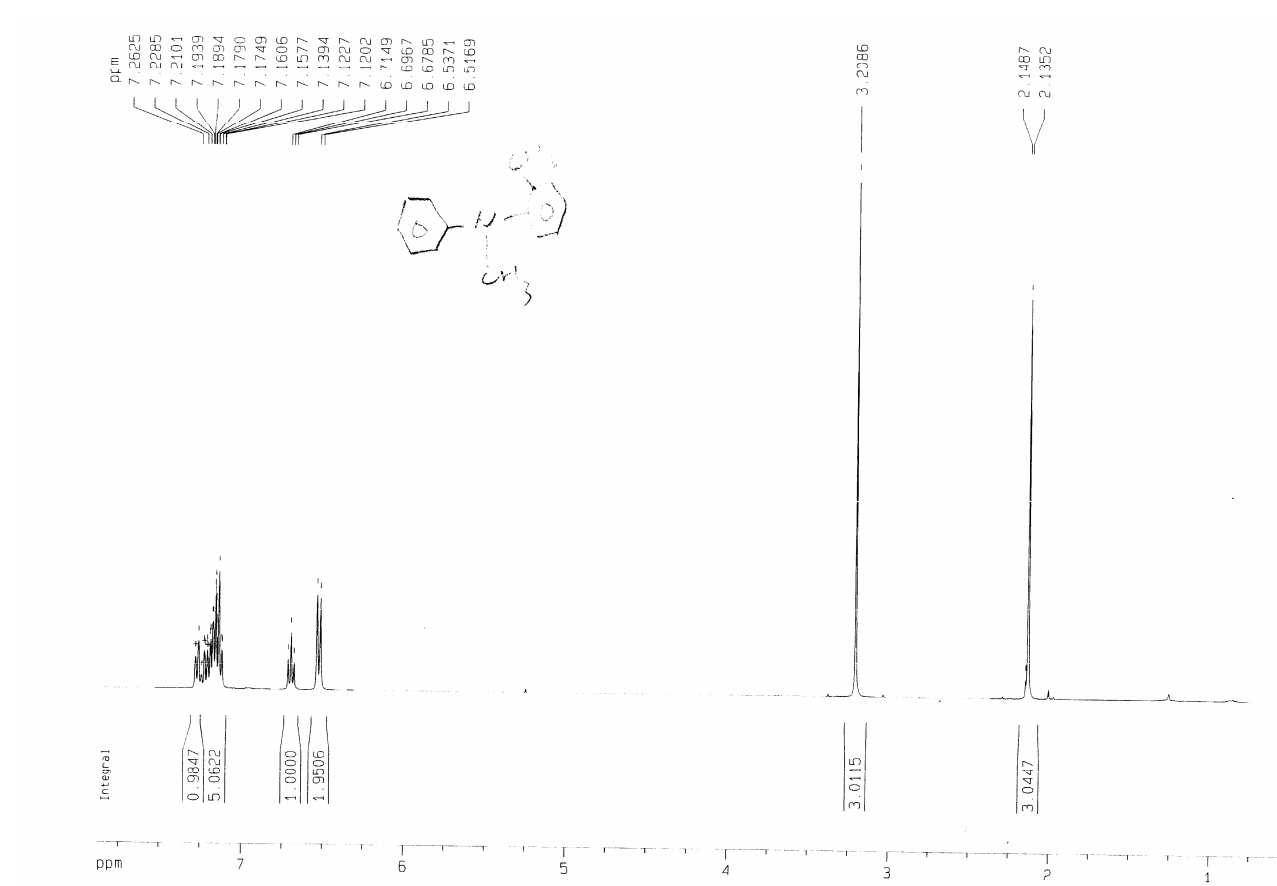
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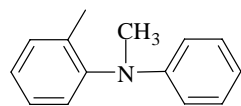
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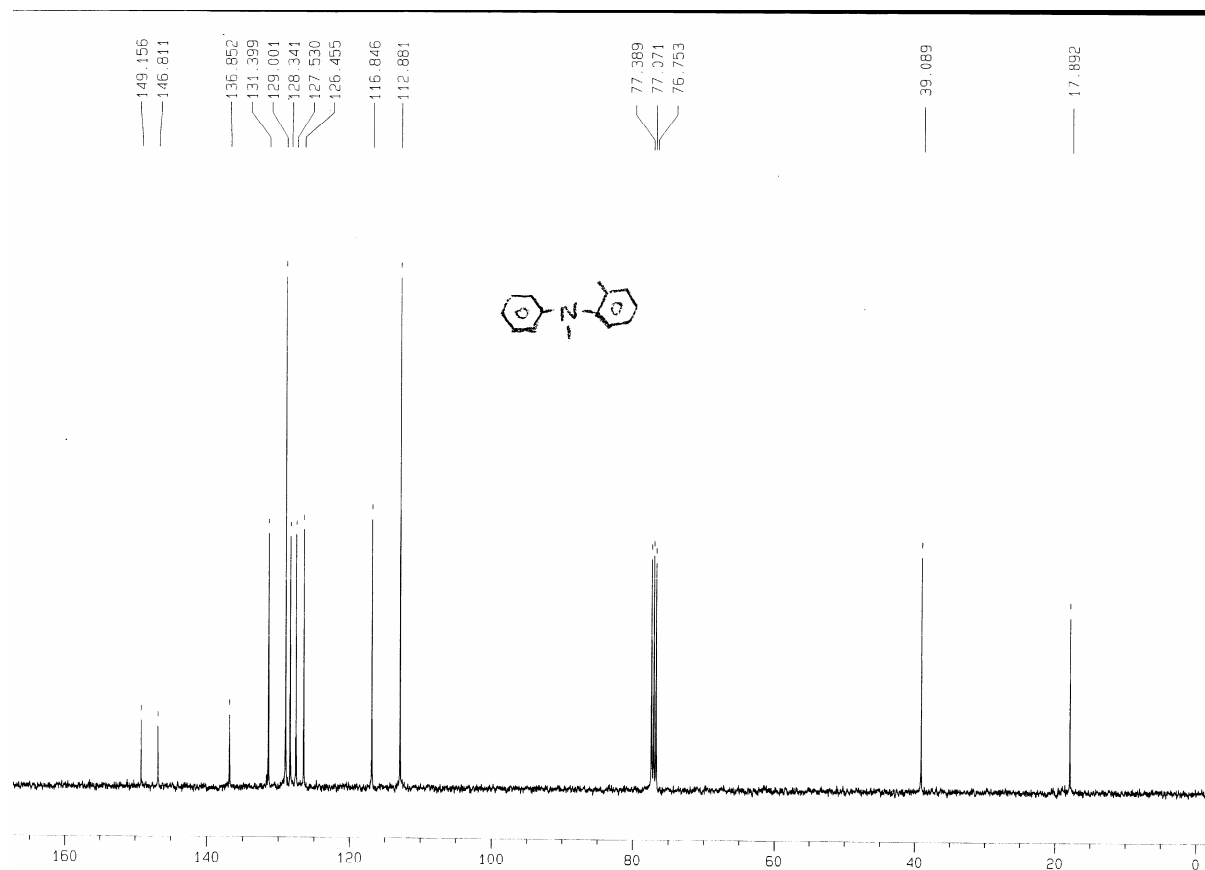
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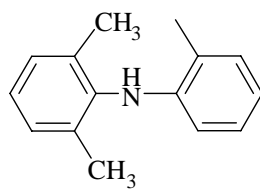
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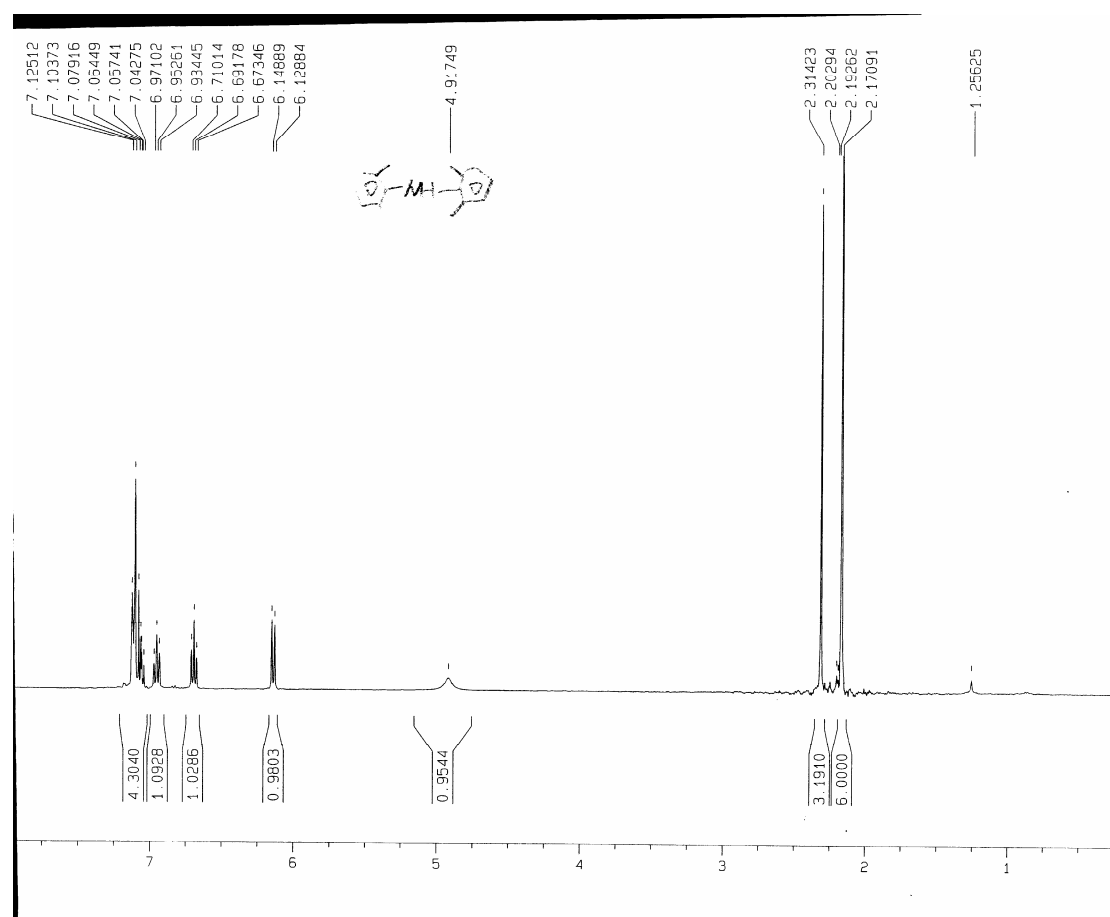
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coupled product

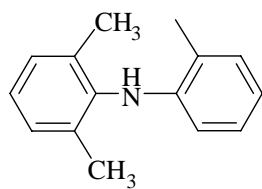


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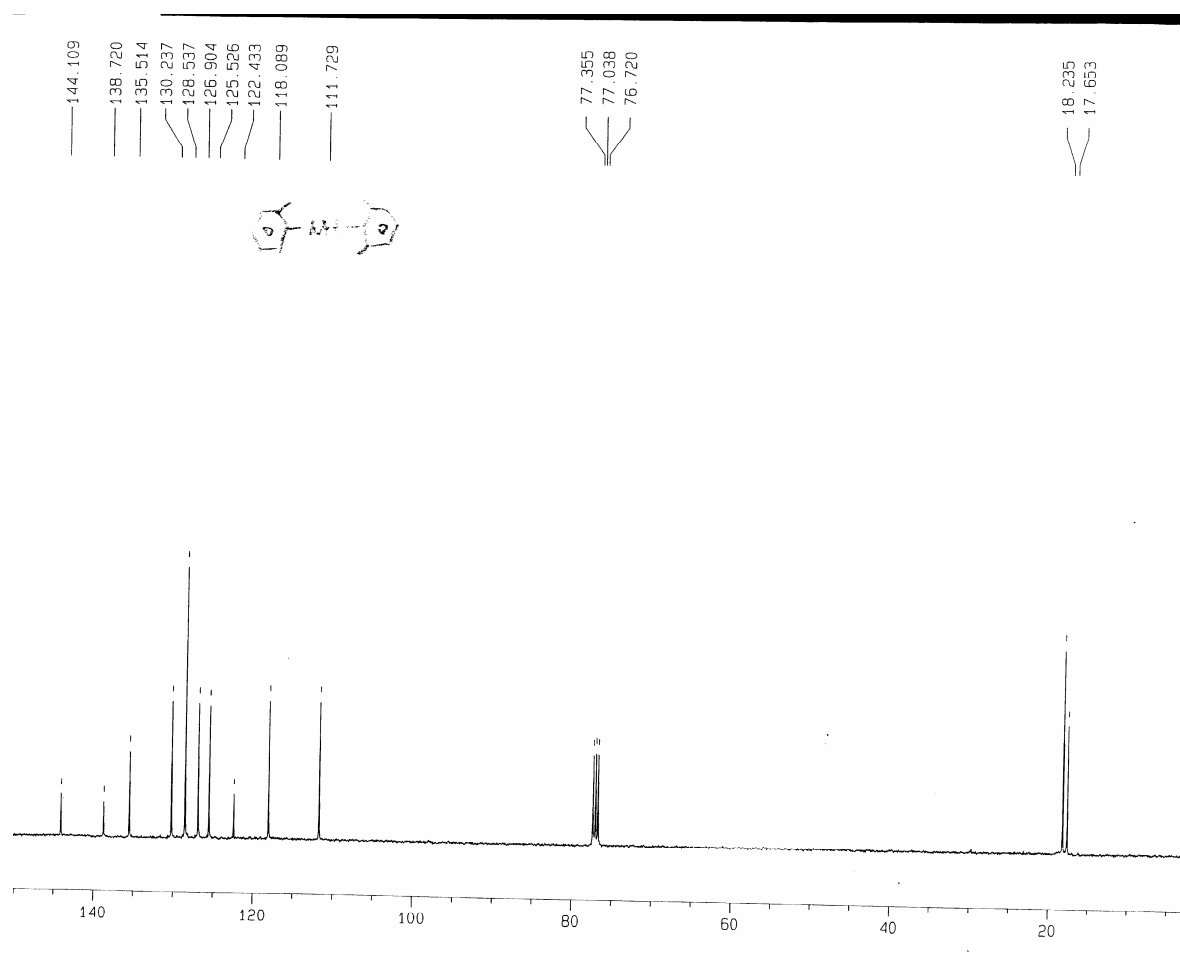




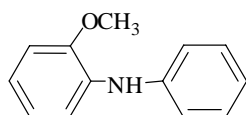
