

Supplementary materials for

**Hydrogen bonding and polymorphism of amino alcohol salts with quinaldinate:
Structural study**

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Abbreviations

1	(3a1pOHH)quin
2	(2a1bOHH)quin
3	(2a2m1pOHH)quin
quin ⁻	anion of quinaldinic acid
3a1pOHH ⁺	protonated 3-amino-1-propanol
2a1bOHH ⁺	protonated 2-amino-1-butanol
2a2m1pOHH ⁺	protonated 2-amino-2-methyl-1-propanol

2a and **2b** are polymorphs of **2**, **3a** and **3b** are polymorphs of **3**.

1. Powder X-ray diffraction patterns

Figure S1. Comparison of the calculated powder pattern for **1** with the measured PXRD pattern of the product of the direct reaction between 3-amino-1-propanol and quinaldinic acid.

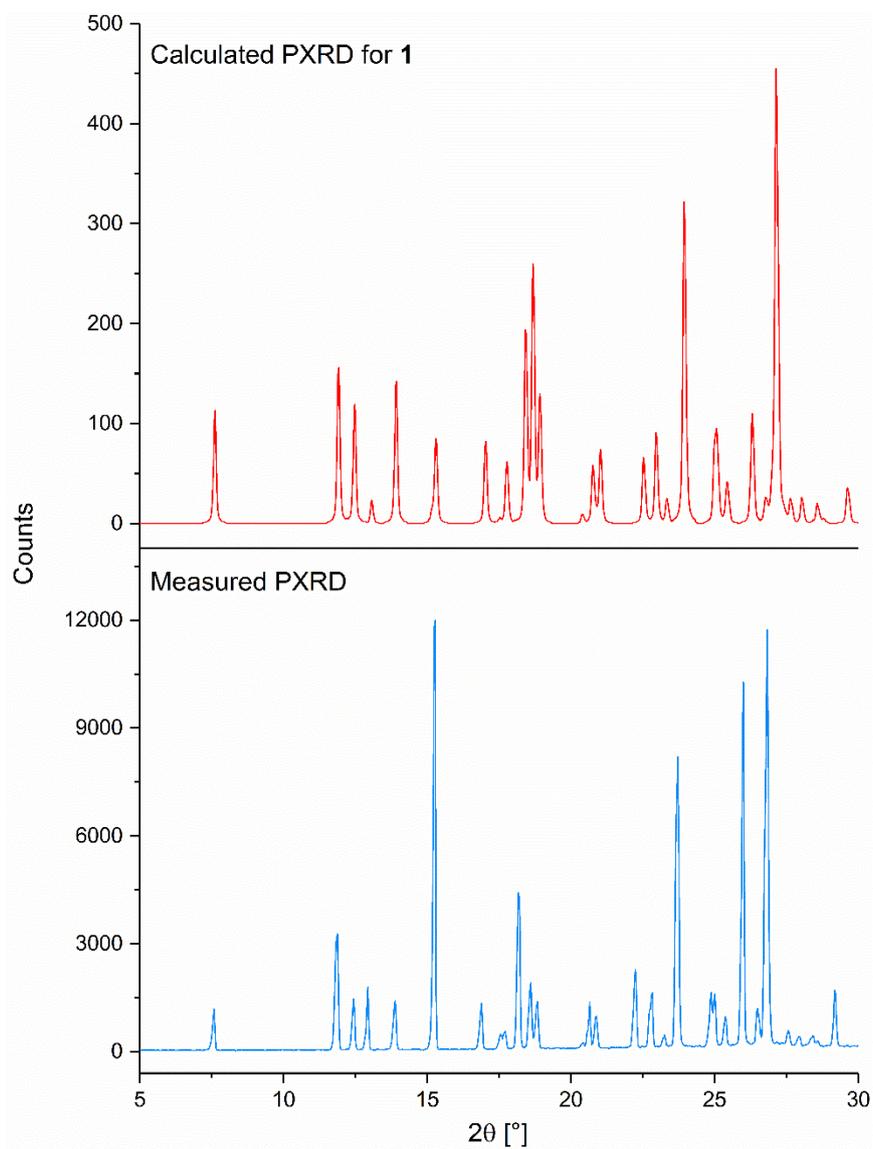


Figure S2. Comparison of the calculated powder patterns for **2a** and **2b** polymorphs with the measured PXRD pattern of the product of the direct reaction between 2-amino-1-butanol and quinaldinic acid.

