

Supporting Information for

**Synthesis of Cyclic Monothiocarbonates via the Coupling of
Carbonyl Sulfide (COS) with Epoxides**

Figures

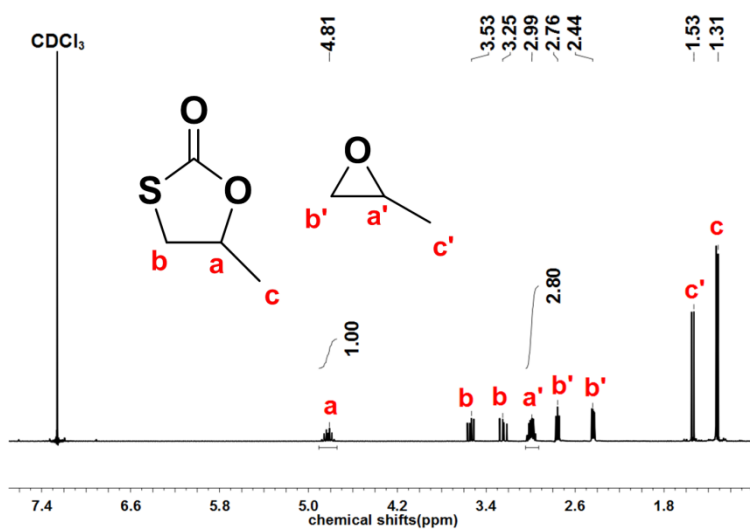


Figure S1. ¹H NMR spectrum of the crude product of entry 1 in Table 1.

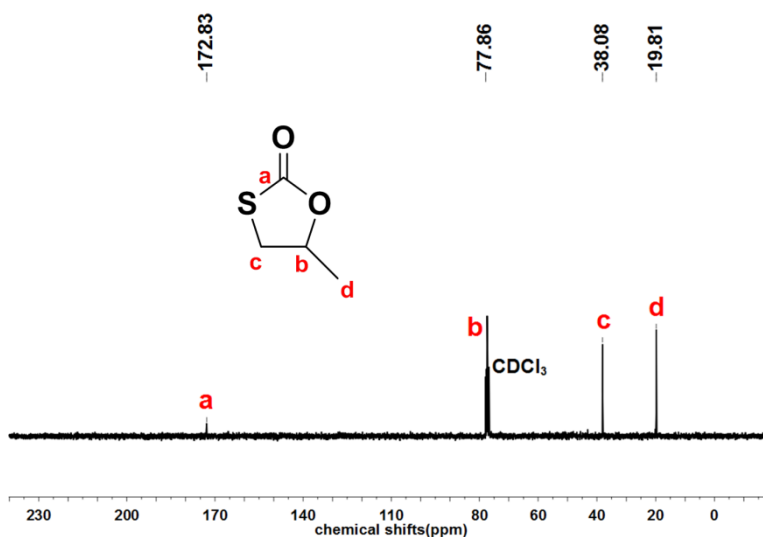


Figure S2. ¹³C NMR spectrum of compound 2a of entry 1 in Table 1.

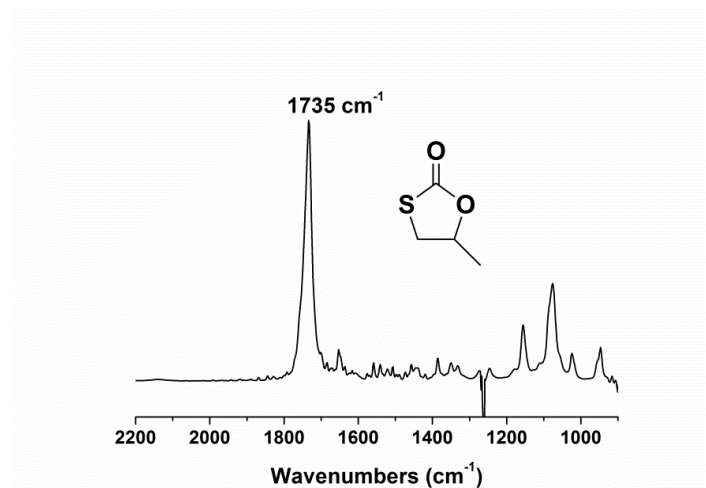


Figure S3. FT-IR spectrum of compound 2a of entry 1 in Table 1.