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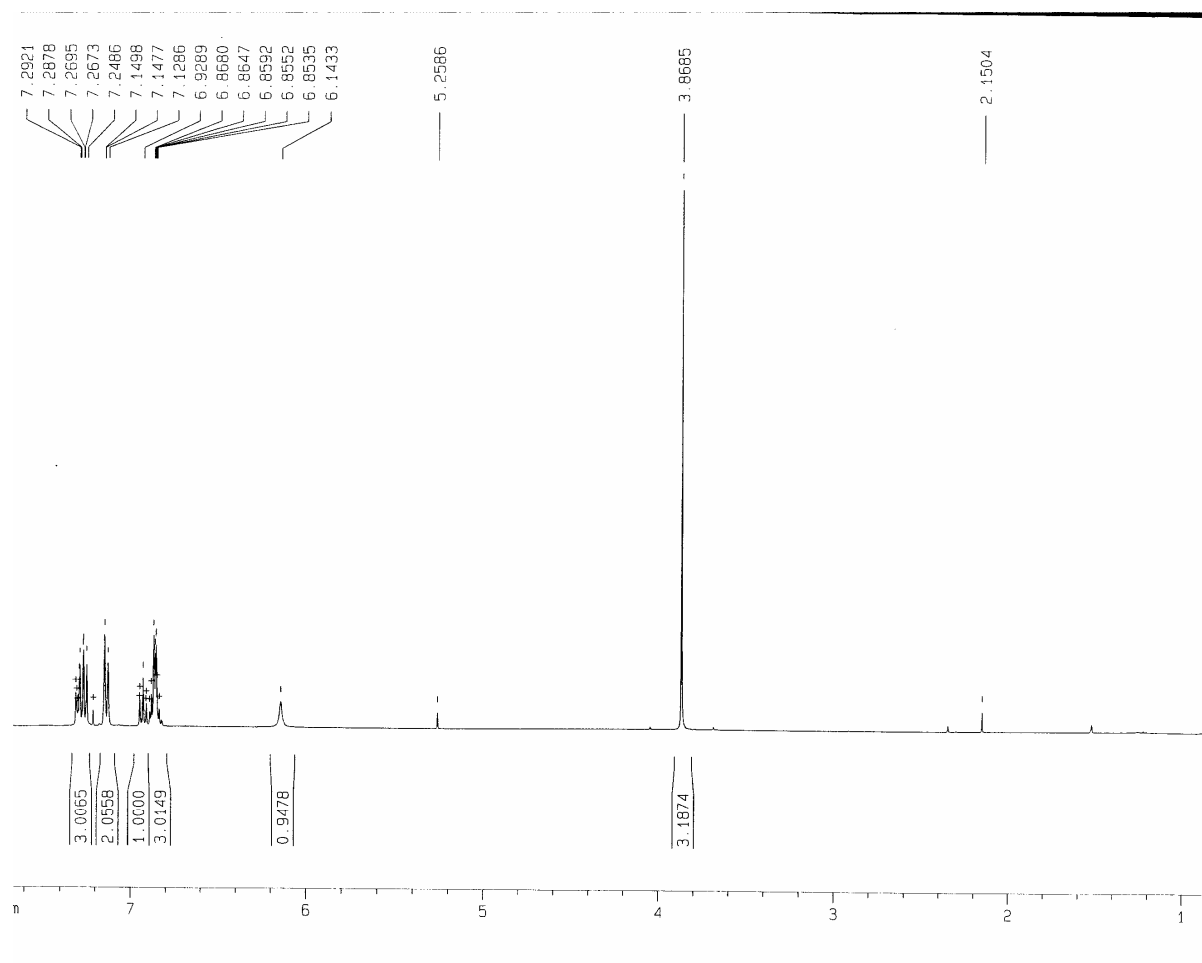
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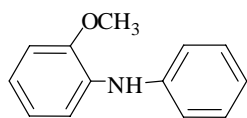
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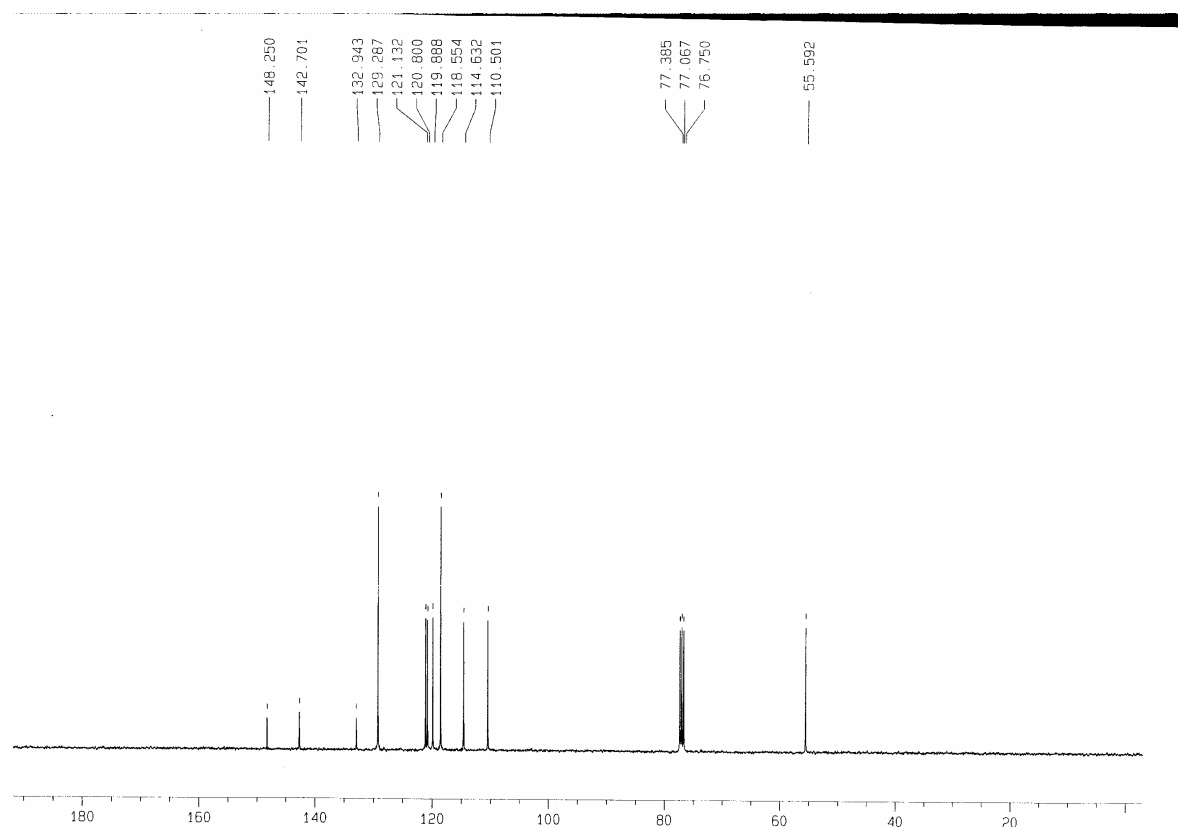
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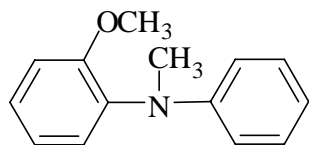
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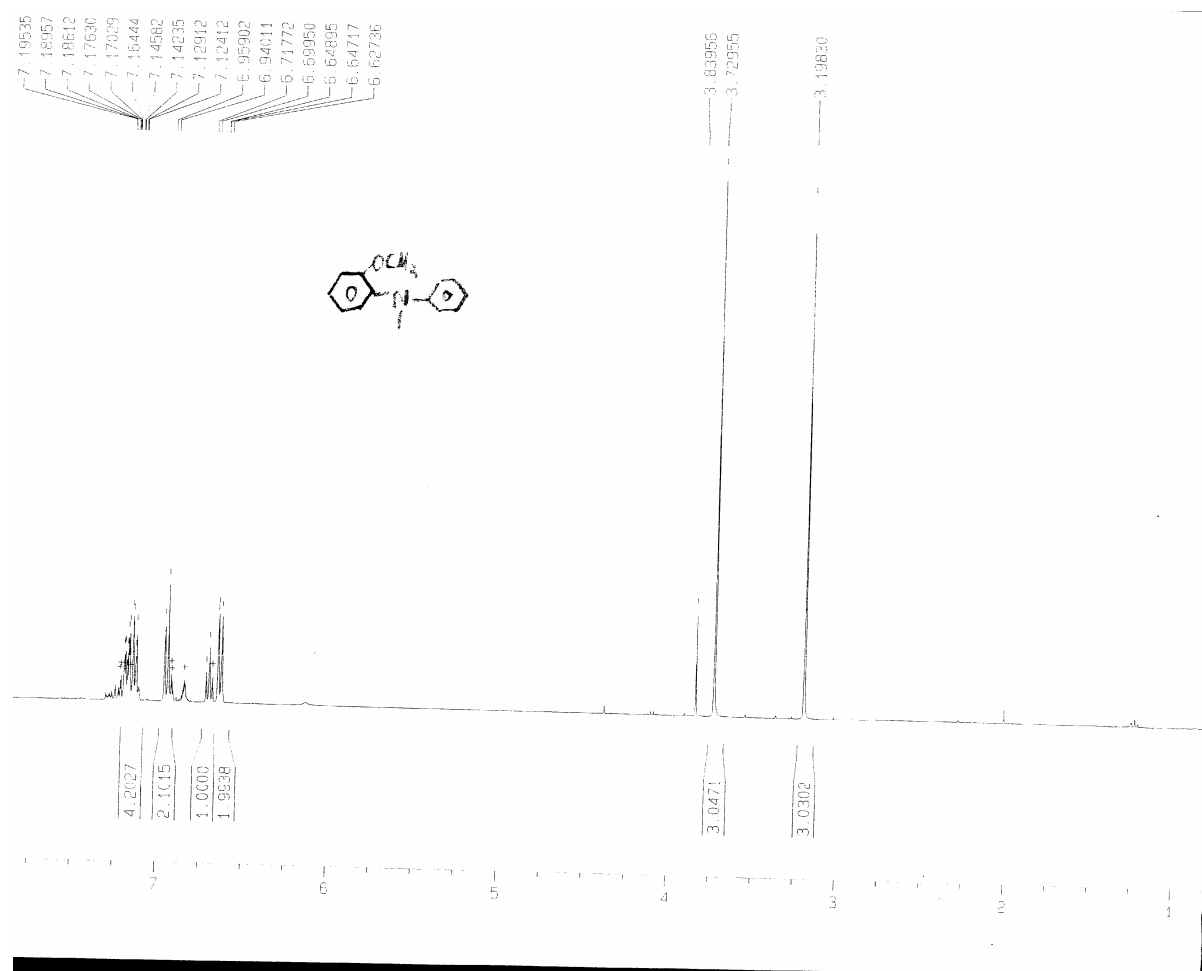
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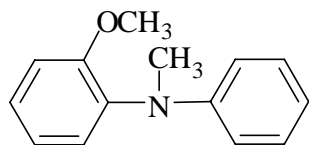
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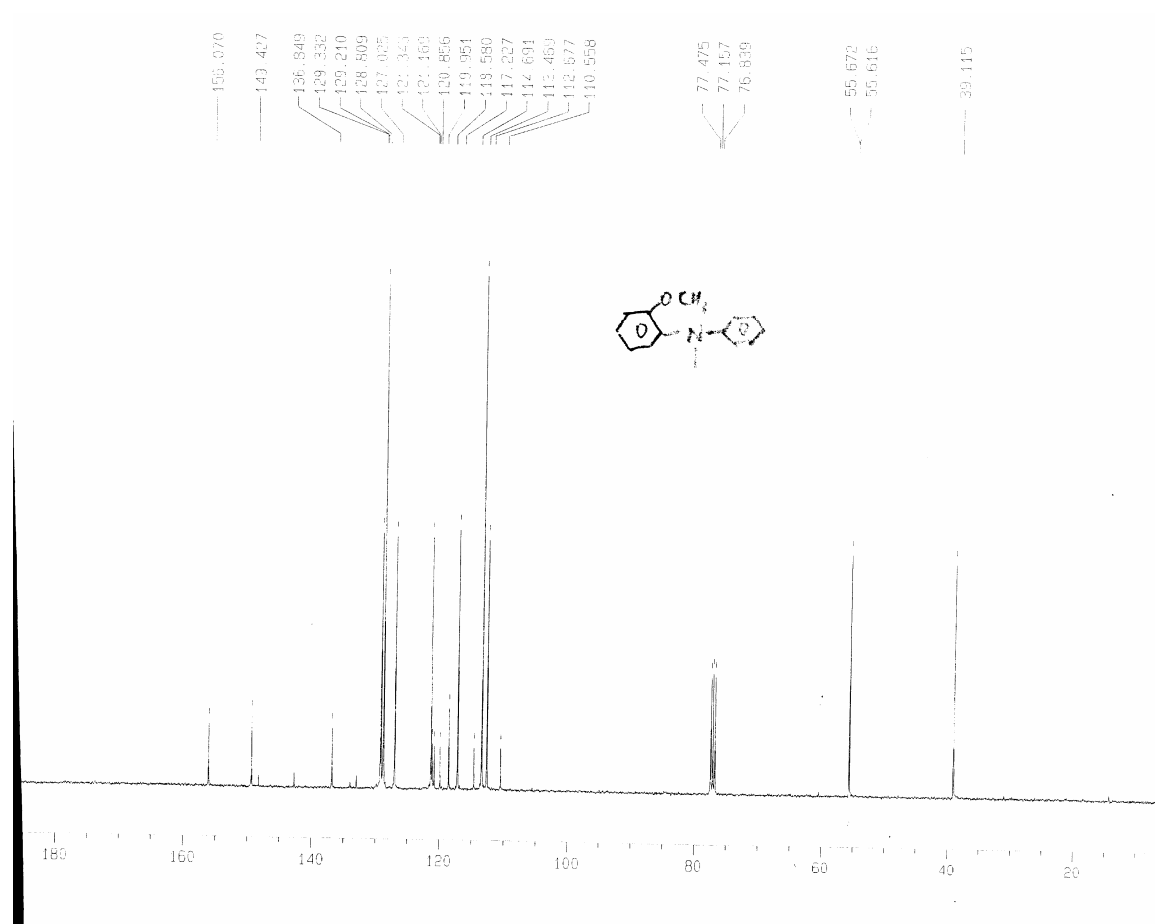
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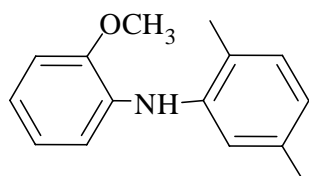
