

## A Mild Procedure for the $\alpha,\alpha$ -Dichlorination of Cyclic Aryl Ketones using Commercial Bleach

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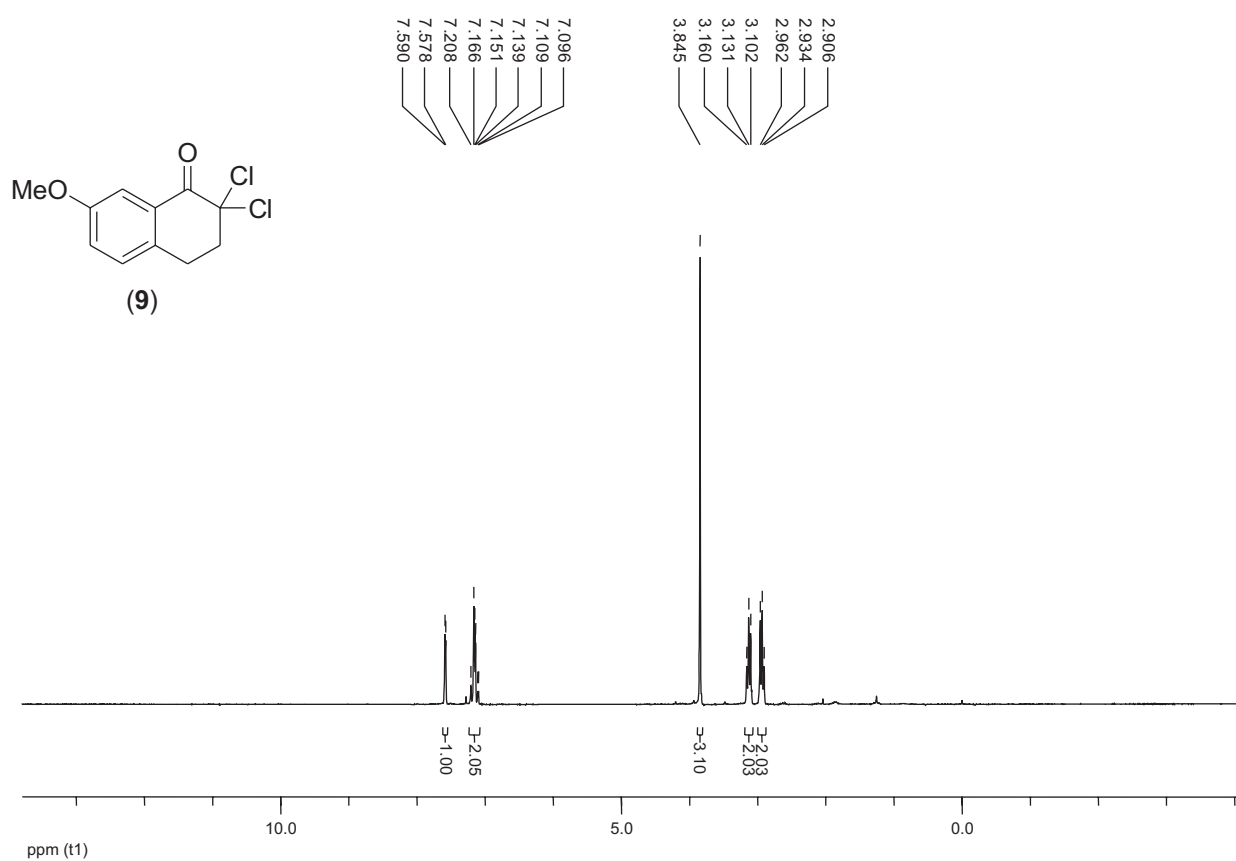


Figure S1.  $^1\text{H}$  NMR spectrum (200 MHz,  $\text{CDCl}_3$ ) of compound 9.

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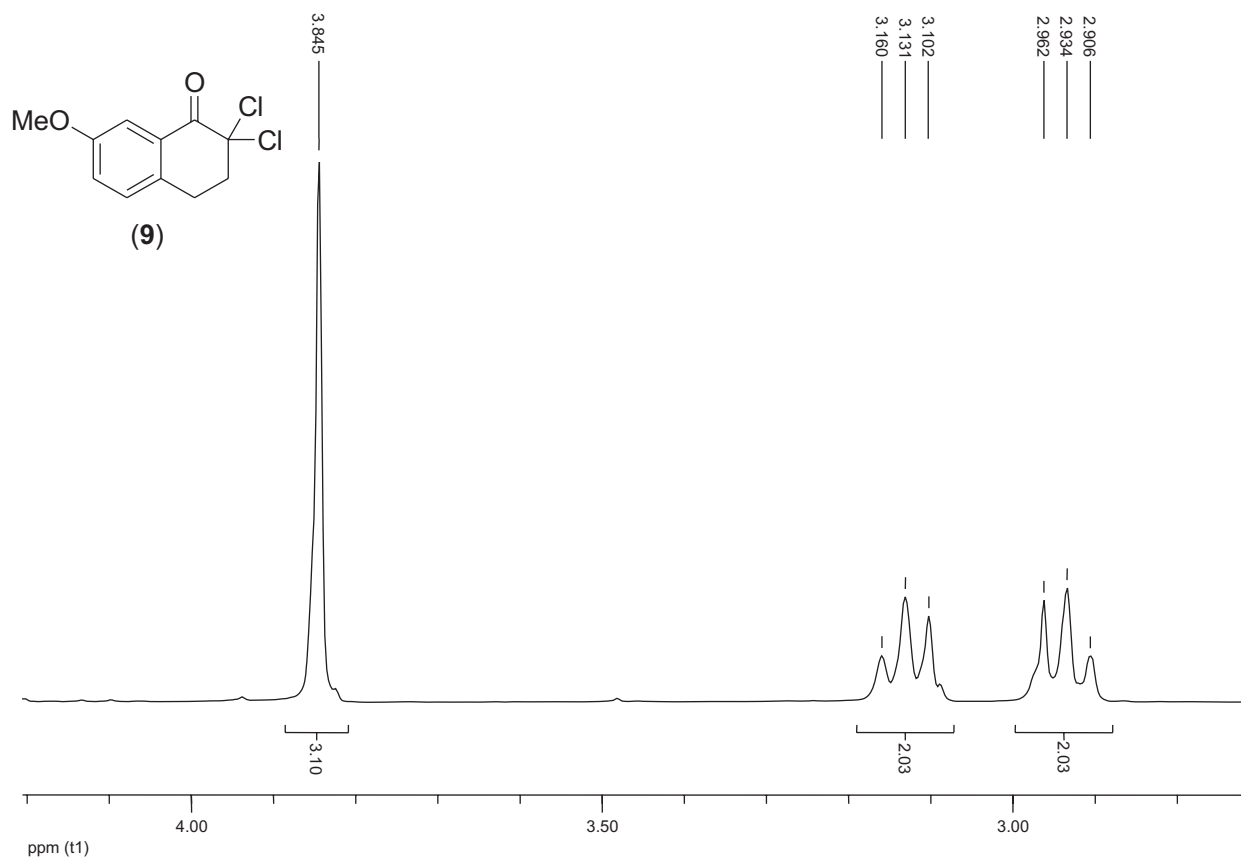