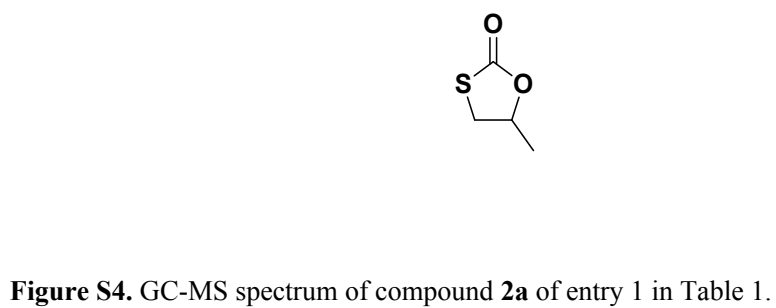


Figure S4. GC-MS spectrum of compound 2a of entry 1 in Table 1.

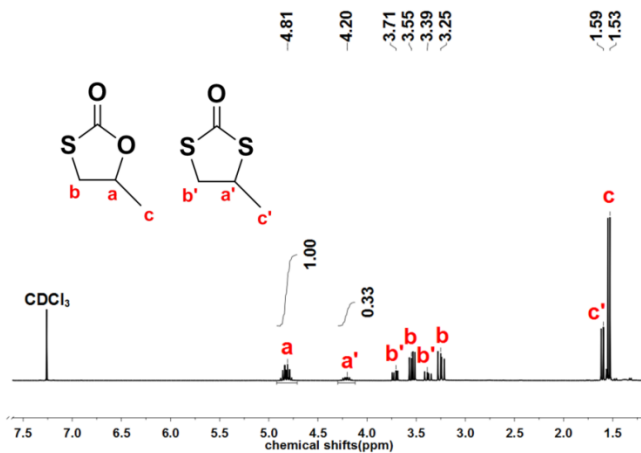


Figure S5. 1H NMR spectrum of the crude product of entry 2 in Table 1.

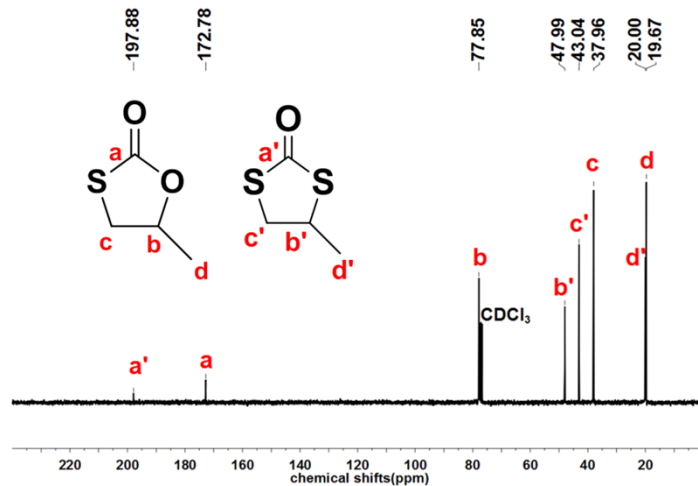


Figure S6. ^{13}C NMR spectrum of the crude product of entry 2 in Table 1.

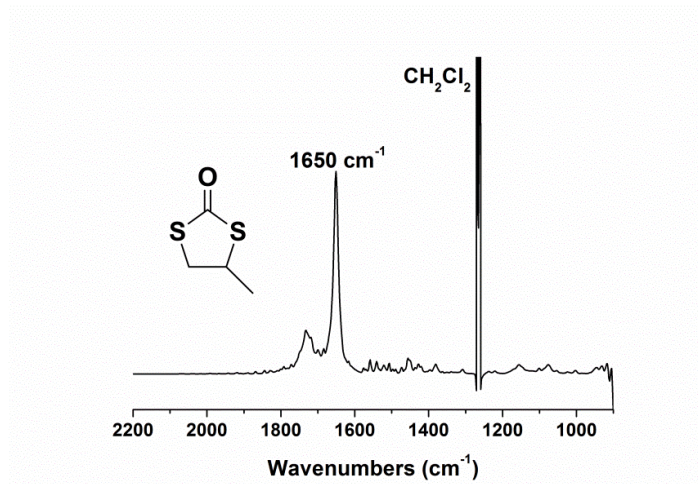


Figure S7. FT-IR spectrum of compound **3a** in Table 1.

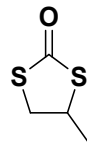


Figure S8. GC-MS spectrum of compound **3a** in Table 1.