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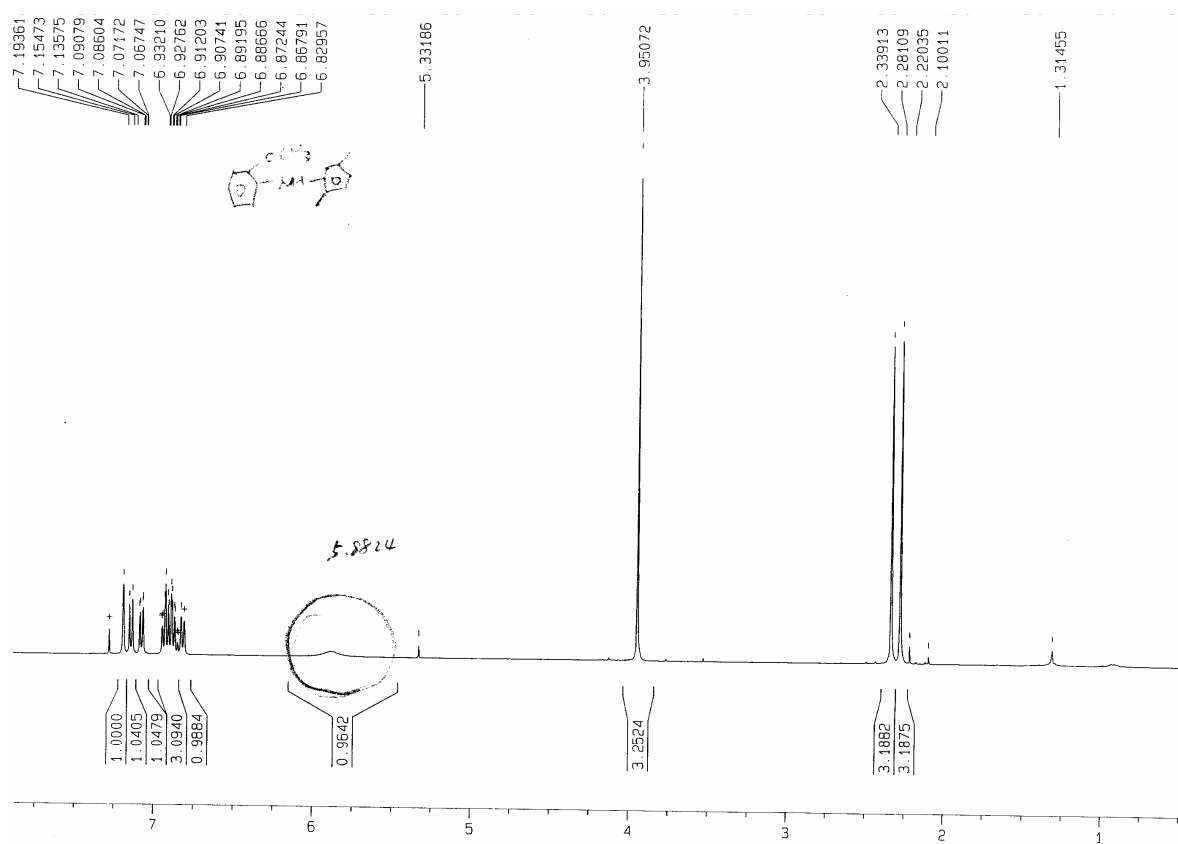
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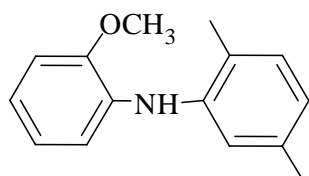
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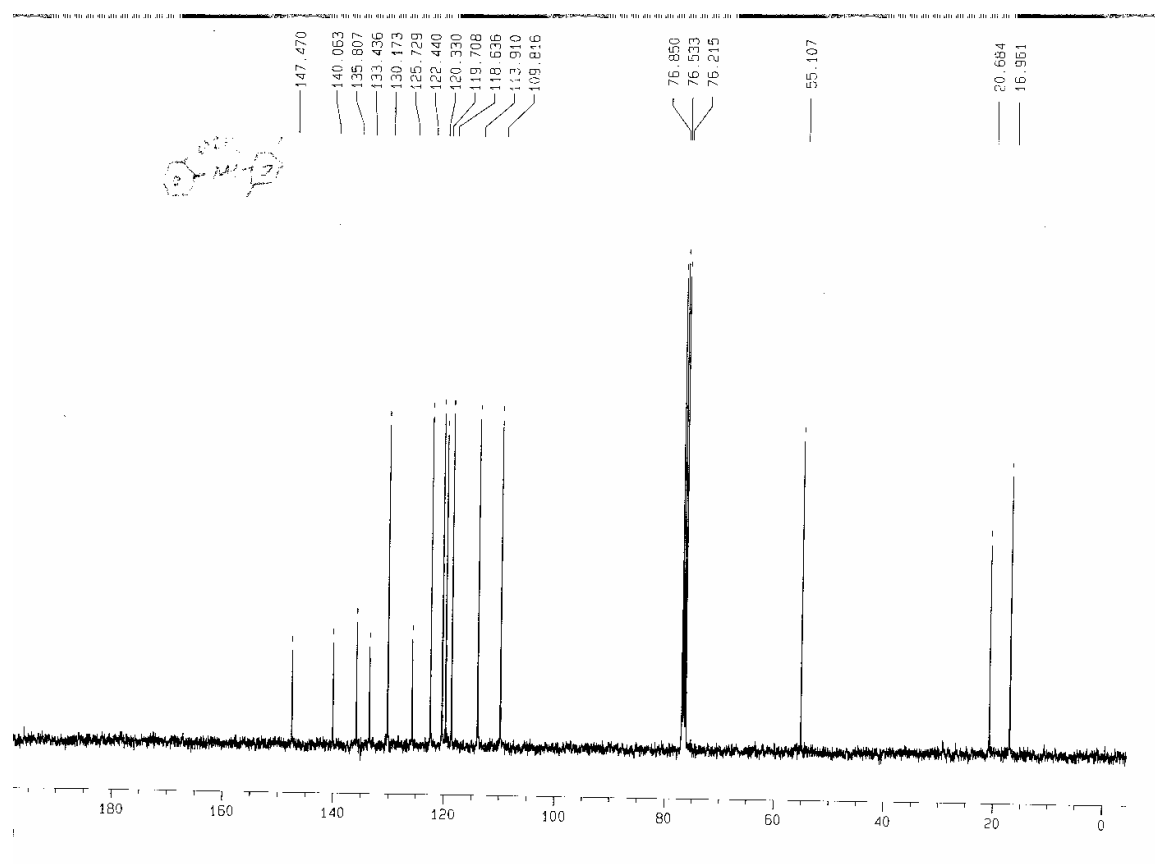
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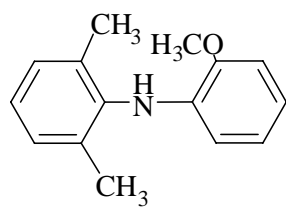
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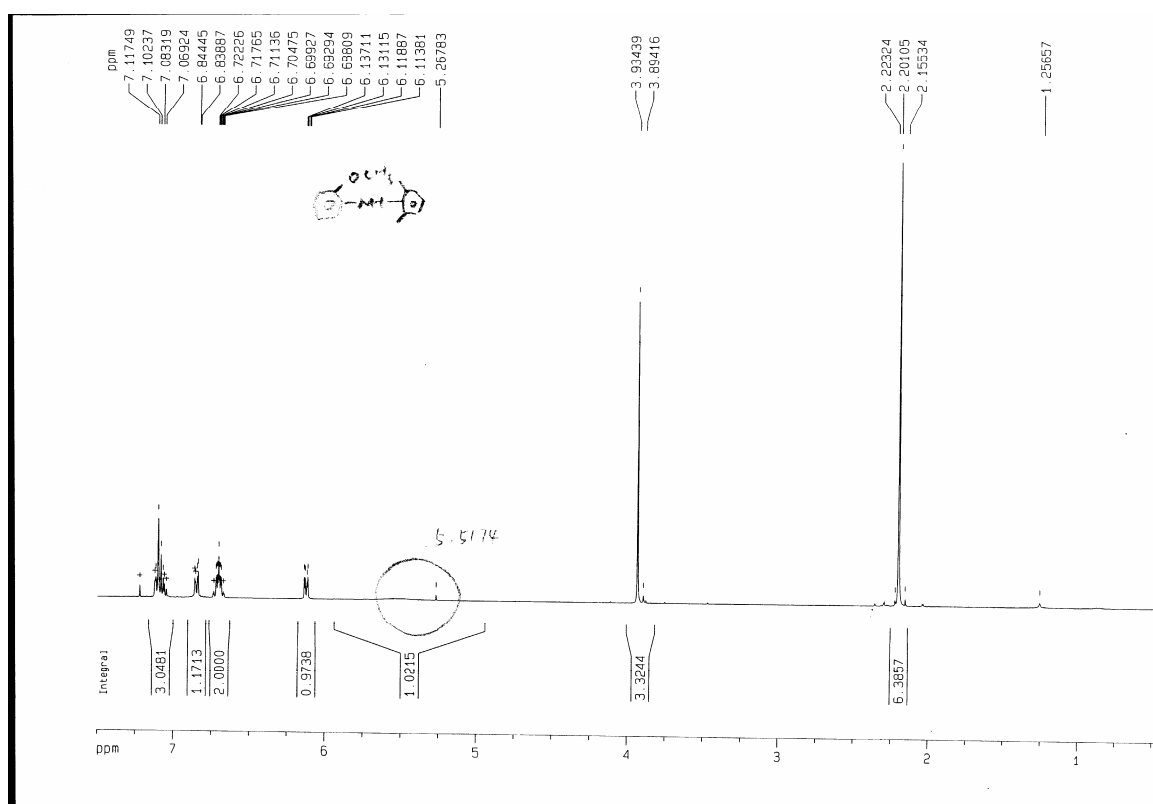
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coupled product

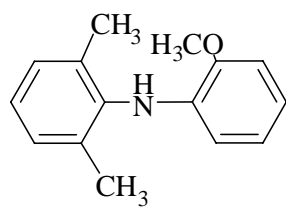


<sup>1</sup>H NMR

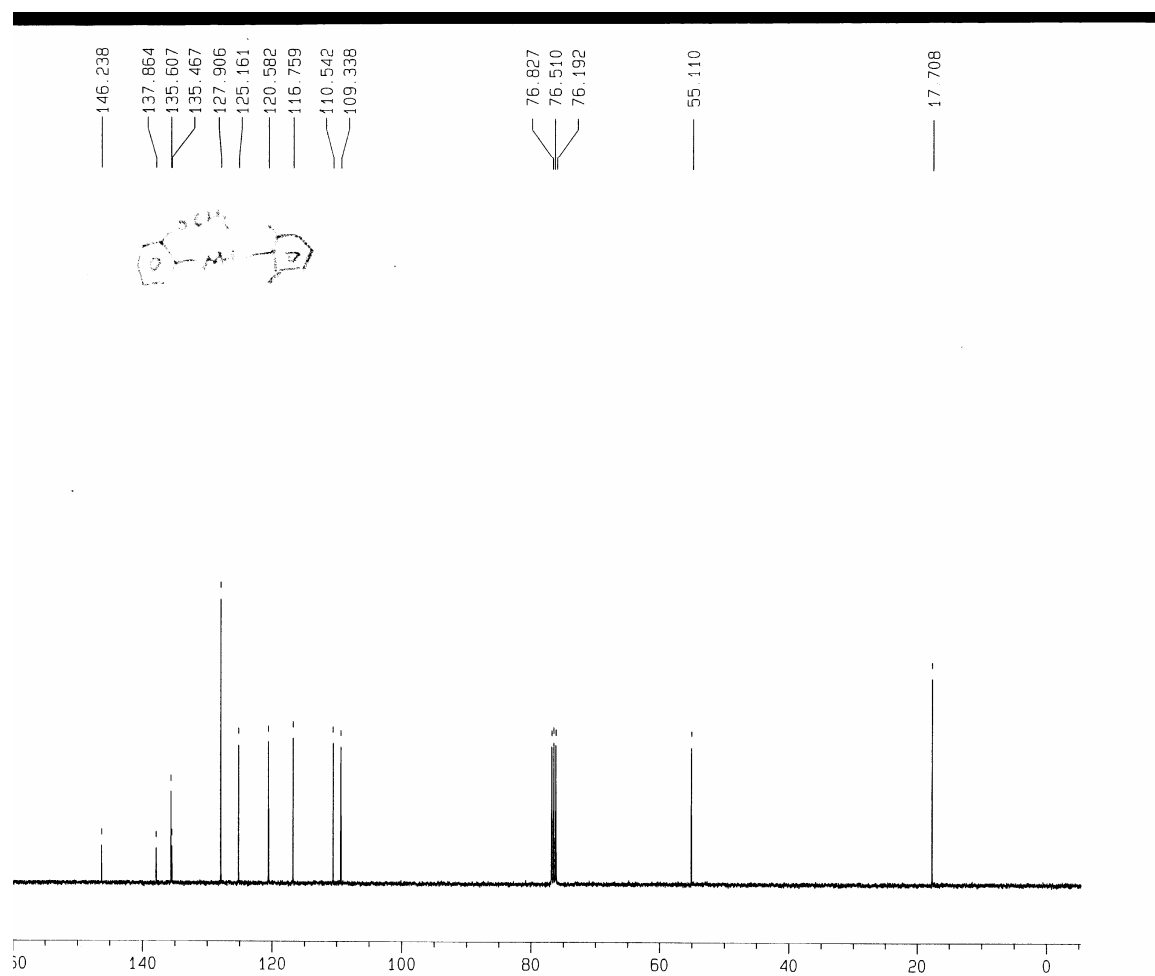




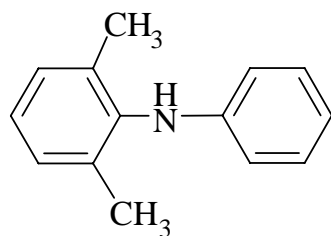