Figure S2. Detail of the <sup>1</sup>H NMR spectrum (200 MHz, CDCl<sub>3</sub>) of compound 9.

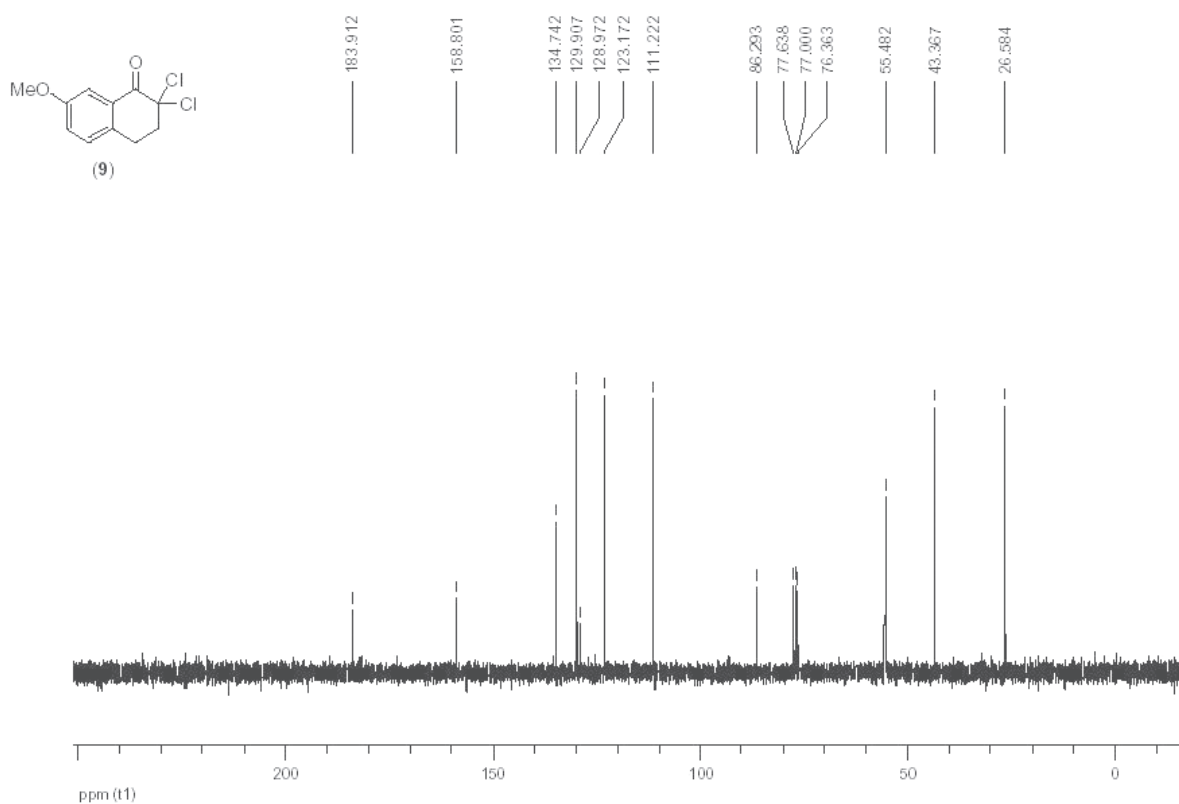


Figure S3. <sup>13</sup>C NMR spectrum (50 MHz, CDCl<sub>3</sub>) of compound 9.