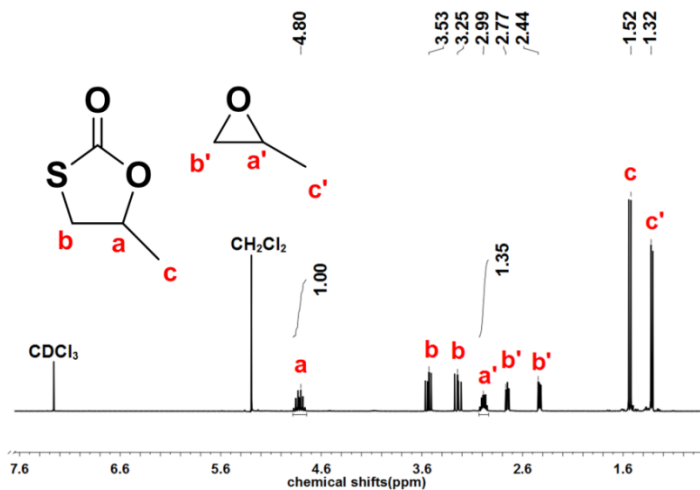


Figure S9. ¹H NMR spectrum of the crude product of entry 6 in Table 1.

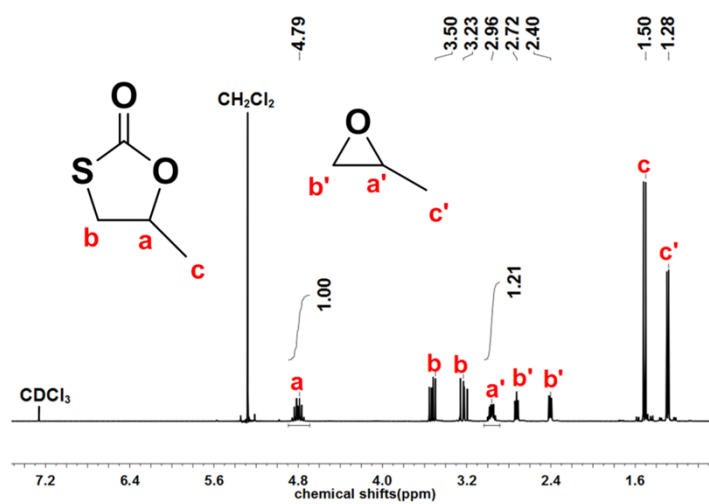


Figure S10. ¹H NMR spectrum of the crude product of entry 7 in Table 1.

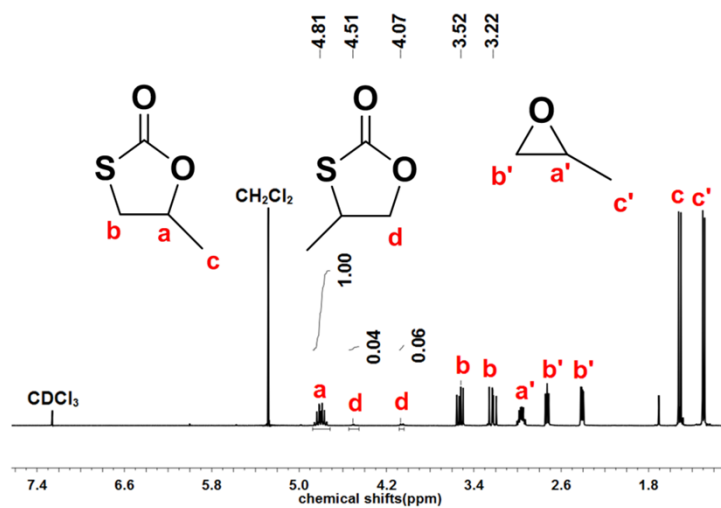


Figure S11. ¹H NMR spectrum of the crude product of entry 8 in Table 1.

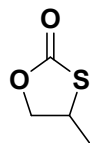
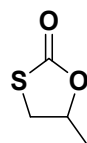


Figure S12. GC-MS spectrum of the crude product (compound **2a** and **4a**) of entry 8 in Table 1.

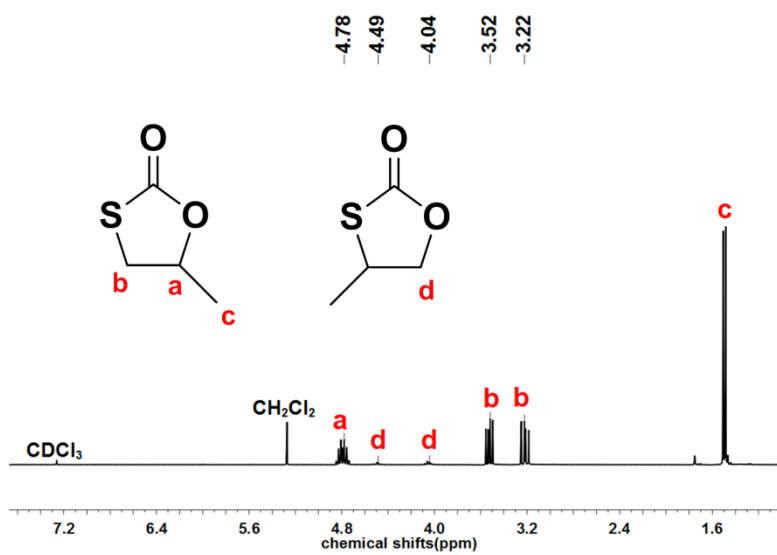


Figure S13. ¹H NMR spectrum of the crude product of entry 9 in Table 1.