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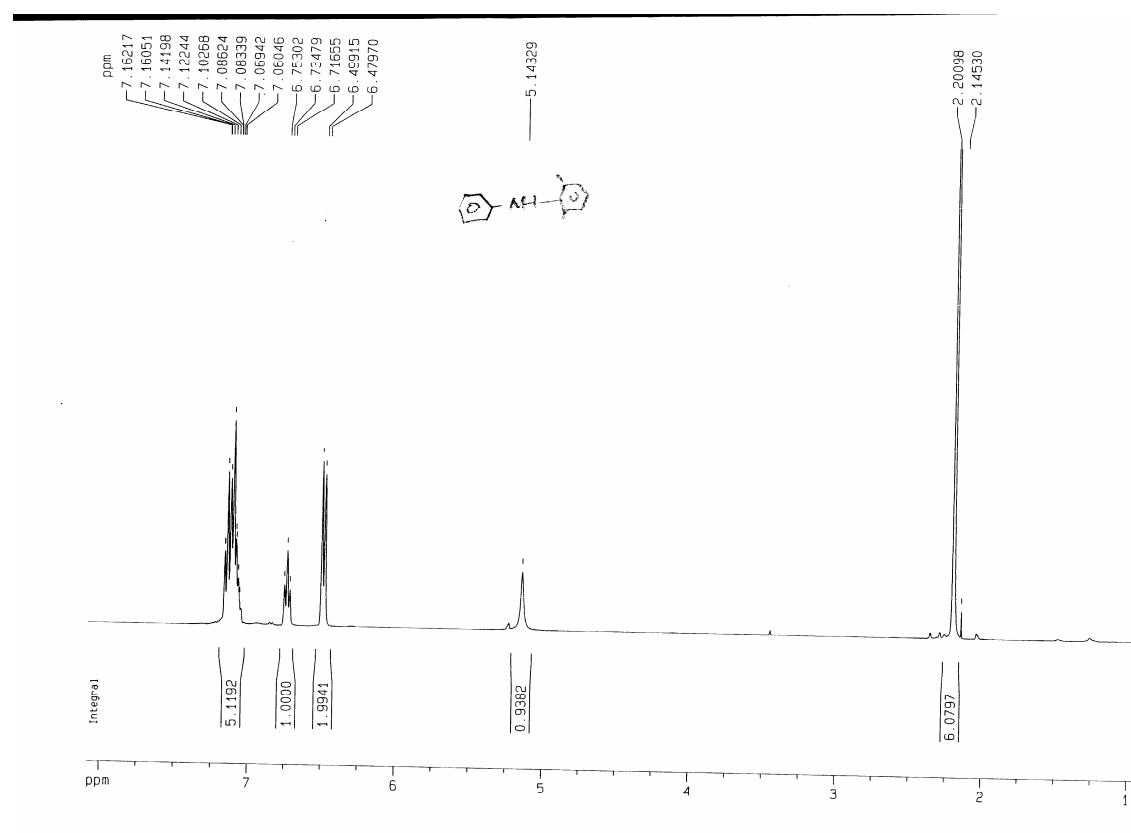
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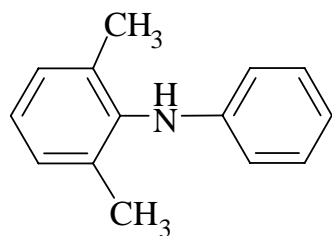
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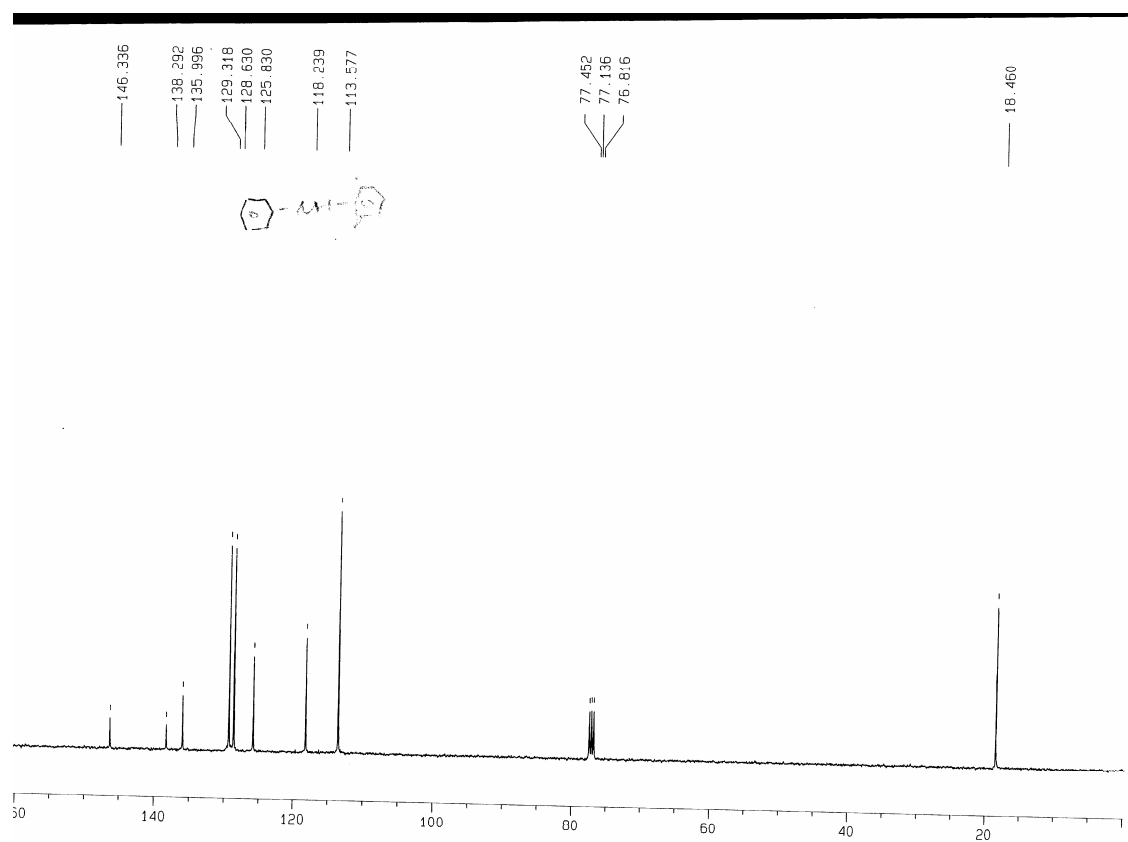
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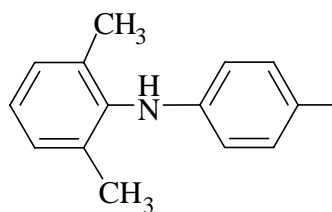
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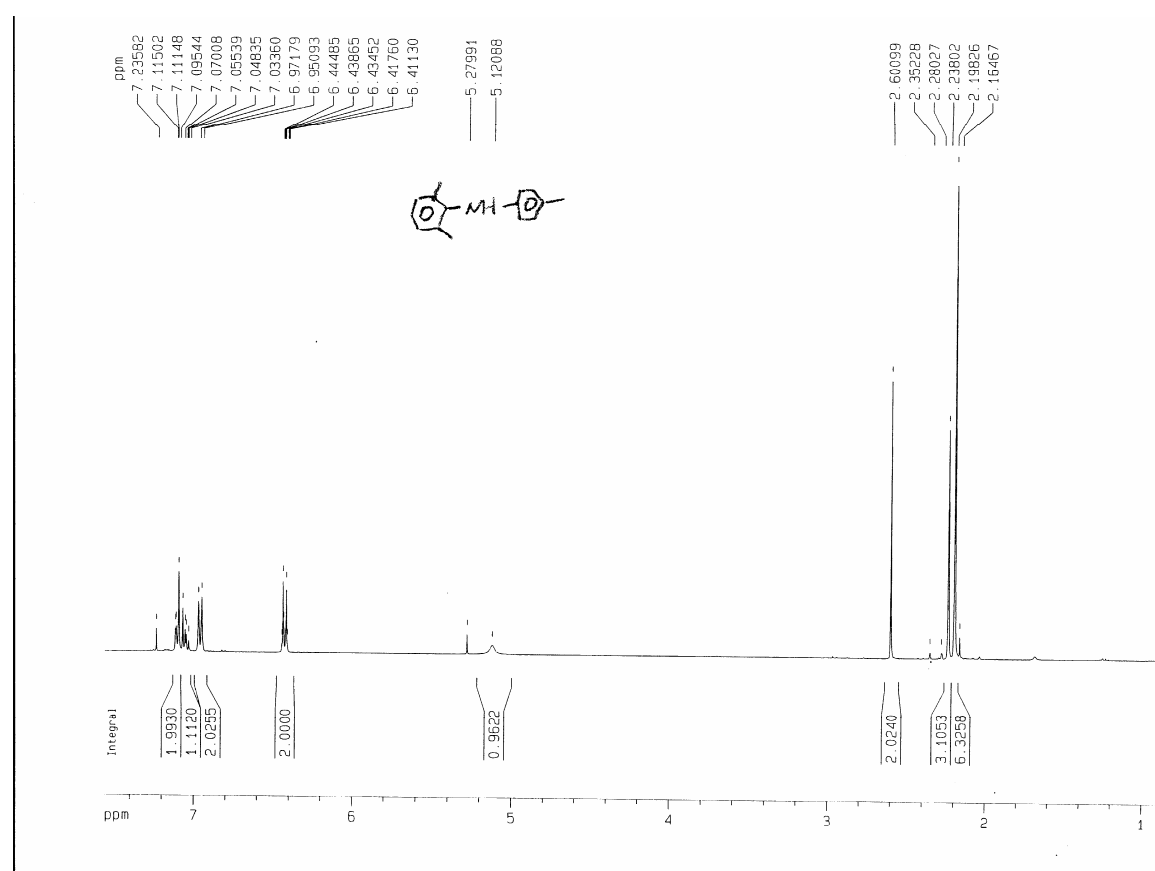
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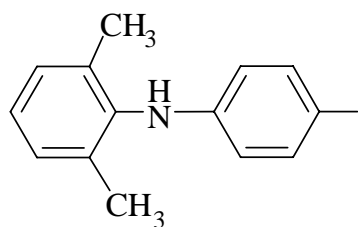
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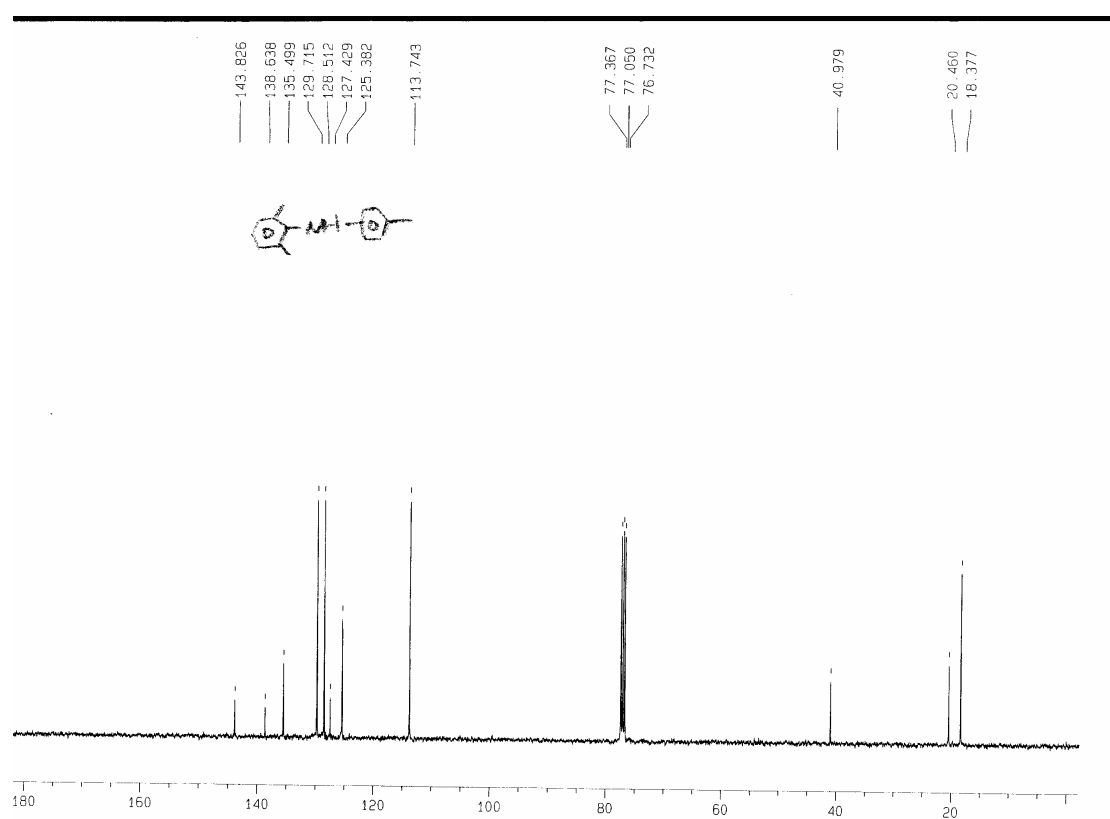
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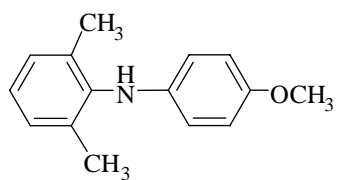