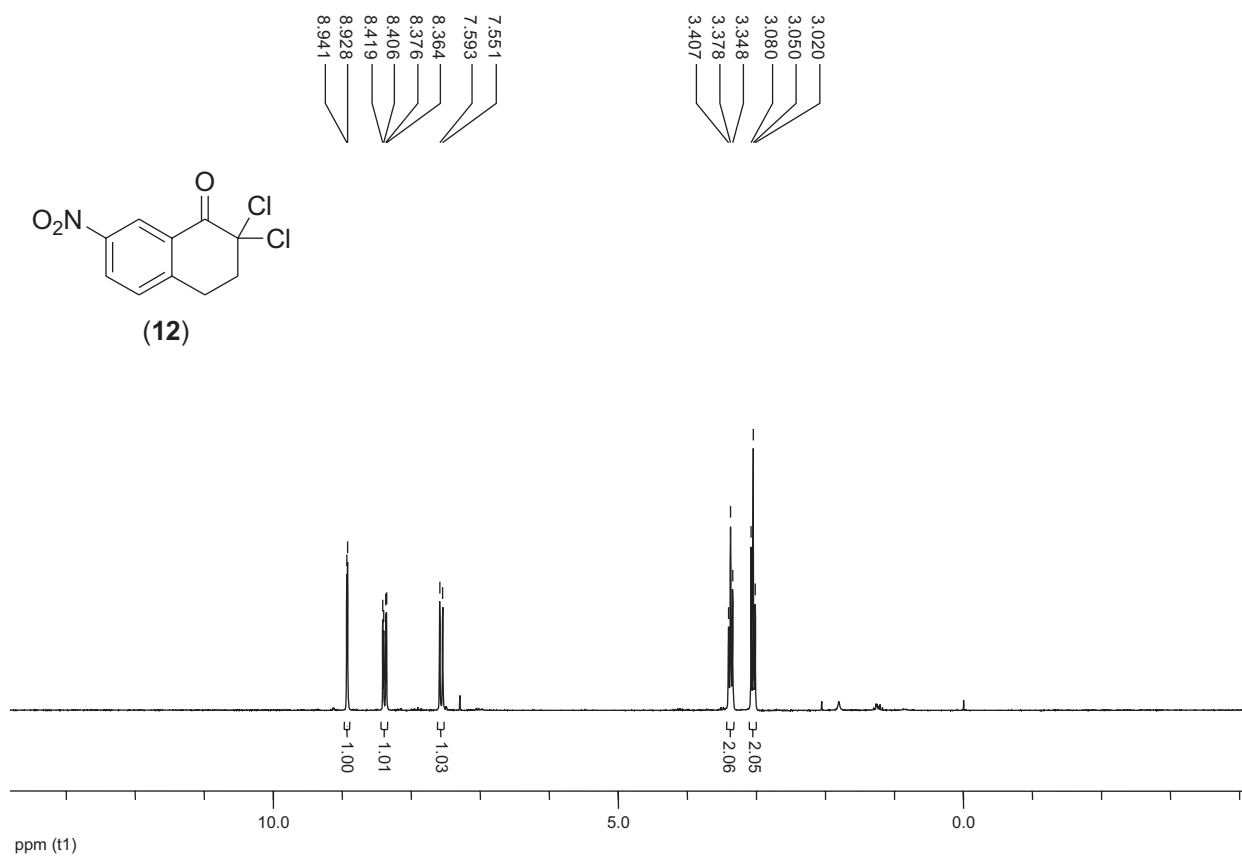


Figure S4. <sup>1</sup>H NMR spectrum (200 MHz, CDCl<sub>3</sub>) of compound 12.