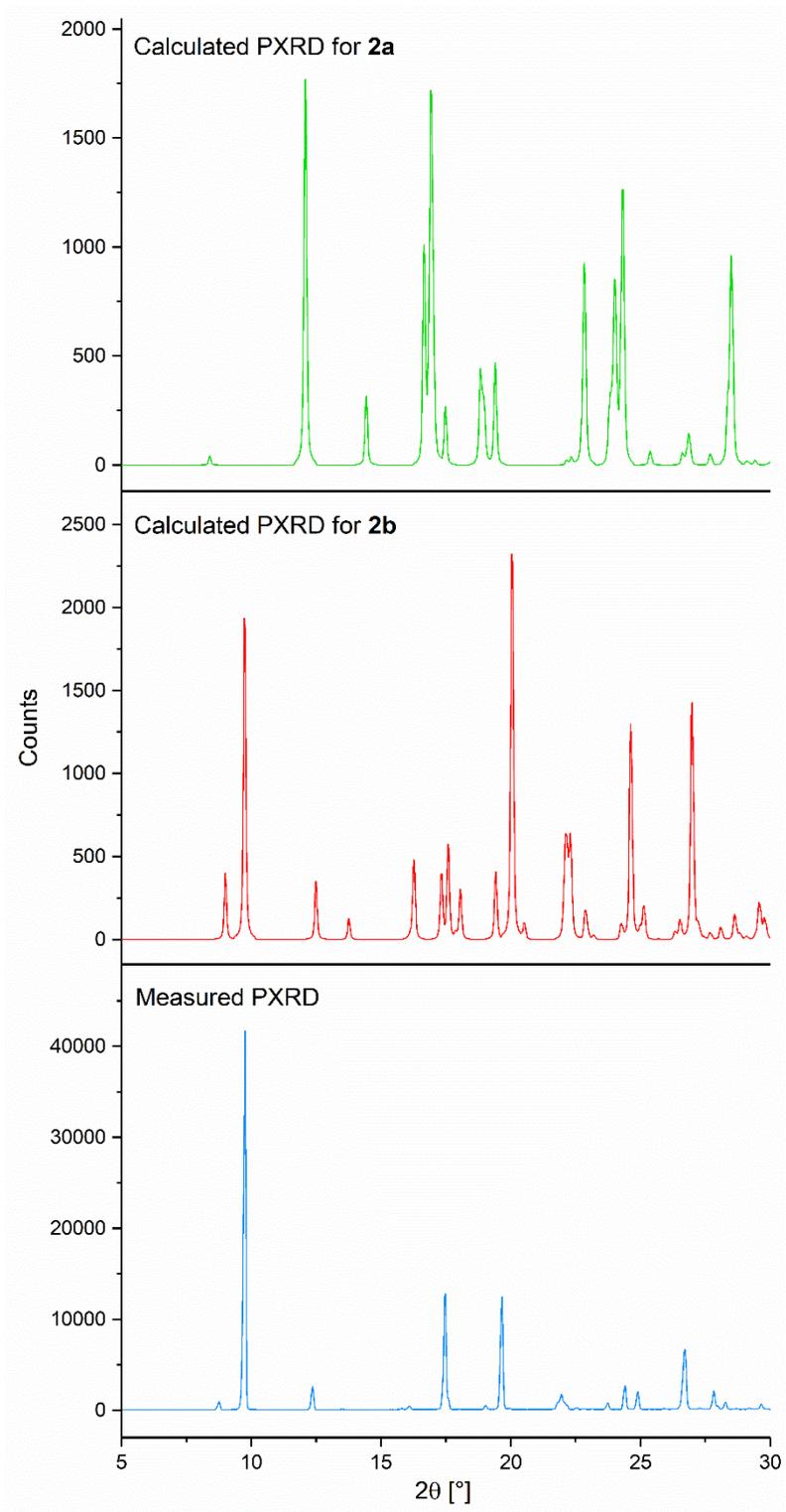