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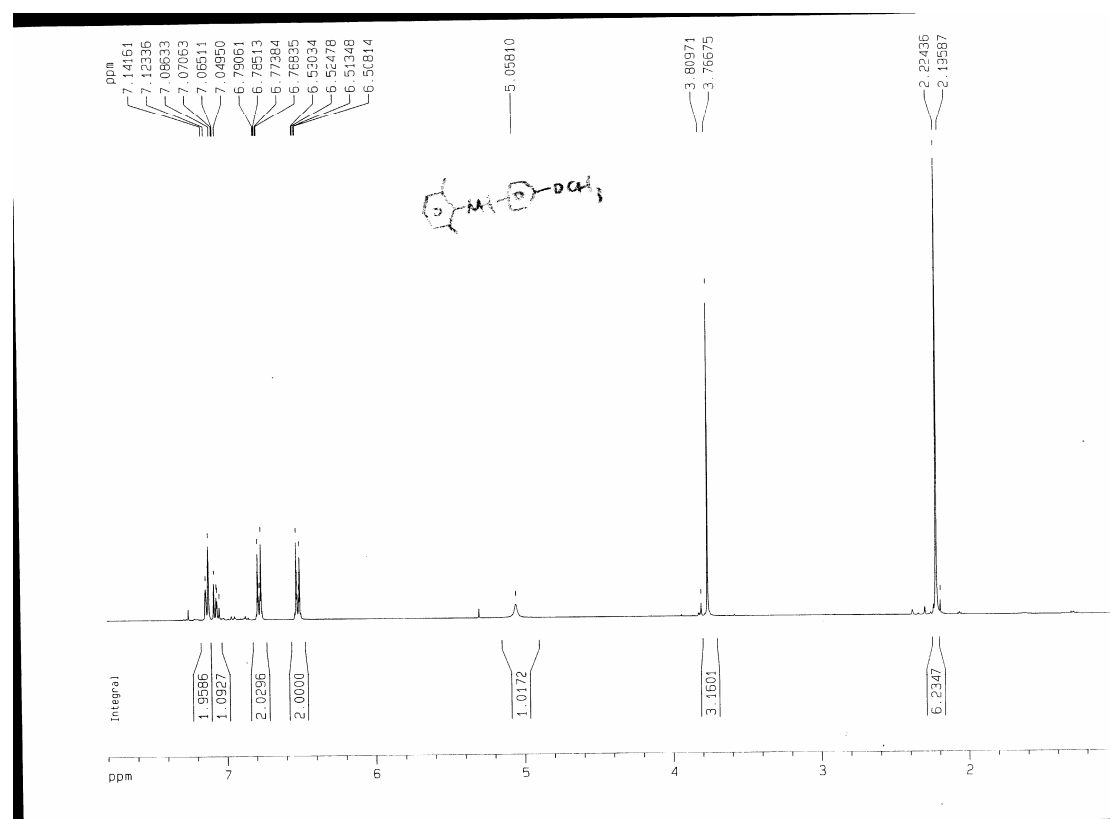
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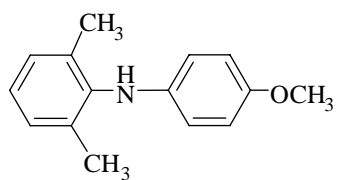
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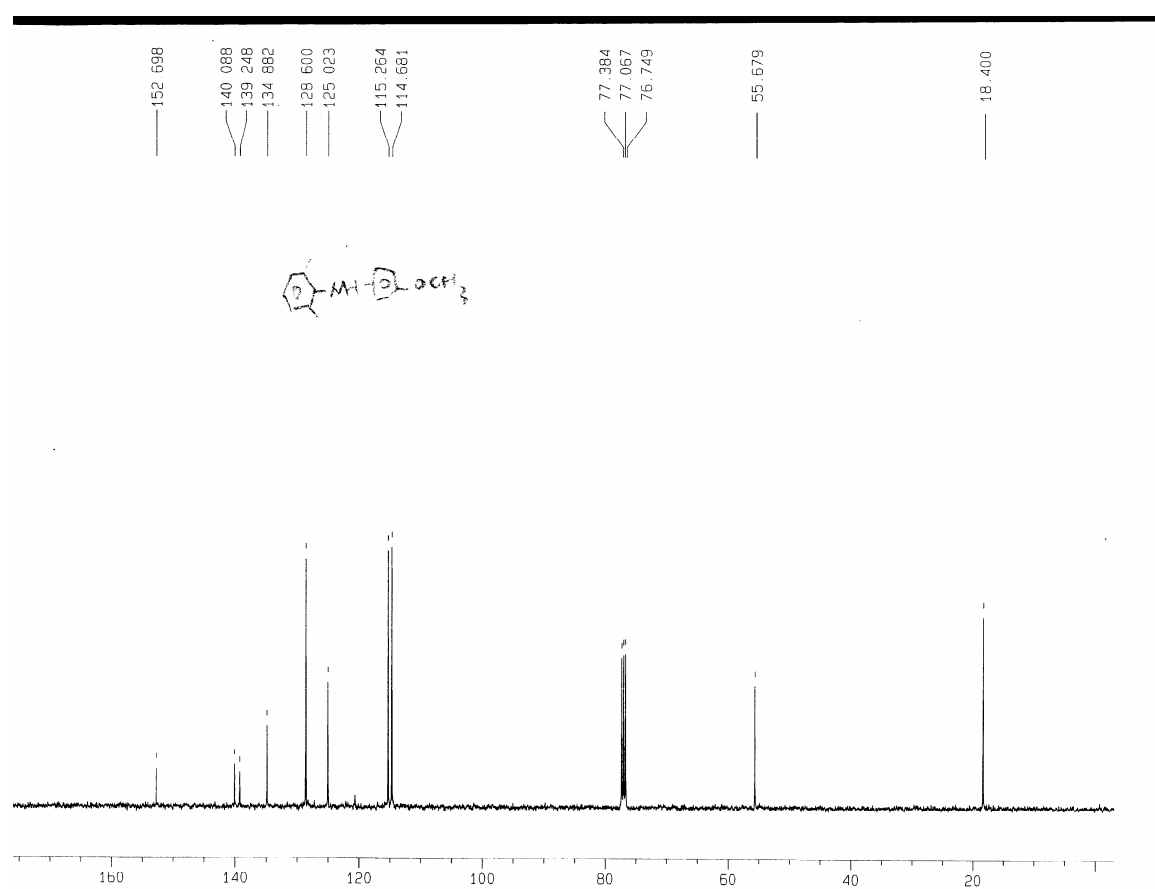
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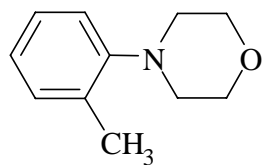
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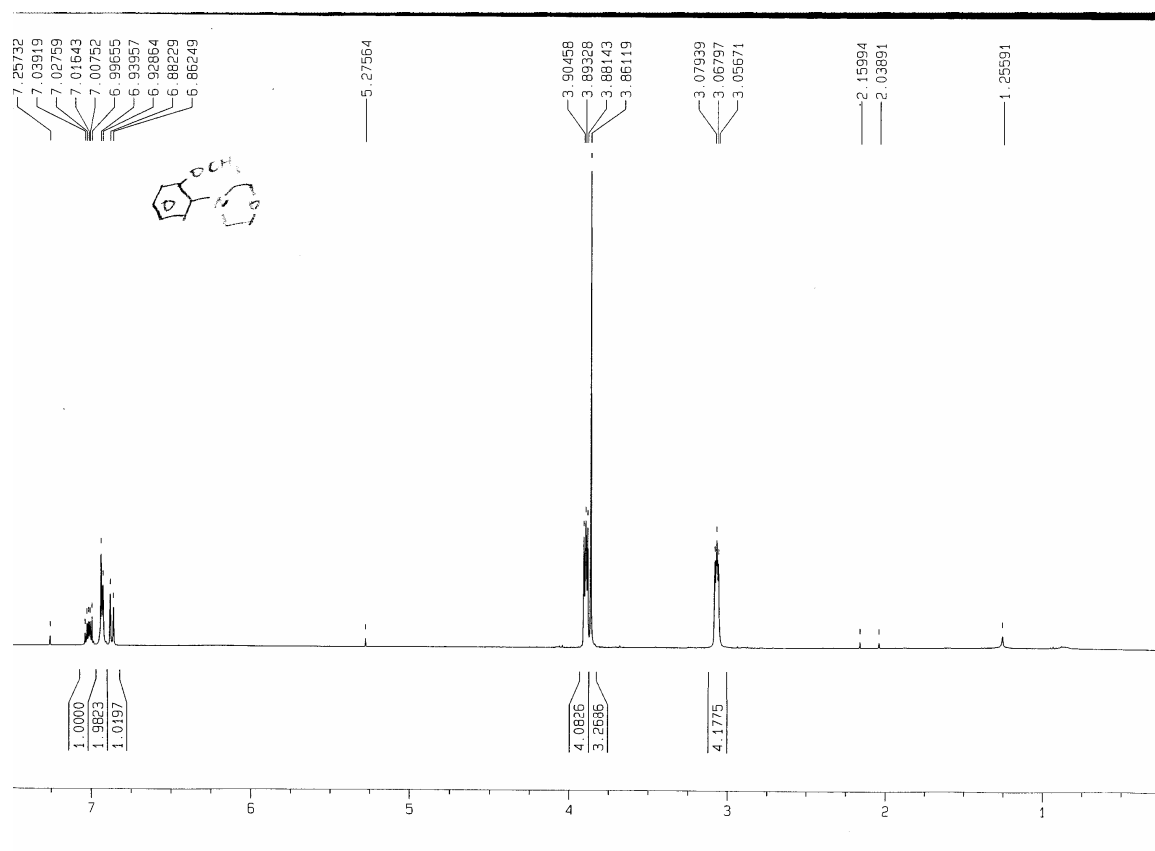
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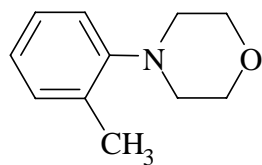


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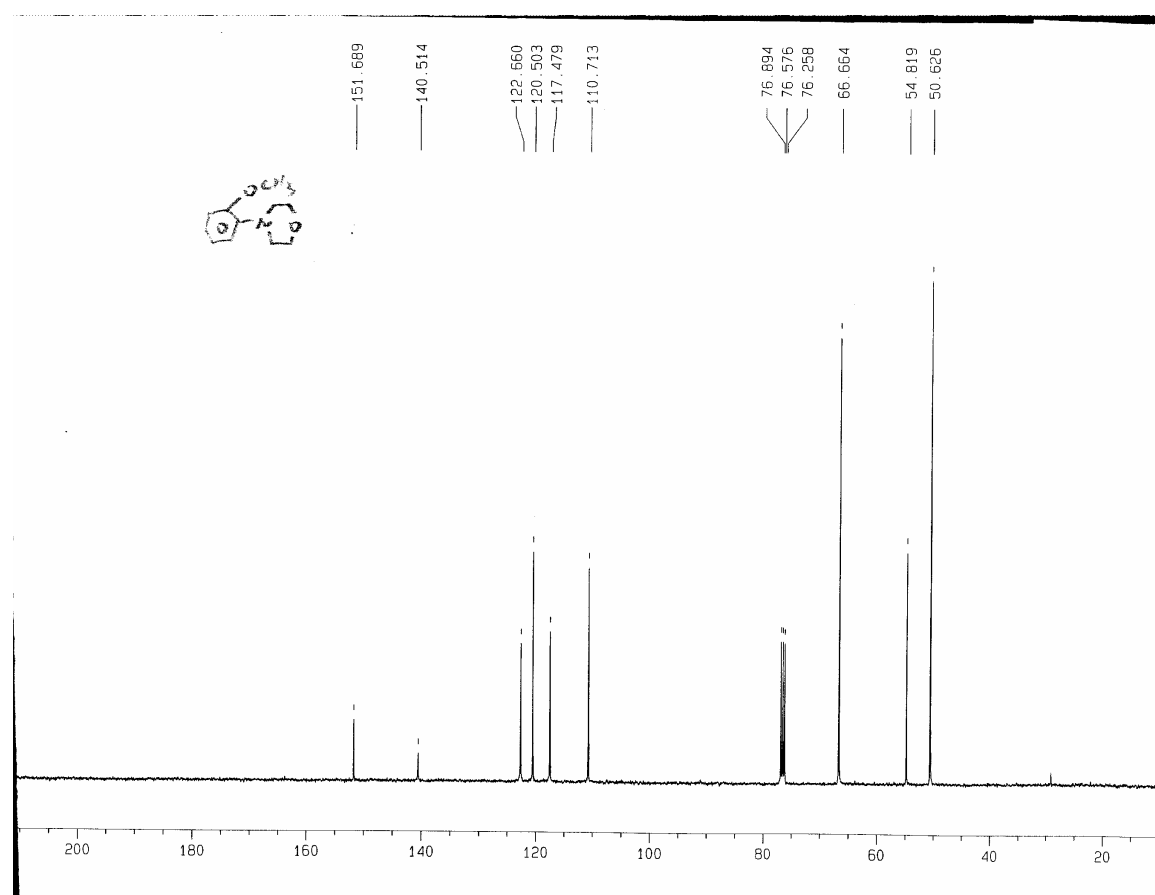




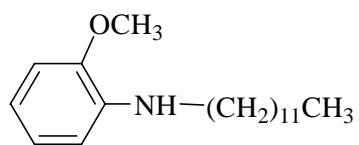