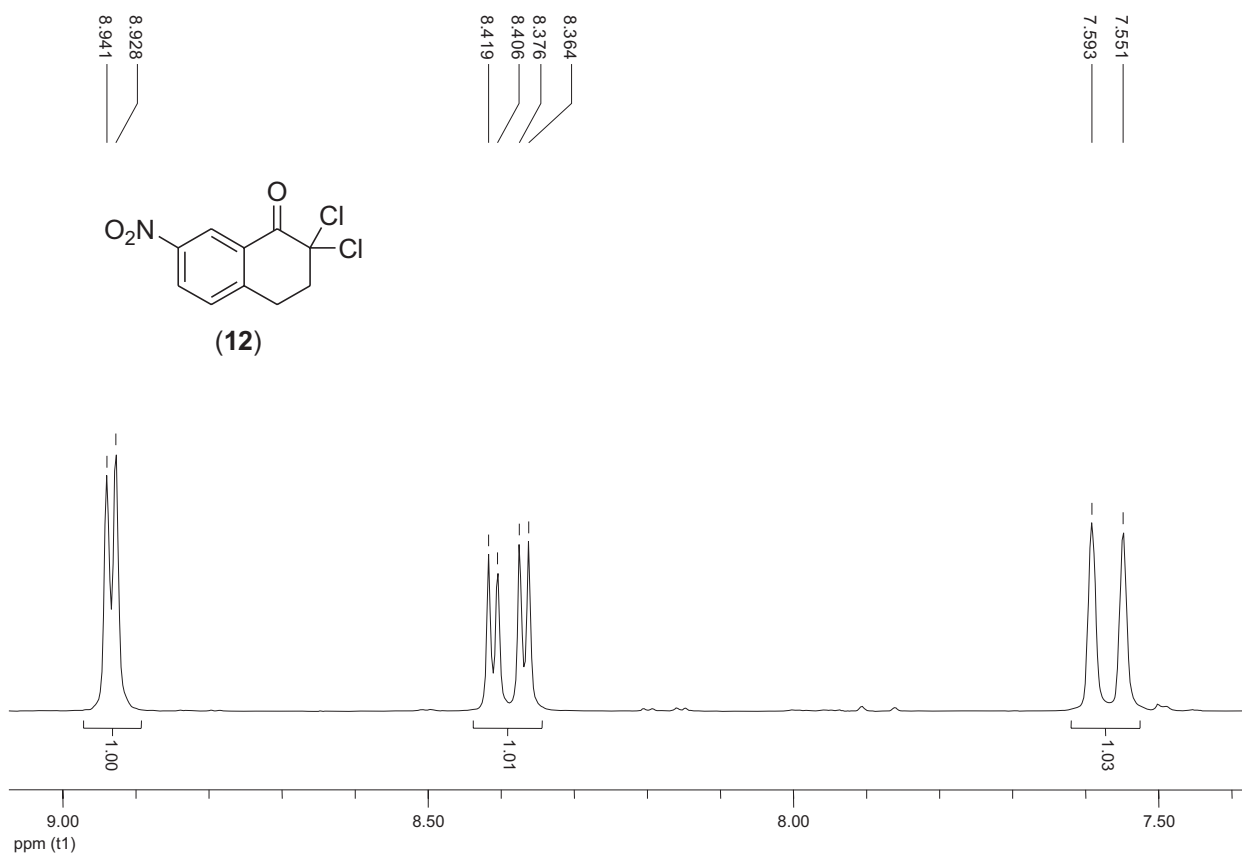
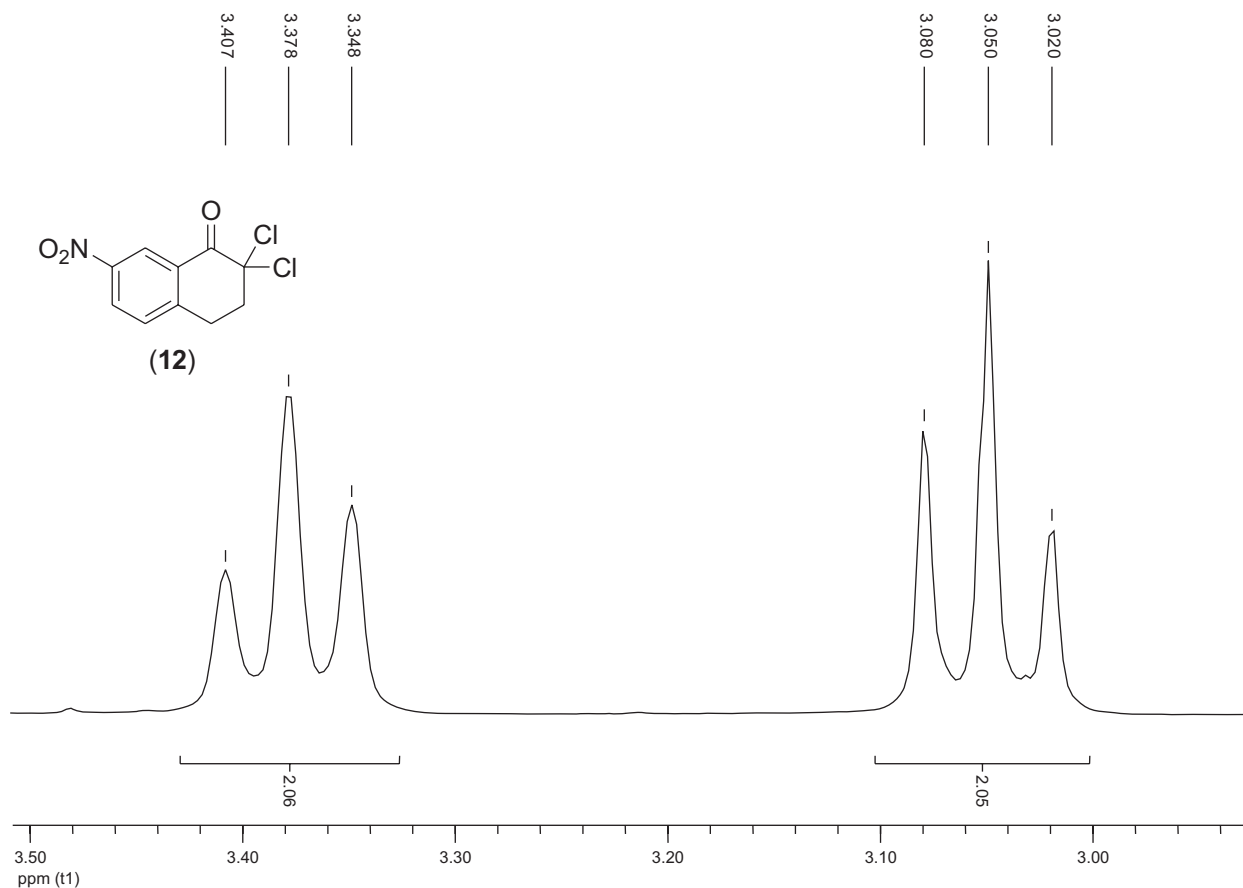
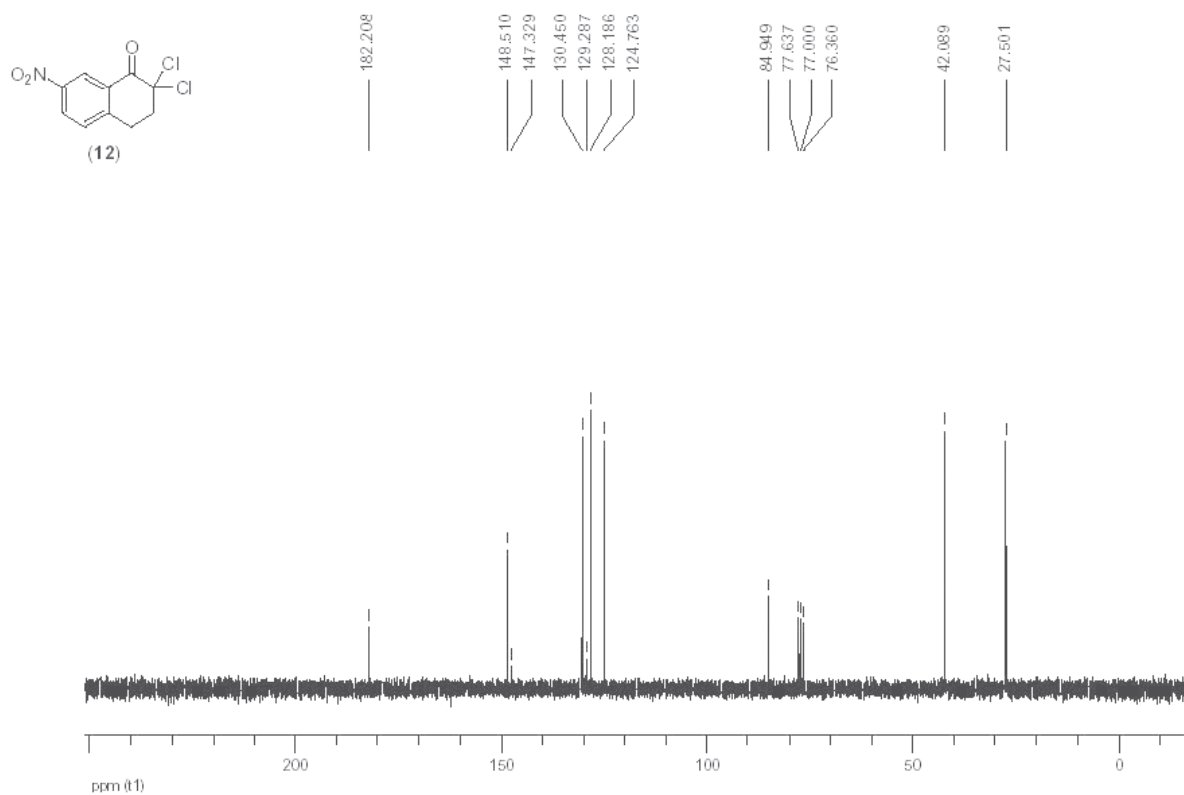


Figure S5. Detail of the <sup>1</sup>H NMR spectrum (200 MHz, CDCl<sub>3</sub>) of compound 12.