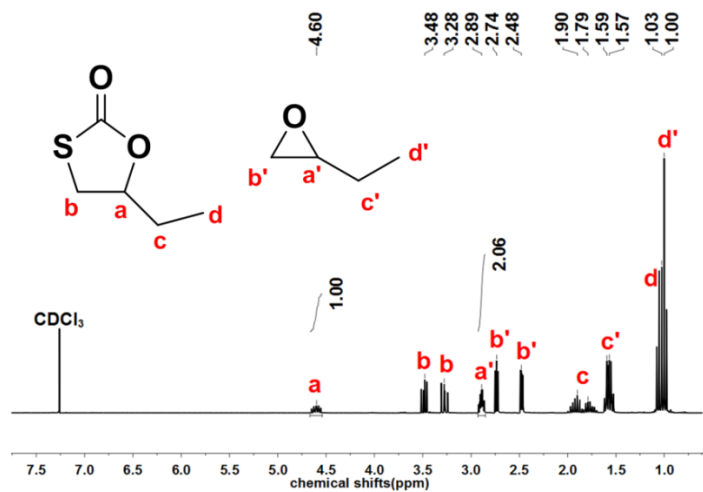


Figure S14. ^1H NMR spectrum of the crude product of entry 1 in Table 2.

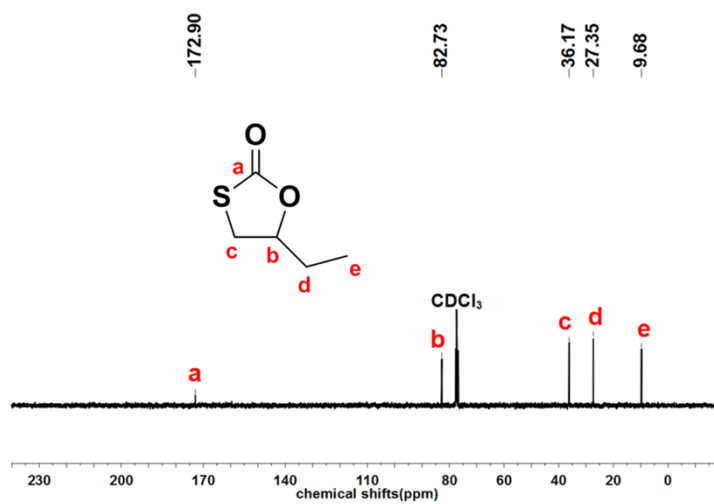


Figure S15. ^{13}C NMR spectrum of compound **2b** of entry 1 in Table 2.

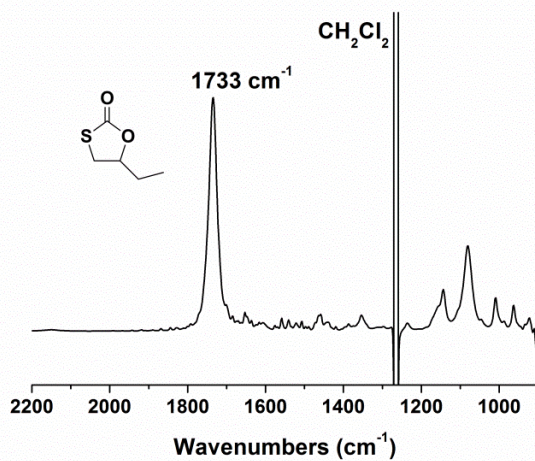


Figure S16. FT-IR spectrum of compound **2b** of entry 1 in Table 2.

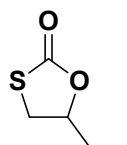


Figure S17. GC-MS spectrum of compound **2b** of entry 1 in Table 2.