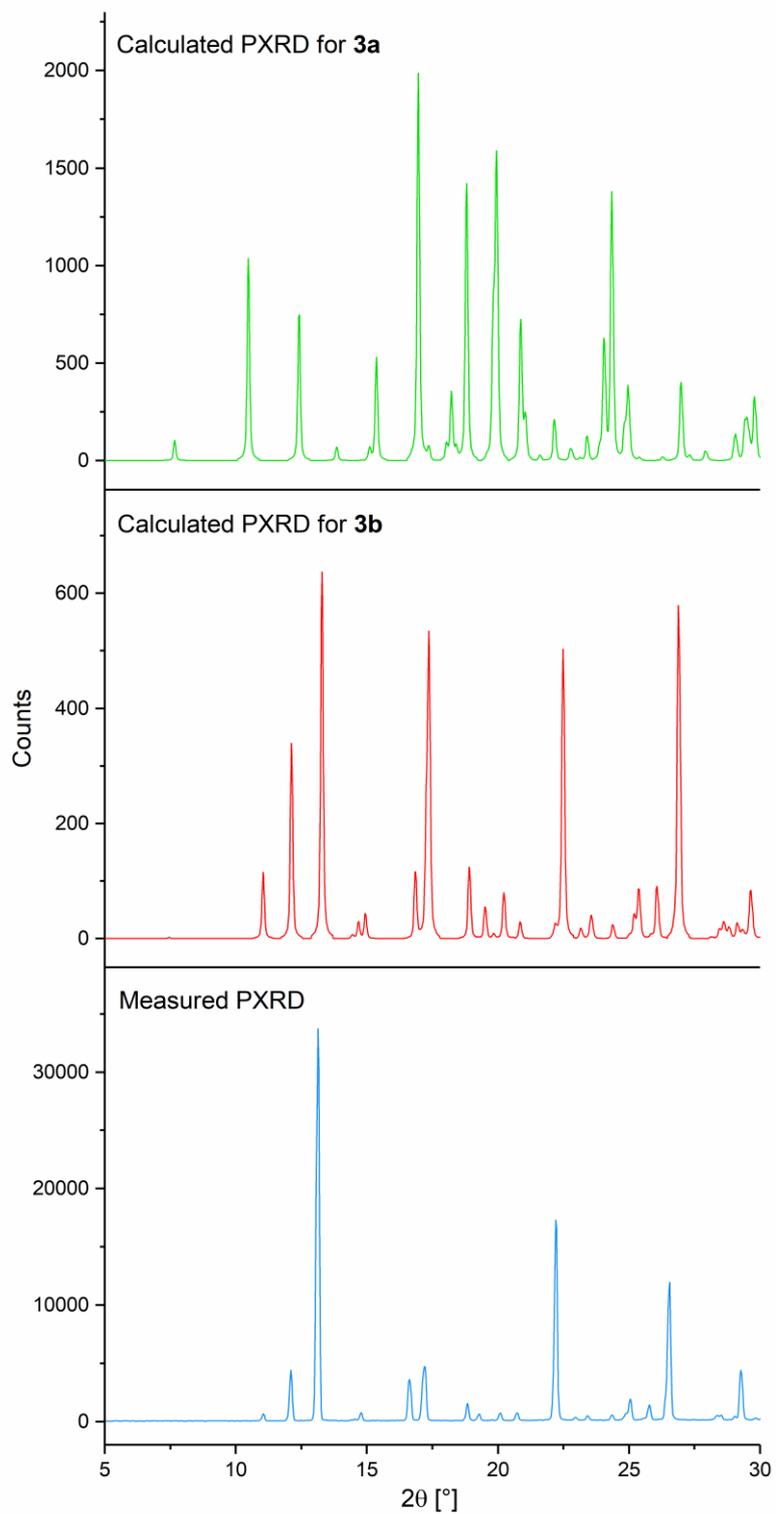