**Figure S6.** Detail of the  $^1\text{H NMR}$  spectrum (200 MHz,  $\text{CDCl}_3$ ) of compound **12**.



**Figure S7.**  $^{13}\text{C NMR}$  spectrum (50 MHz,  $\text{CDCl}_3$ ) of compound **12**.

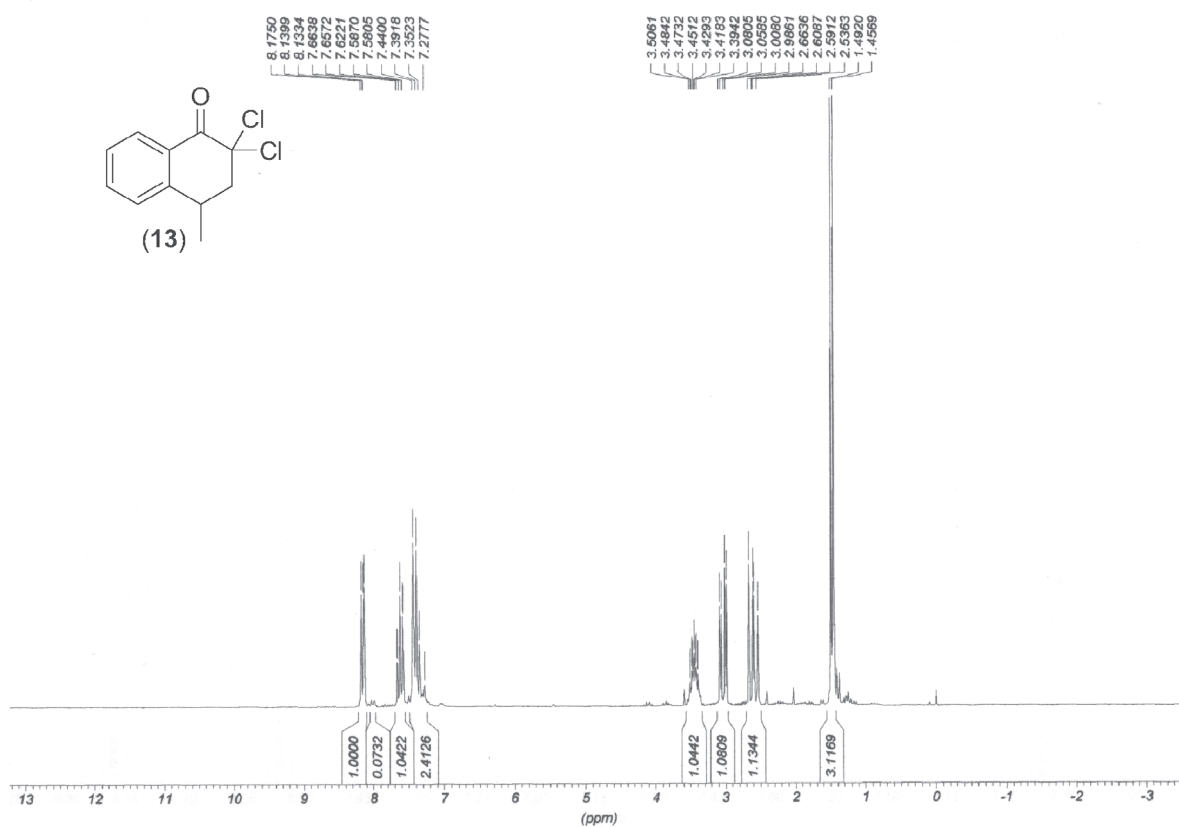


Figure S8. <sup>1</sup>H NMR spectrum (200 MHz, CDCl<sub>3</sub>) of compound 13.