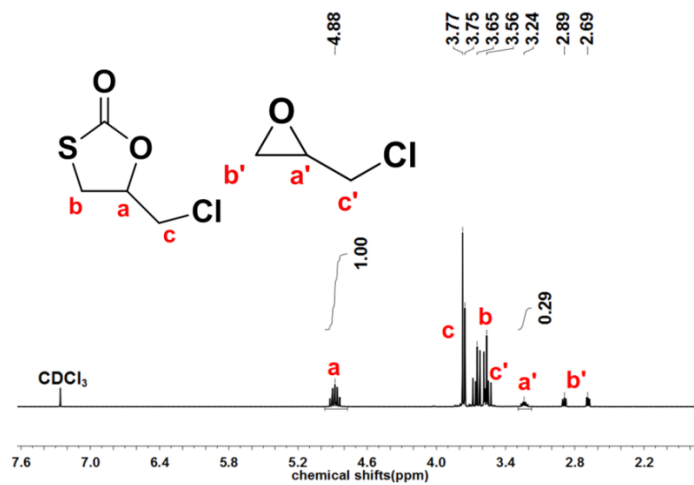


Figure S18. ^1H NMR spectrum of the crude product of entry 5 in Table 2.

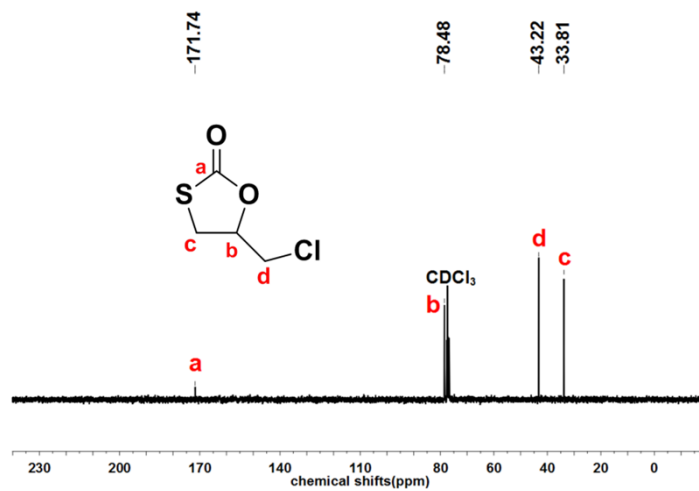


Figure S19. ^{13}C NMR spectrum of compound **2c** of entry 5 in Table 2.

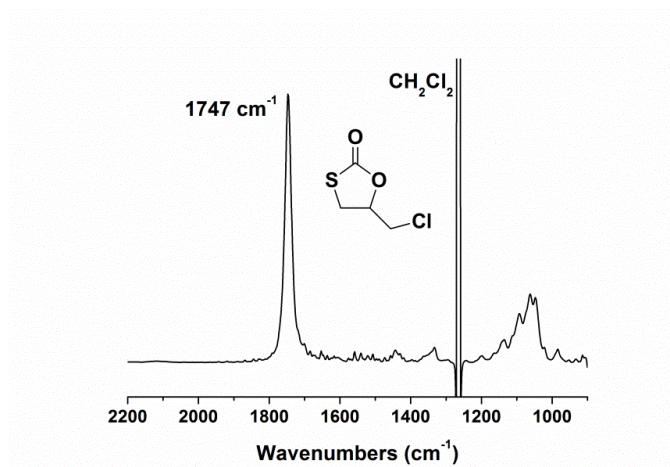


Figure S20. FT-IR spectrum of compound 2c of entry 5 in Table 2.

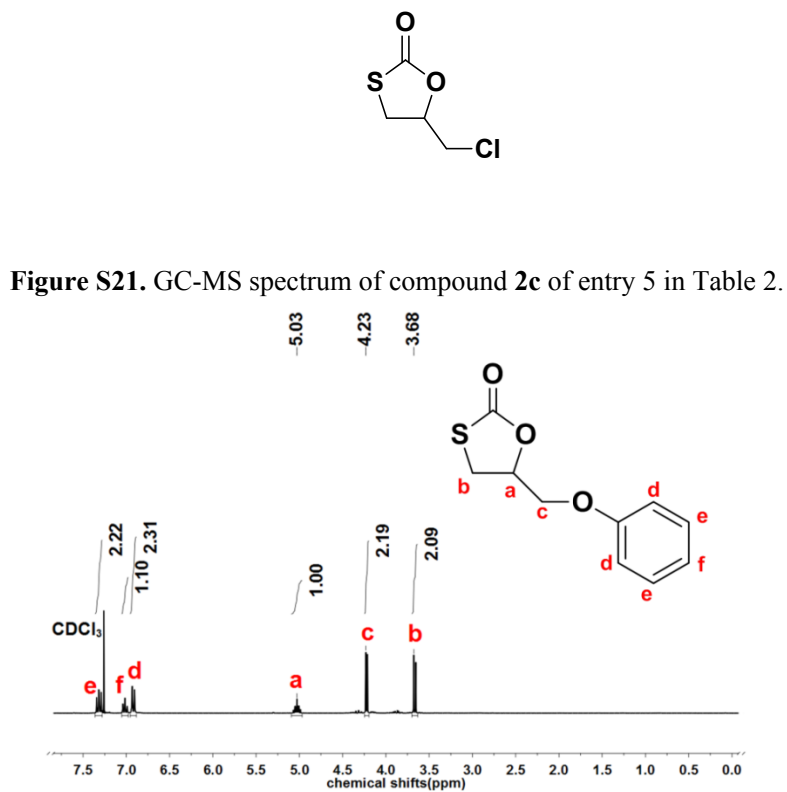


Figure S22. ¹H NMR spectrum of the crude product of entry 6 in Table 2.