Figure S3. Comparison of the calculated powder patterns for **3a** and **3b** polymorphs with the measured PXRD pattern of the product of the direct reaction between 2-amino-2-methyl-1-propanol and quinaldinic acid.



2. Packing diagrams

Figure S4. Stacking of layers in **1**: a view along one (top) or two (bottom) layers. From these two projections, $\pi\cdots\pi$ stacking interactions occurring between quinaldinates from adjacent layers may be seen.

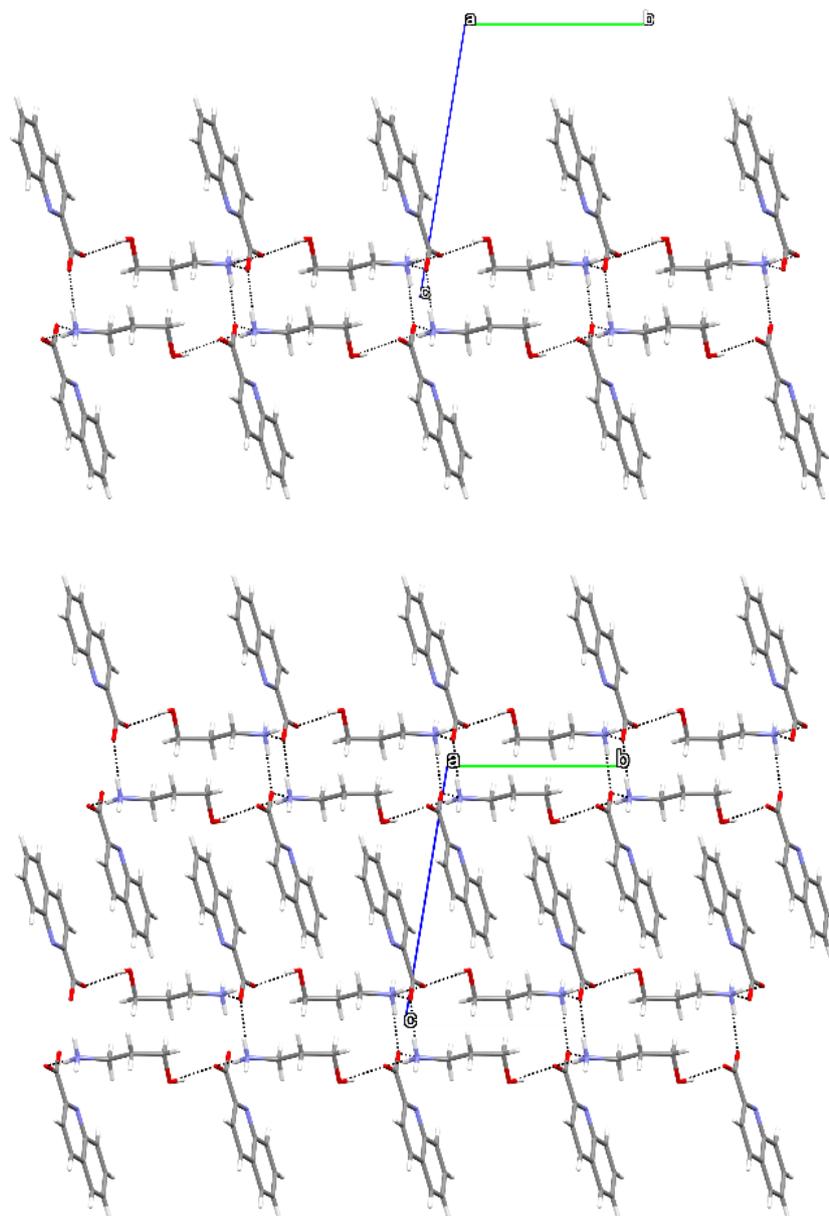


Figure S5. A view along one layer (top) or two layers (bottom) in **2a**. From these two projections, $\pi\cdots\pi$ stacking interactions occurring between quinaldinates from adjacent layers may be seen.