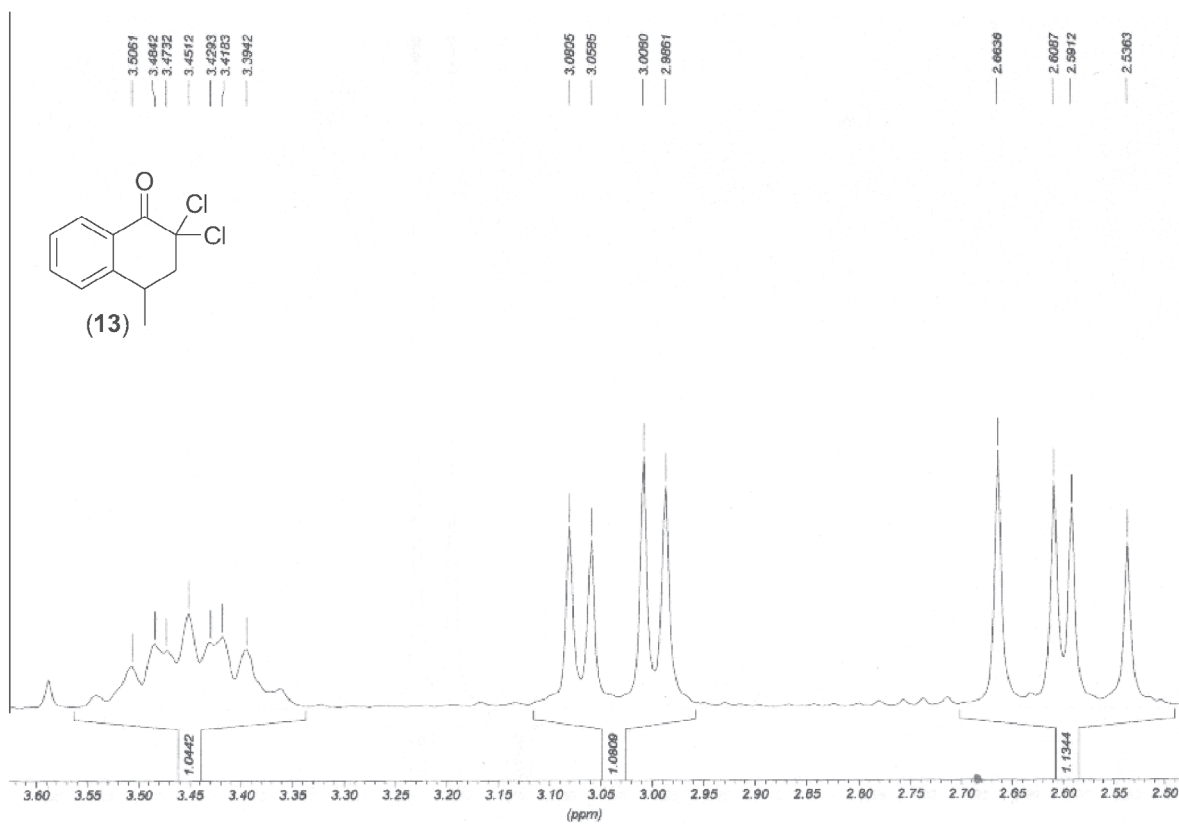
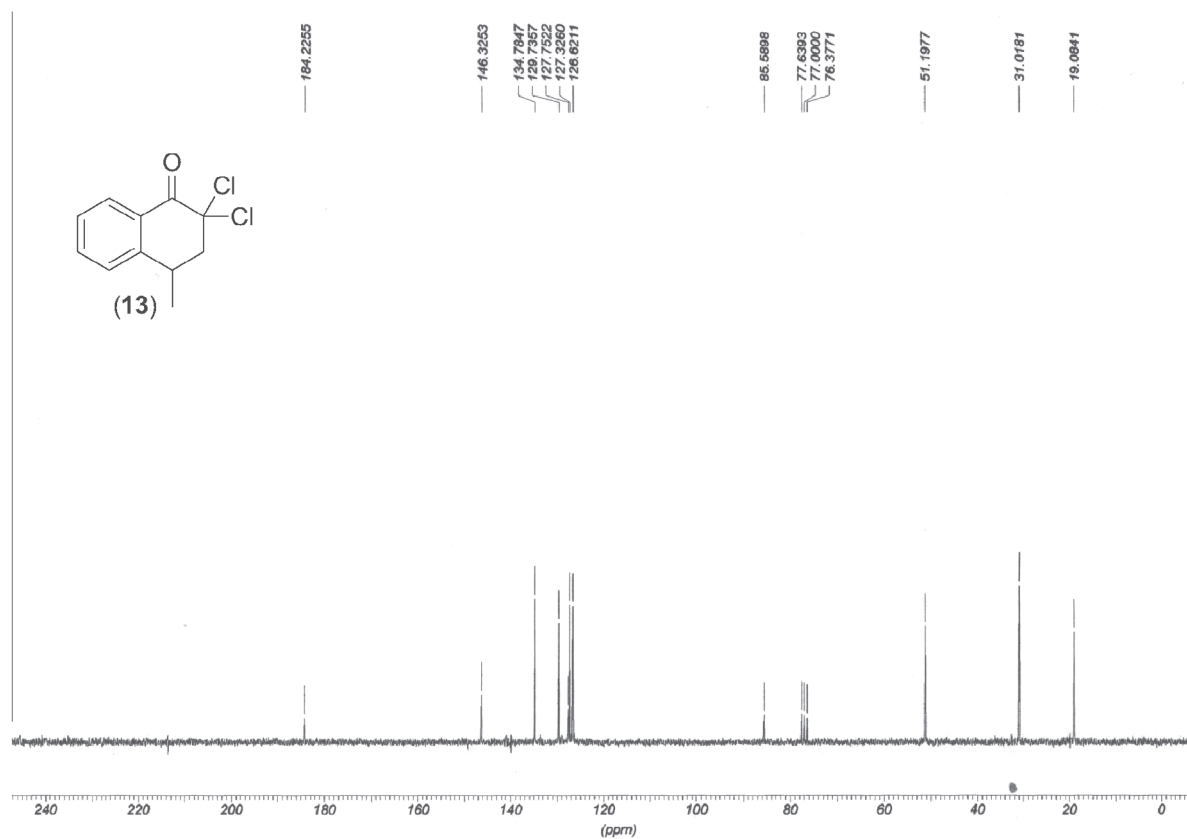
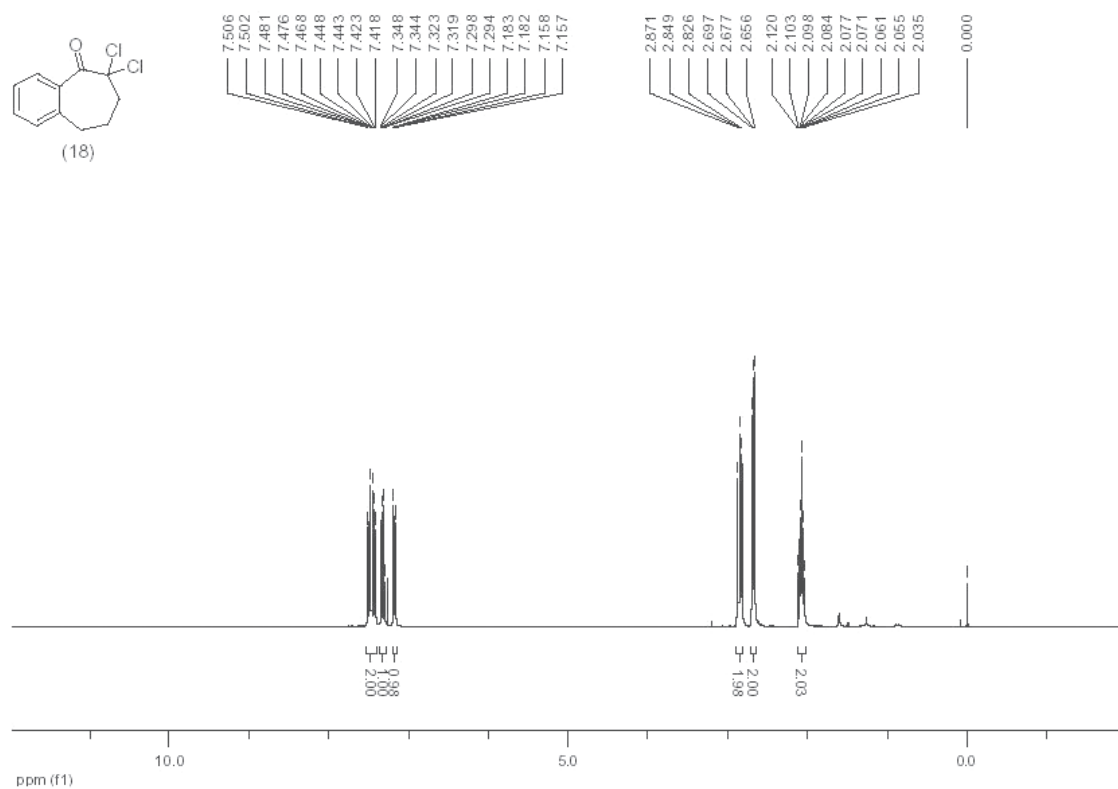