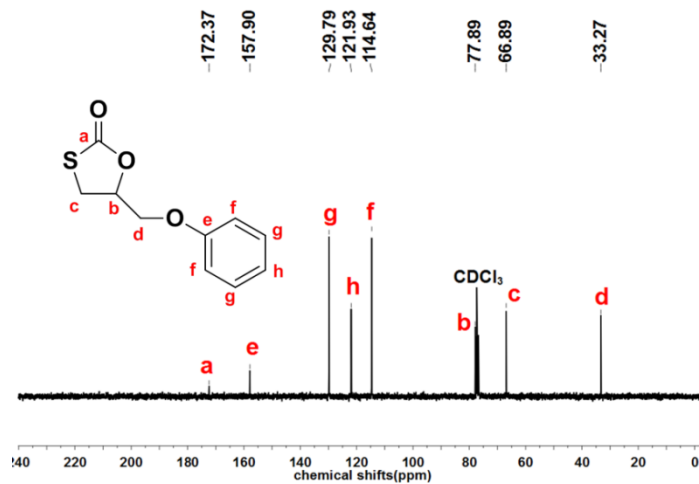


Figure S23. ^{13}C NMR spectrum of compound **2d** of entry 6 in Table 2.

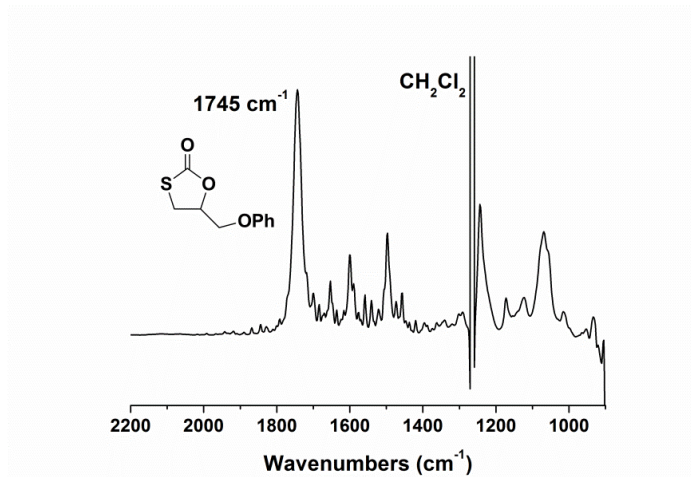


Figure S24. NMRFT-IR spectrum of compound **2d** of entry 6 in Table 2.

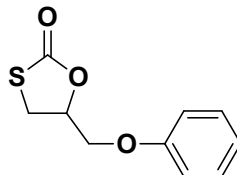


Figure S25. GC-MS spectrum of compound **2d** of entry 6 in Table 2.

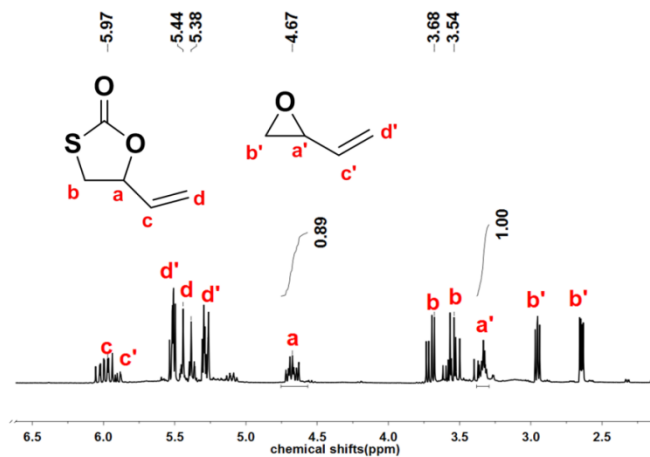


Figure S26. ^1H NMR spectrum of the crude product of entry 8 in Table 2.