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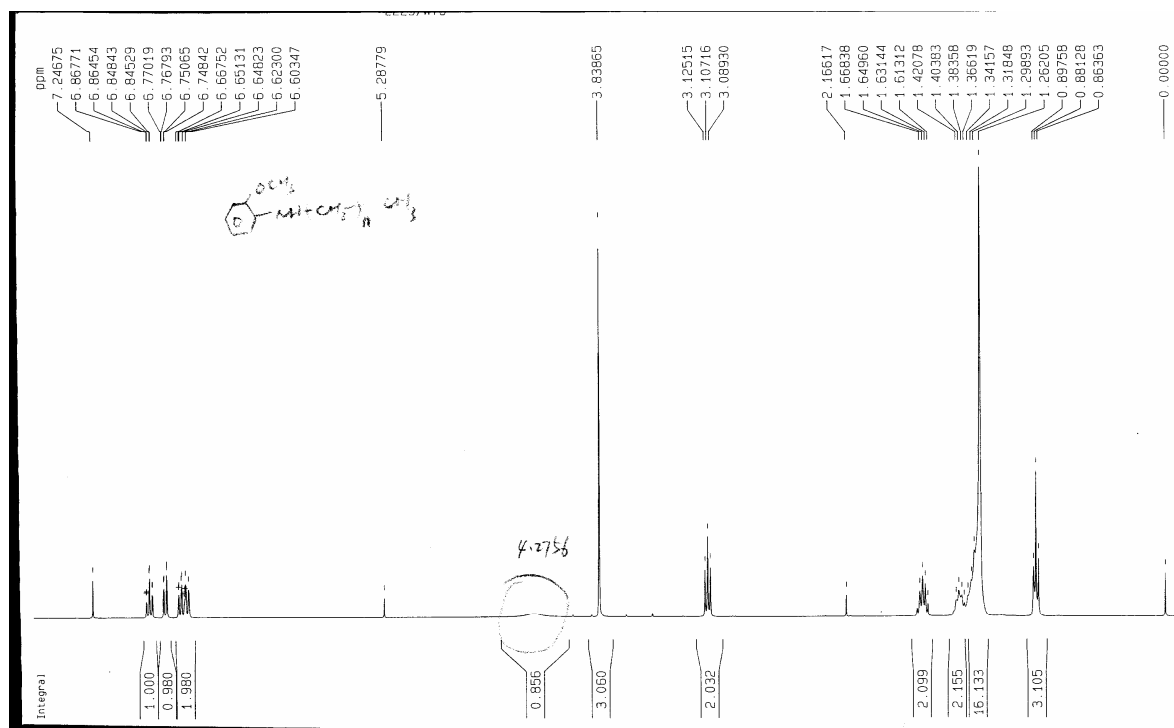
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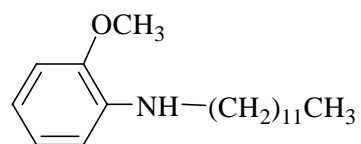
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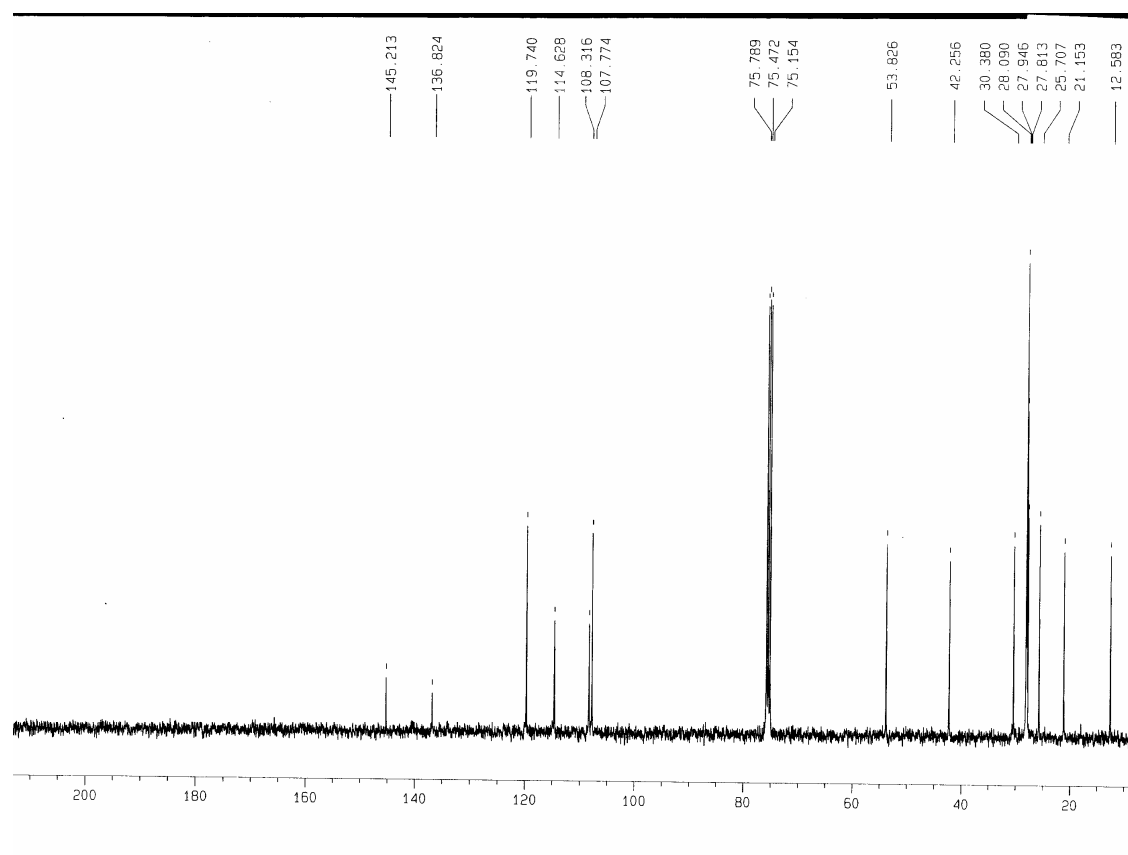
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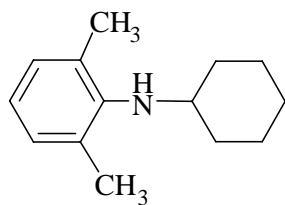
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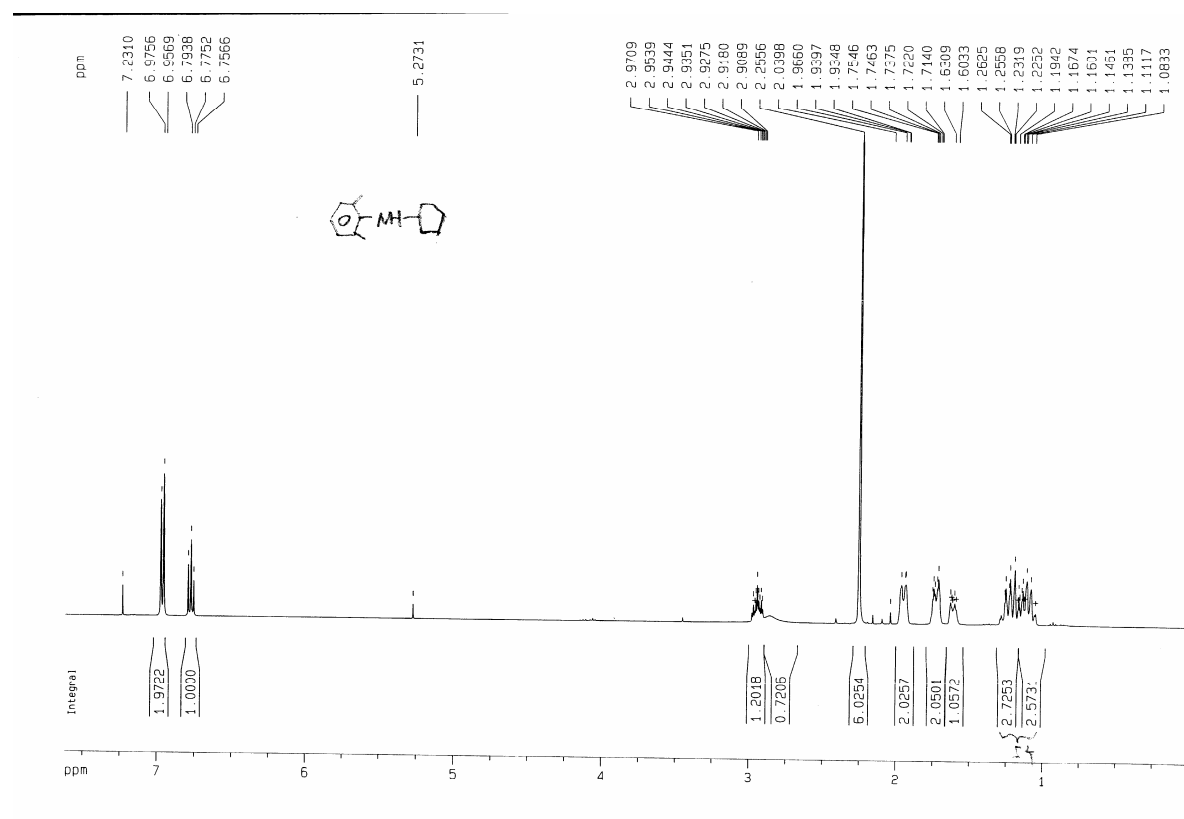
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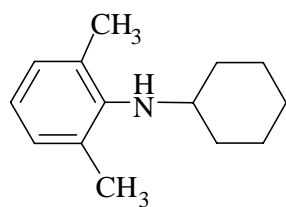
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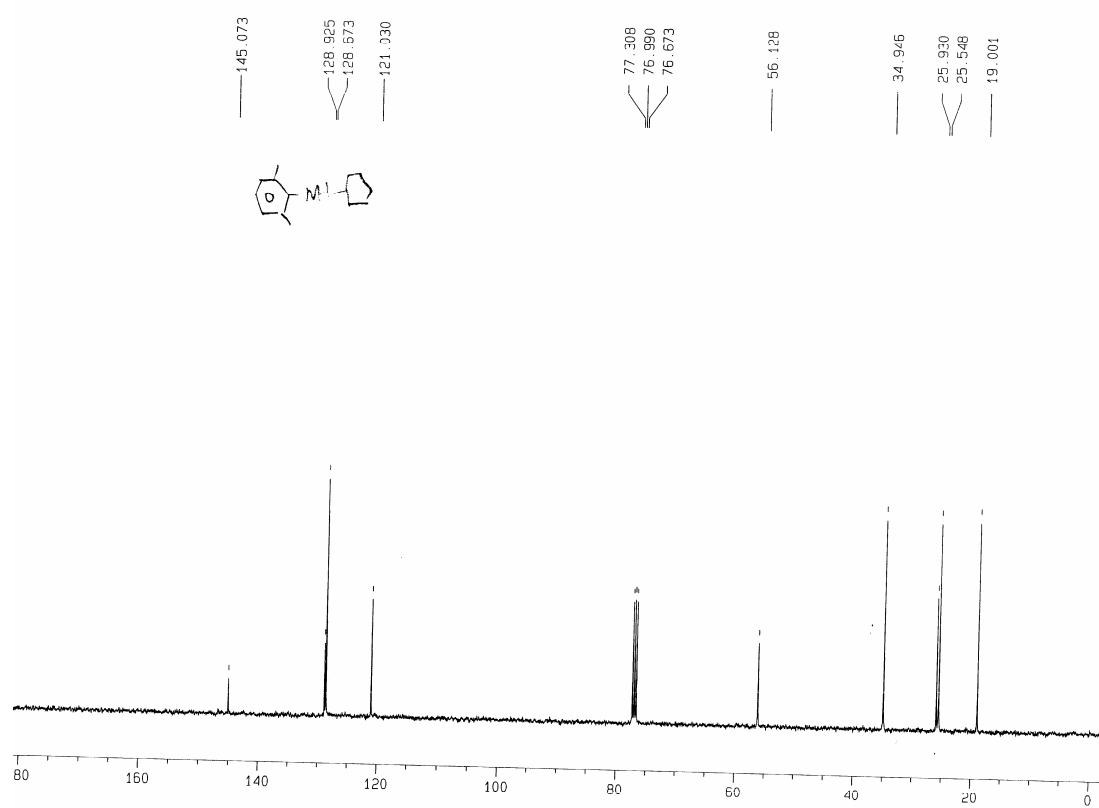