Figure S9. Detail of the <sup>1</sup>H NMR spectrum (200 MHz, CDCl<sub>3</sub>) of compound 13.

Figure S10.  $^{13}\text{C}$  NMR spectrum (50 MHz,  $\text{CDCl}_3$ ) of compound 13.Figure S11.  $^1\text{H}$  NMR spectrum (200 MHz,  $\text{CDCl}_3$ ) of compound 18.

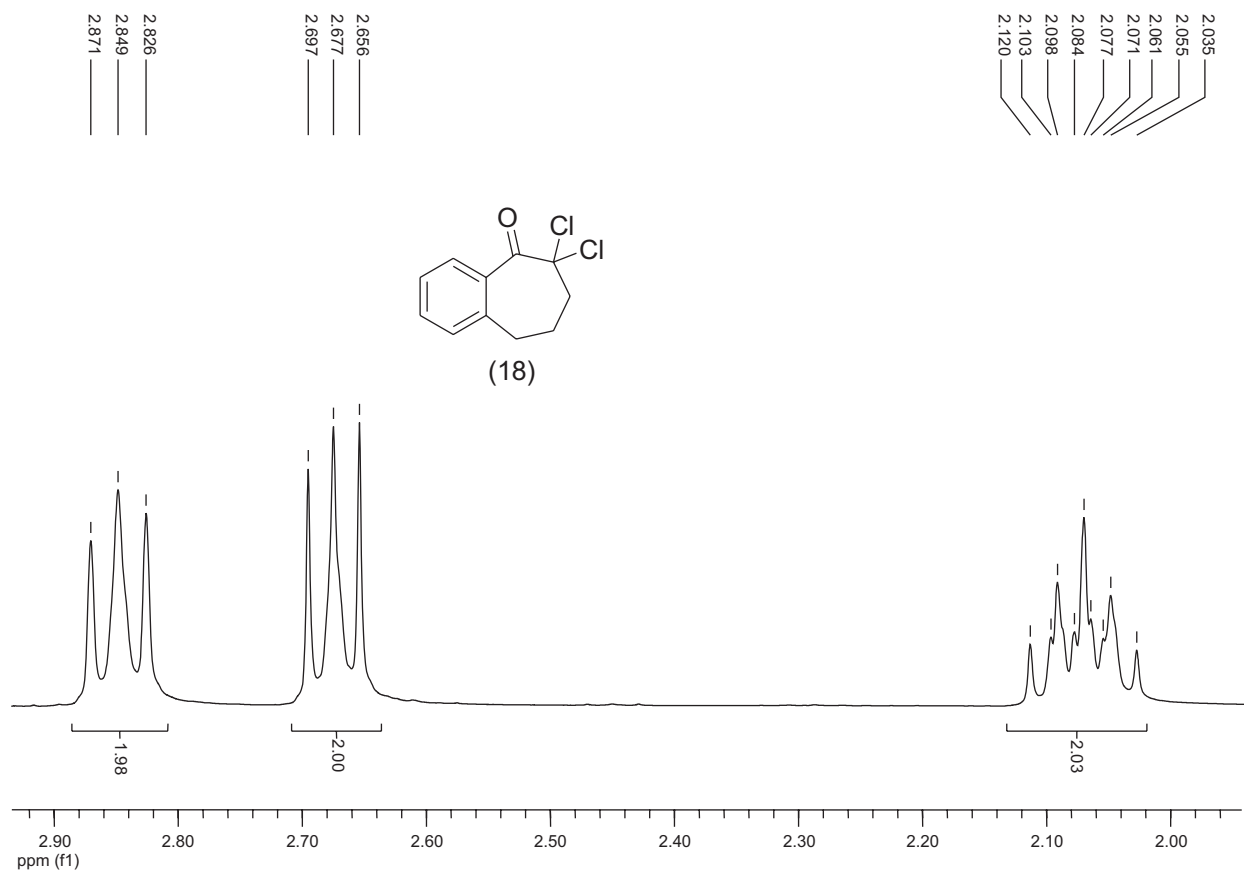


Figure S12. Detail of the  $^1\text{H}$  NMR spectrum (200 MHz,  $\text{CDCl}_3$ ) of compound 18.