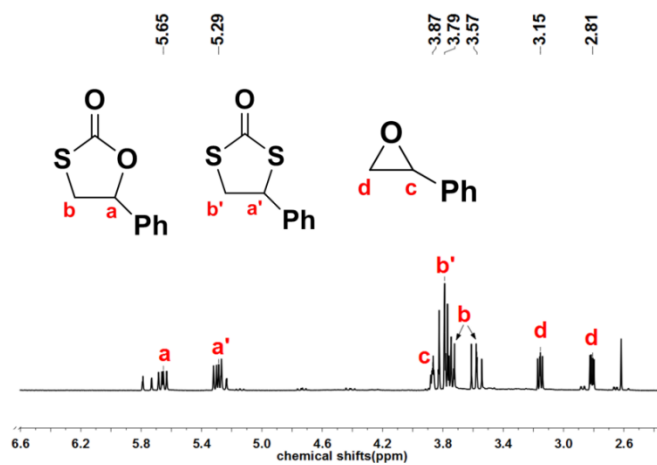
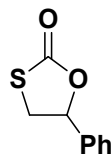


Figure S27. ^1H NMR spectrum of the crude product of entry 10 in Table 2.



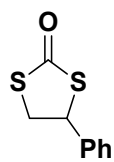


Figure S28. The GC-MS spectrum of compound **2f** and **3f** of entry 10 in Table 2.

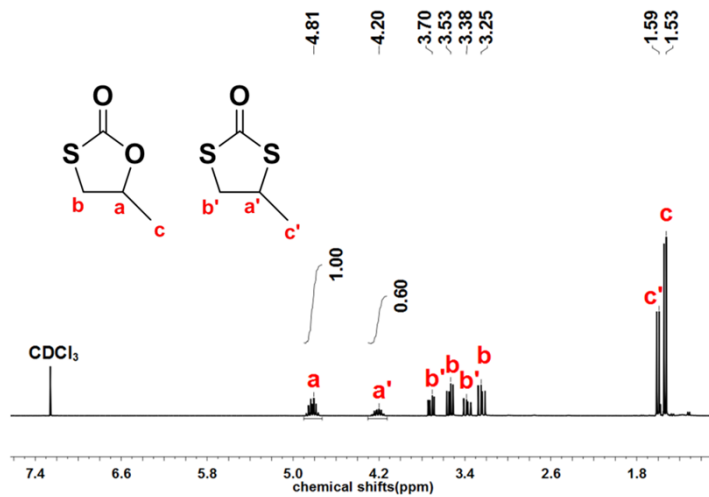


Figure S29. ^1H NMR spectrum of the crude product of entry 3 in Table 1.

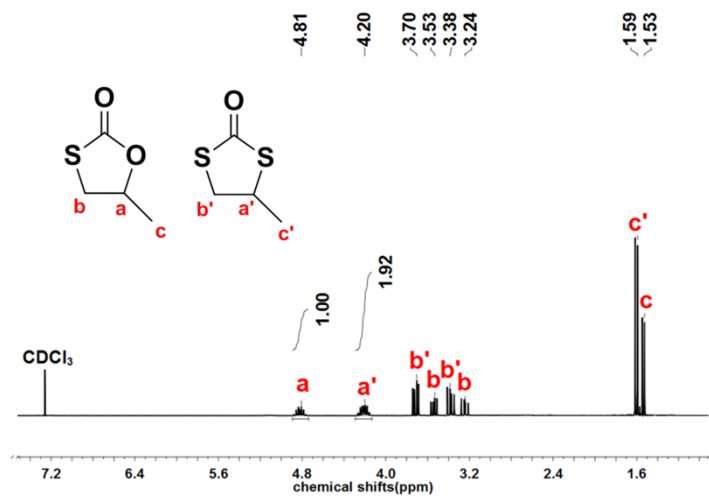


Figure S30. ^1H NMR spectrum of the crude product of entry 4 in Table 1.

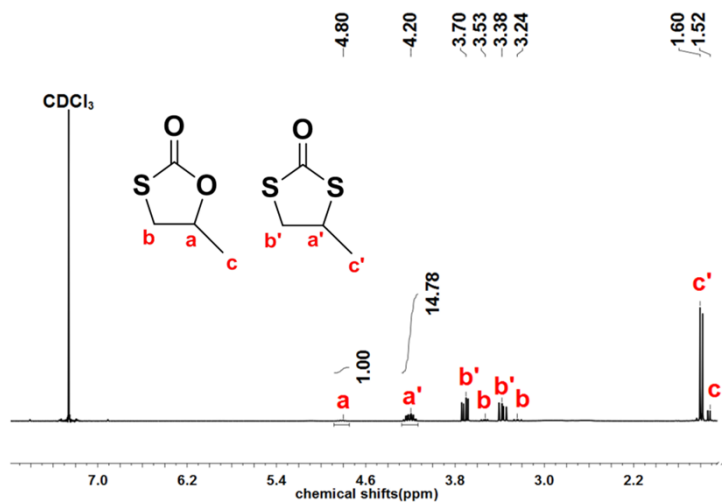


Figure S31. ¹H NMR spectrum of the crude product of entry 5 in Table 1.