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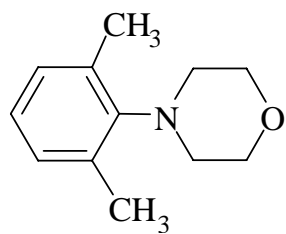
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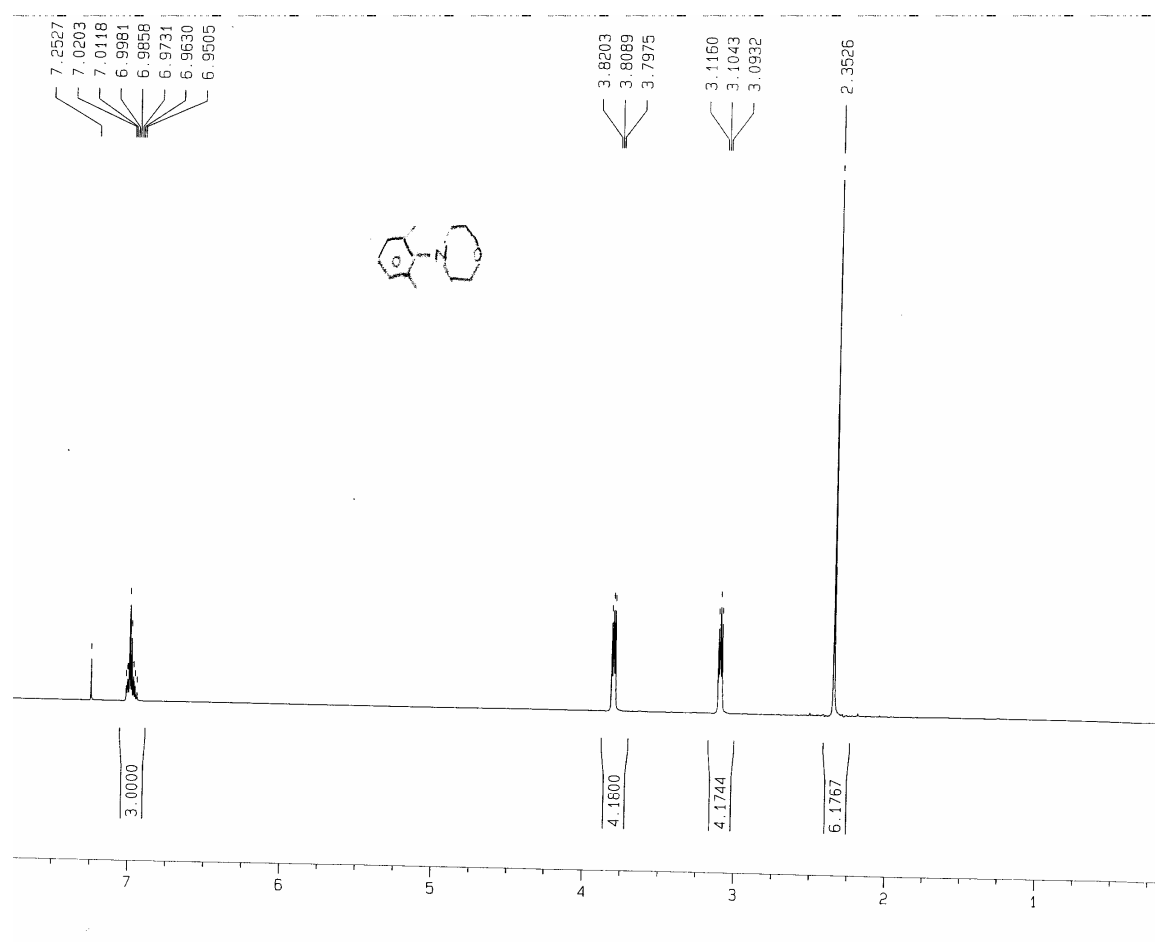
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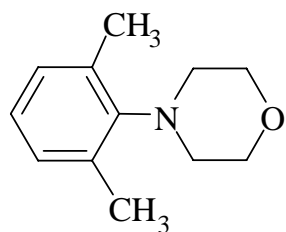
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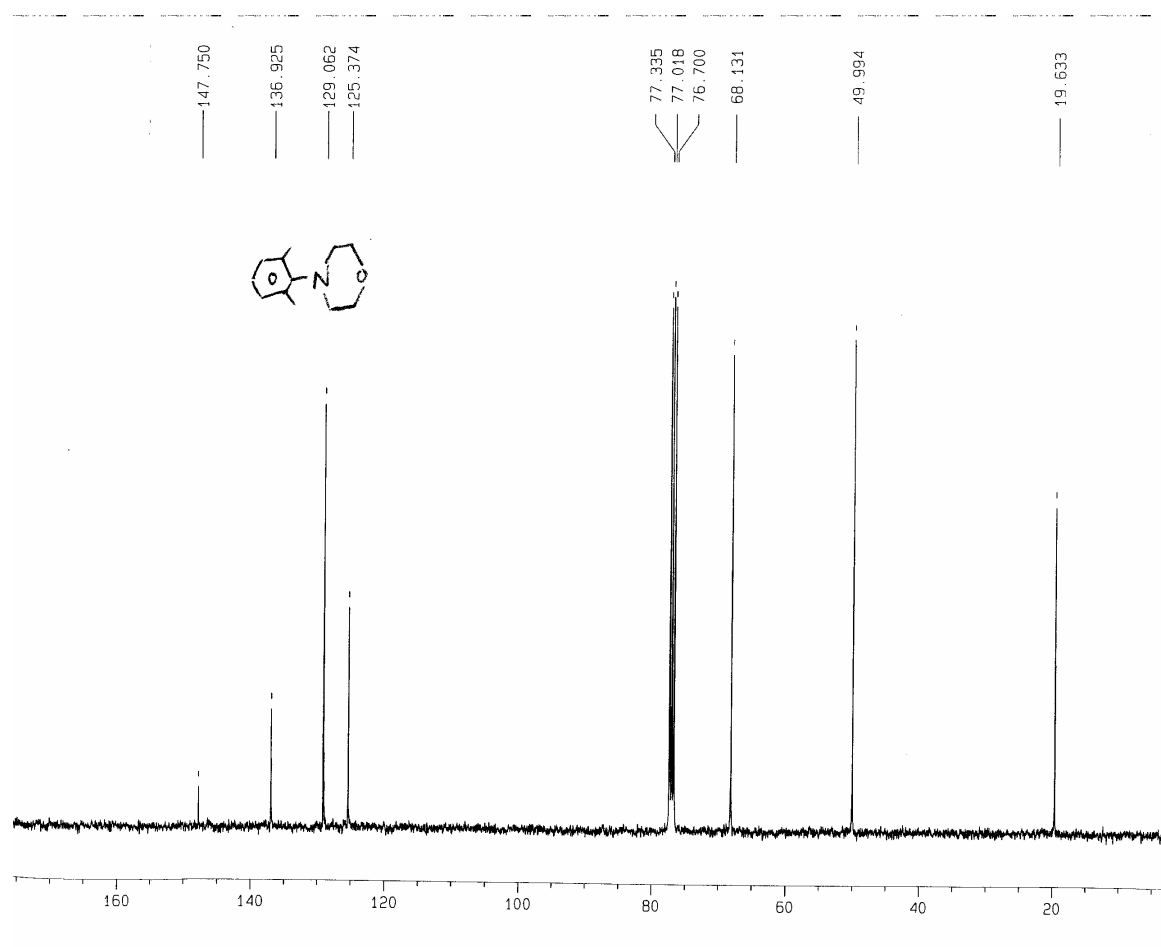
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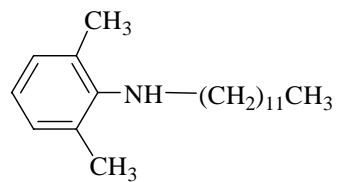
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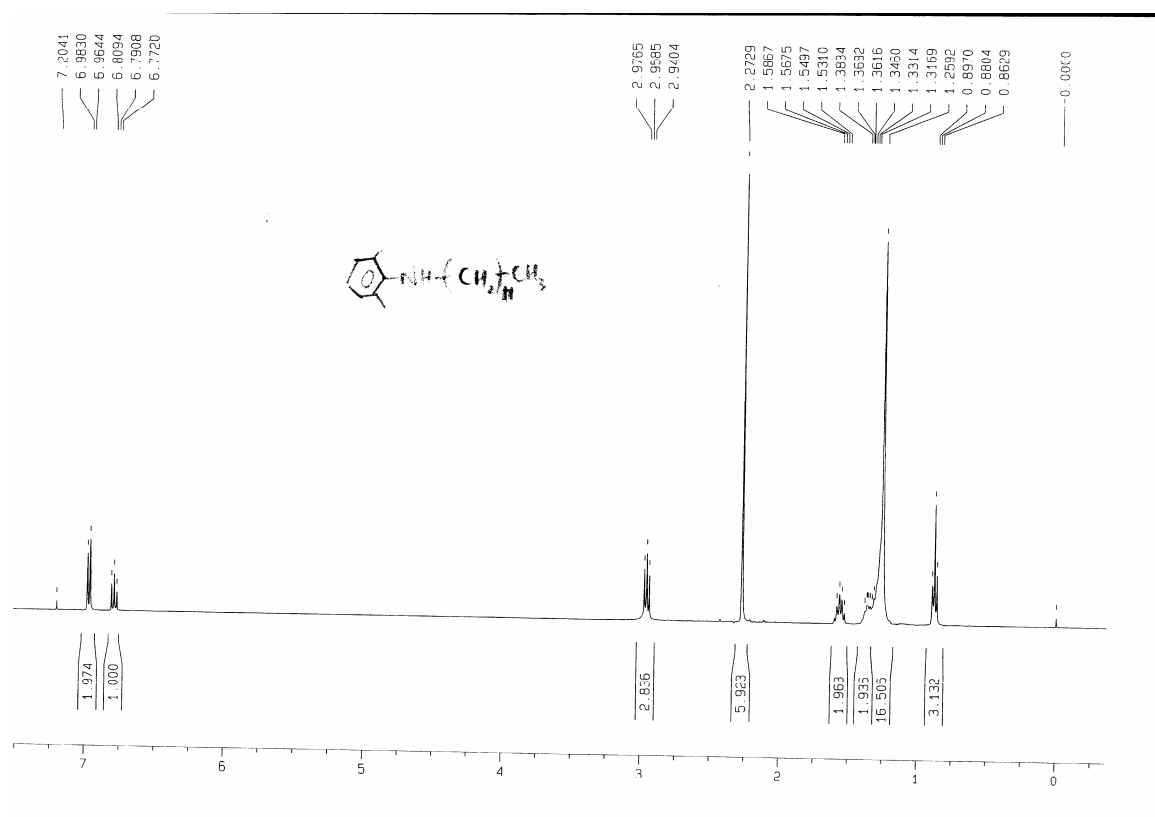
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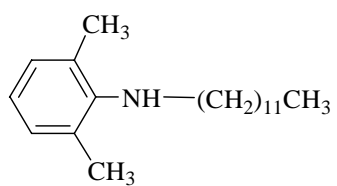


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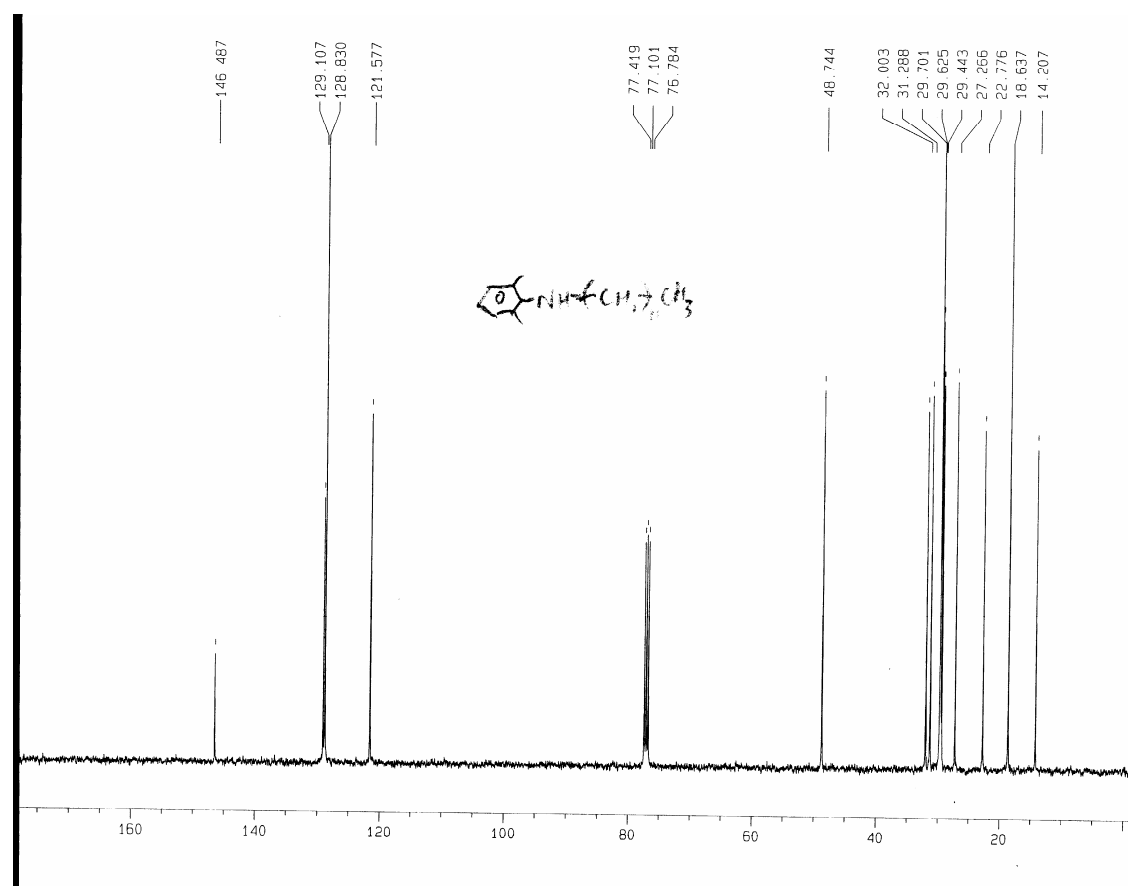