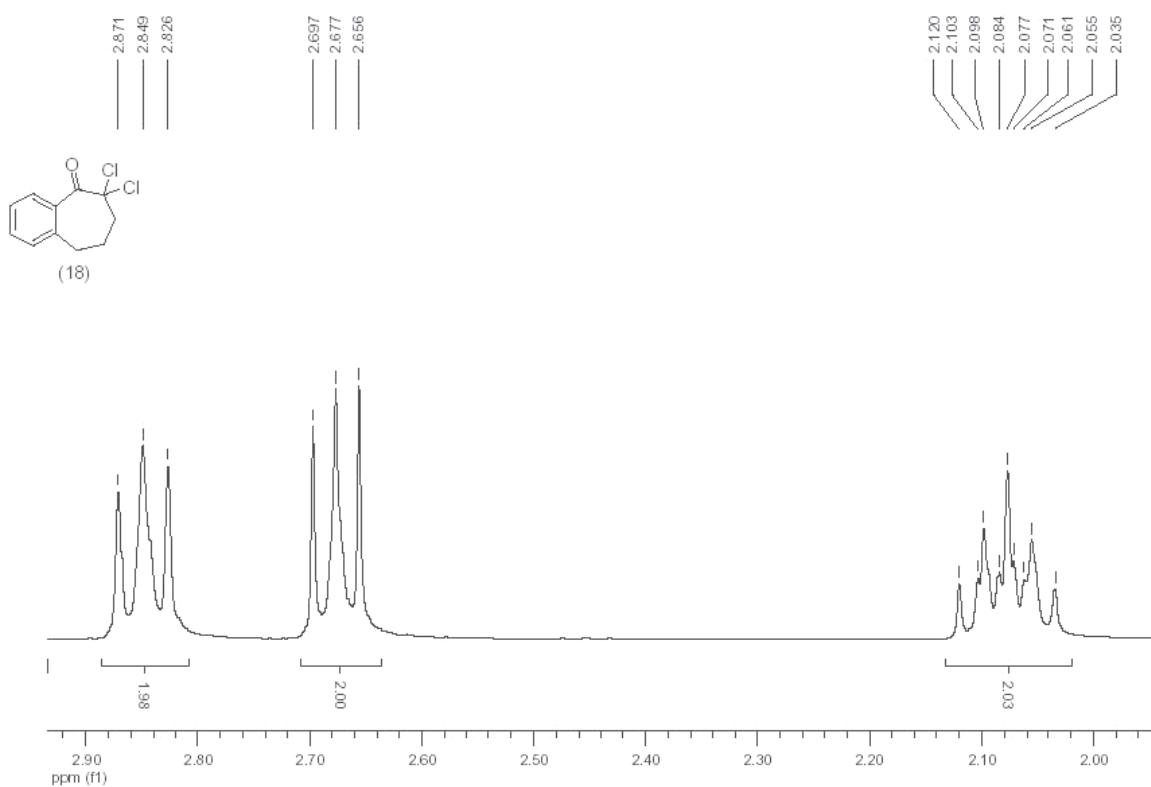
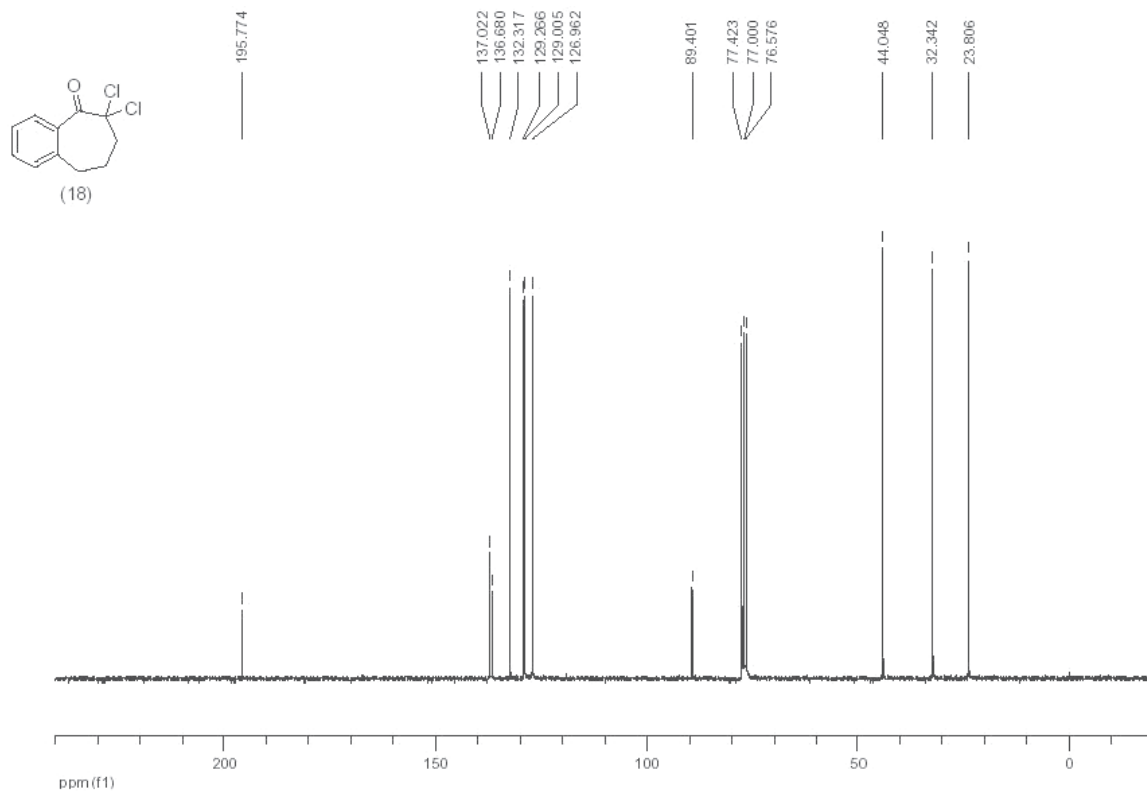


Figure S13. Detail of the  $^1\text{H}$  NMR spectrum (200 MHz,  $\text{CDCl}_3$ ) of compound 18.



**Figure S14.**  $^{13}\text{C}$  NMR spectrum (50 MHz,  $\text{CDCl}_3$ ) of compound 18.