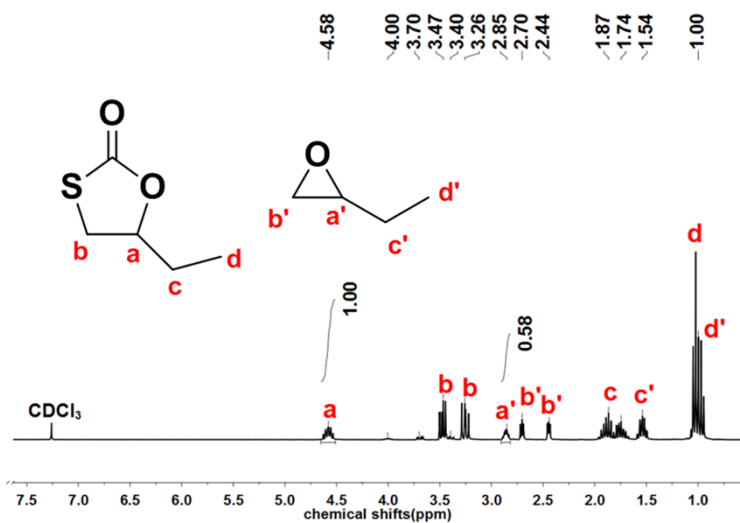


Figure S32. ¹H NMR spectrum of the crude product of entry 2 in Table 2.

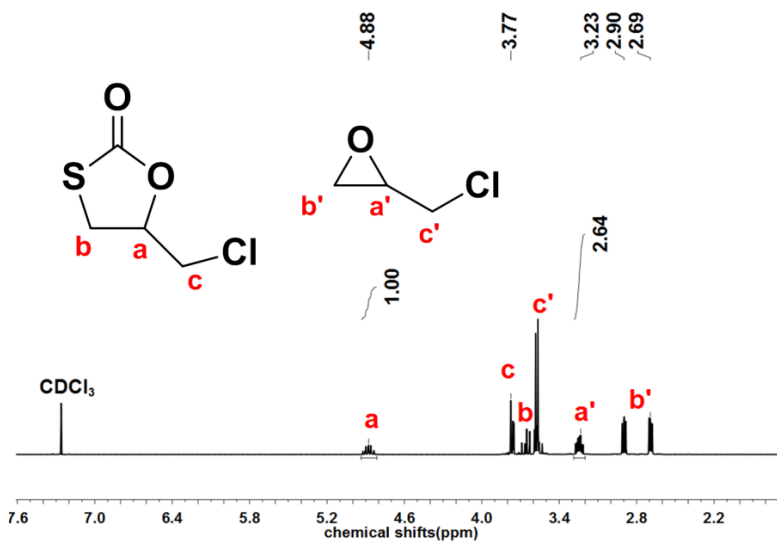


Figure S33. ^1H NMR spectrum of the crude product of entry 3 in Table 2.

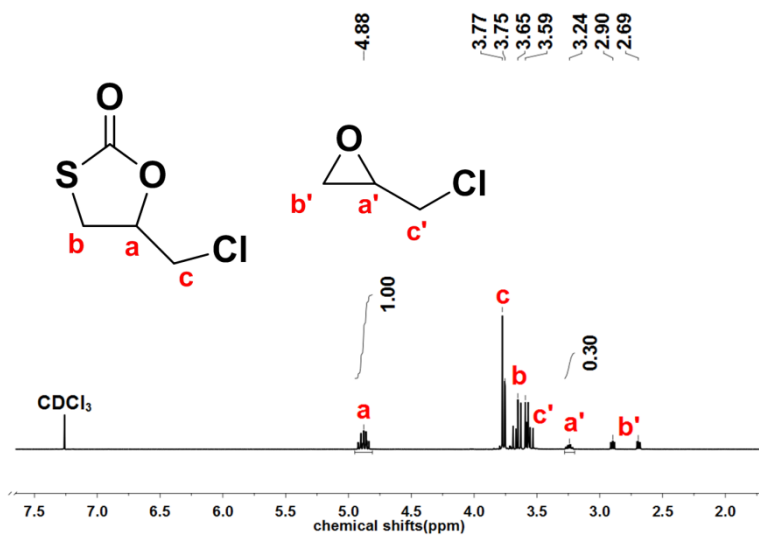


Figure S34. ^1H NMR spectrum of the crude product of entry 4 in Table 2.