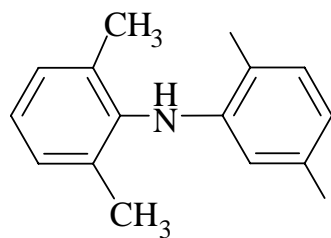
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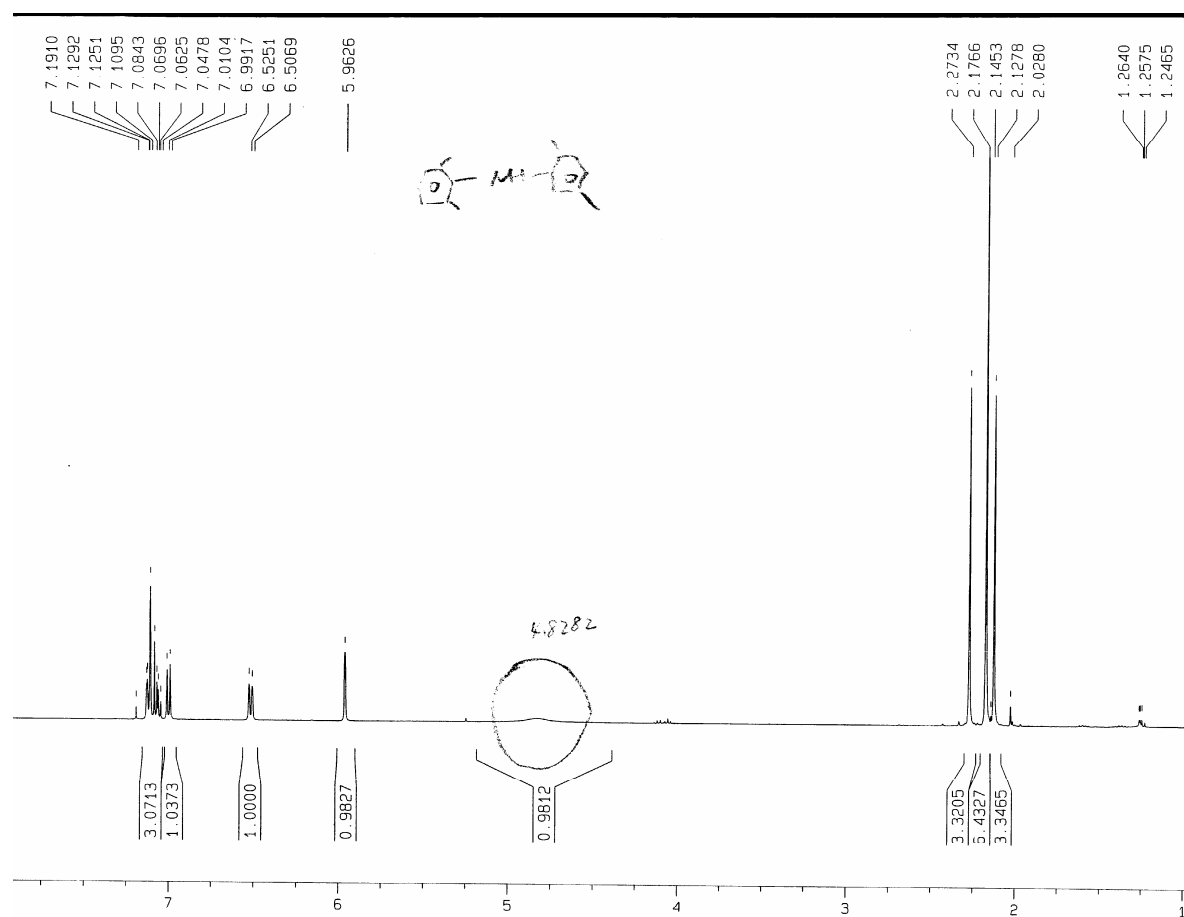
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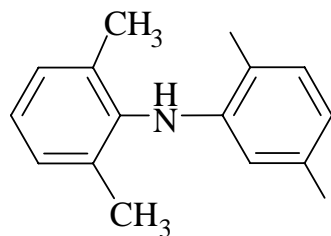
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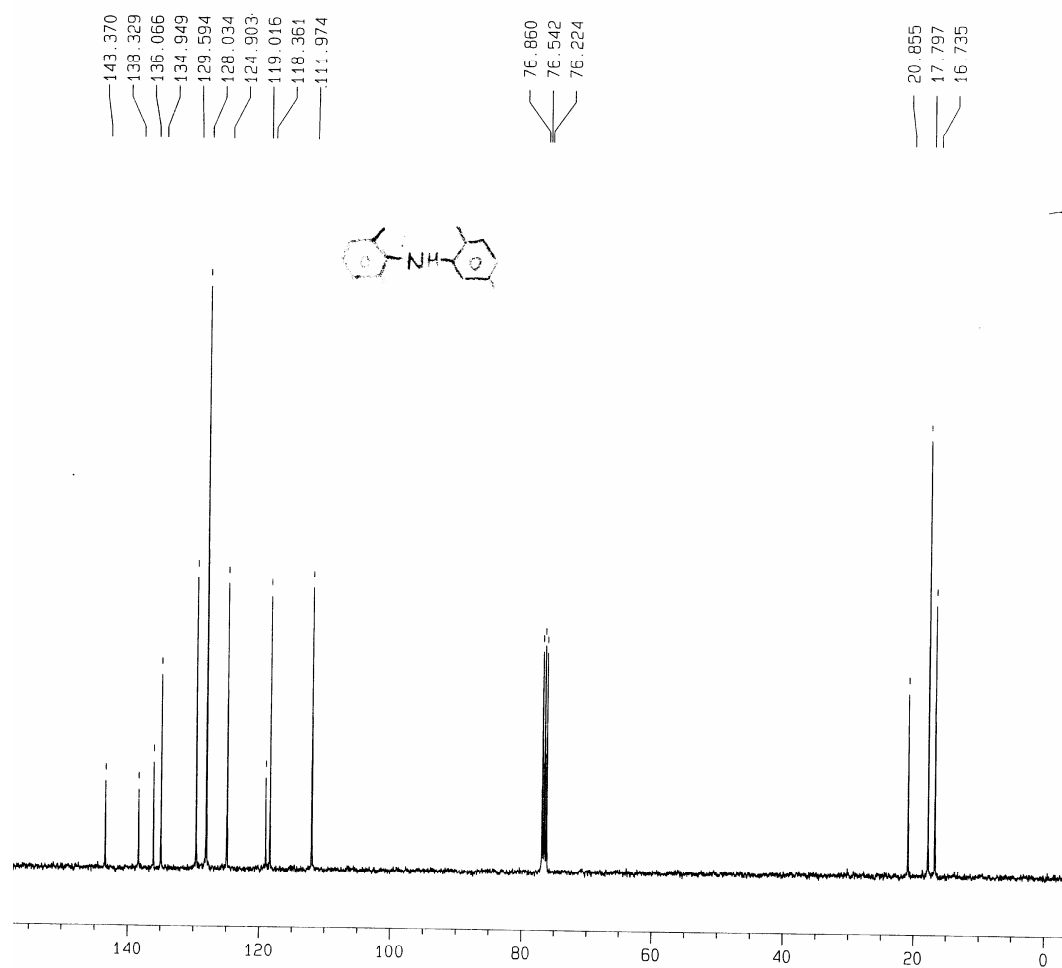
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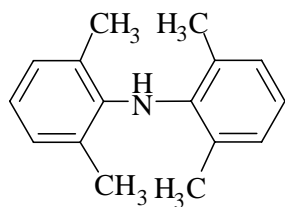
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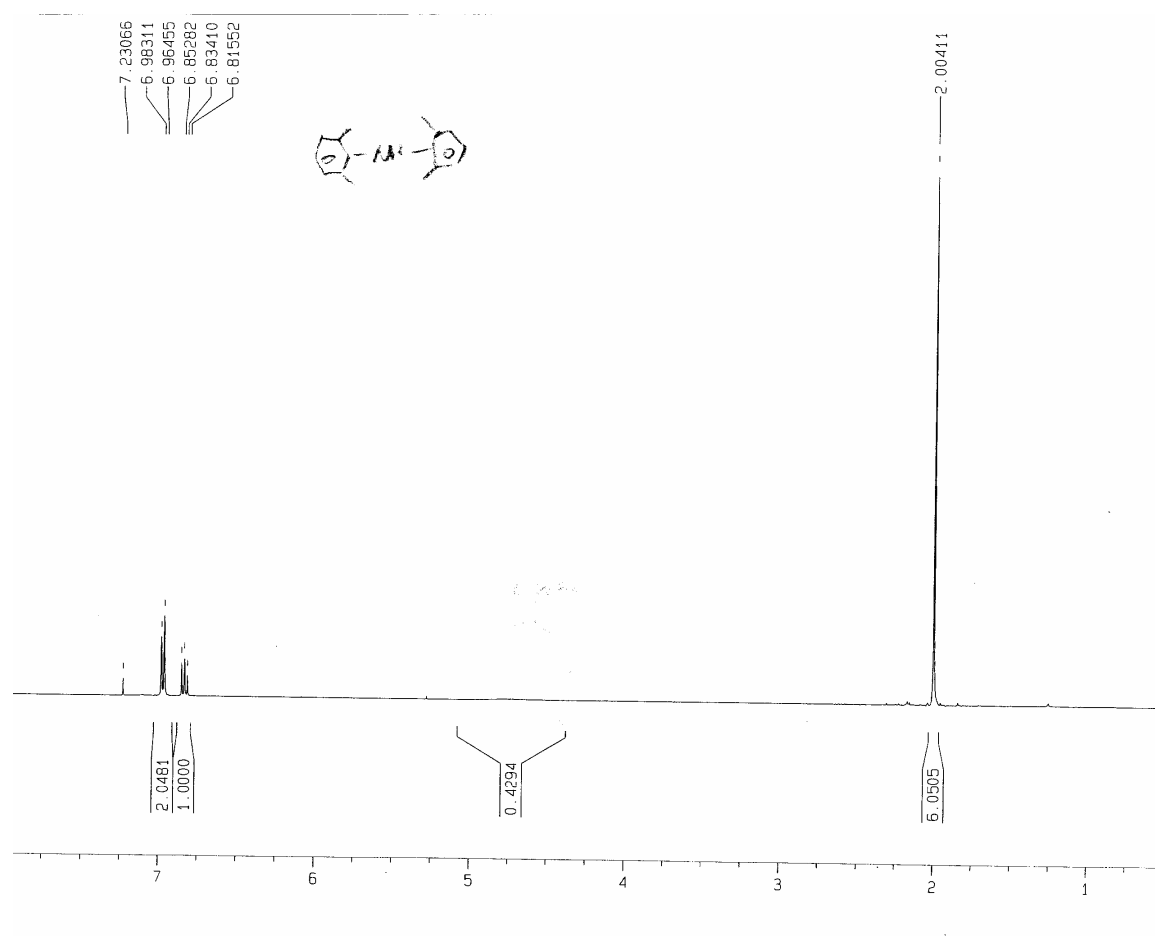
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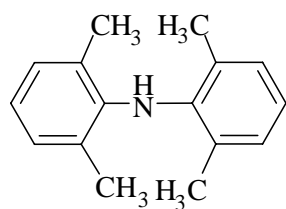
coupled product



$^1\text{H}$  NMR



coupled product



$^{13}\text{C}\{^1\text{H}\}$  NMR