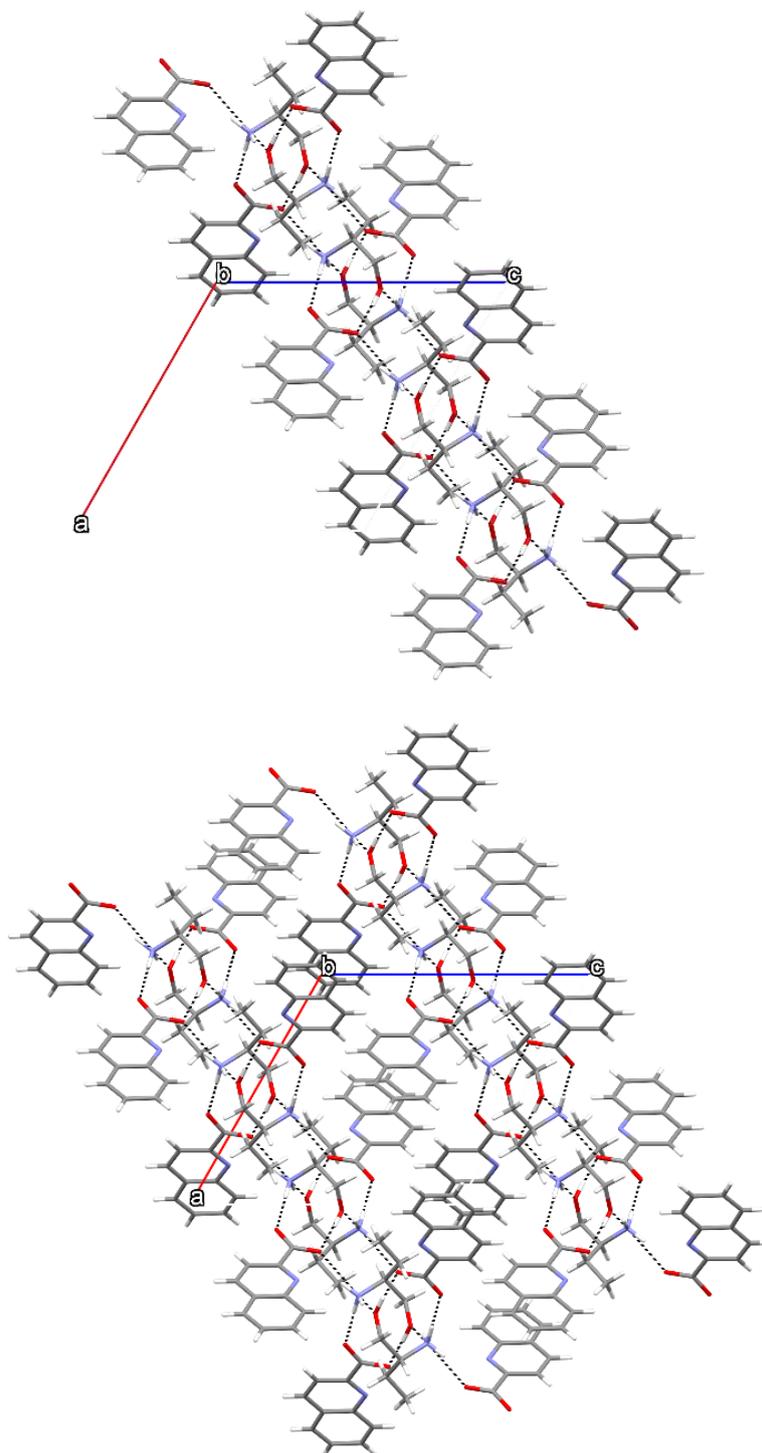
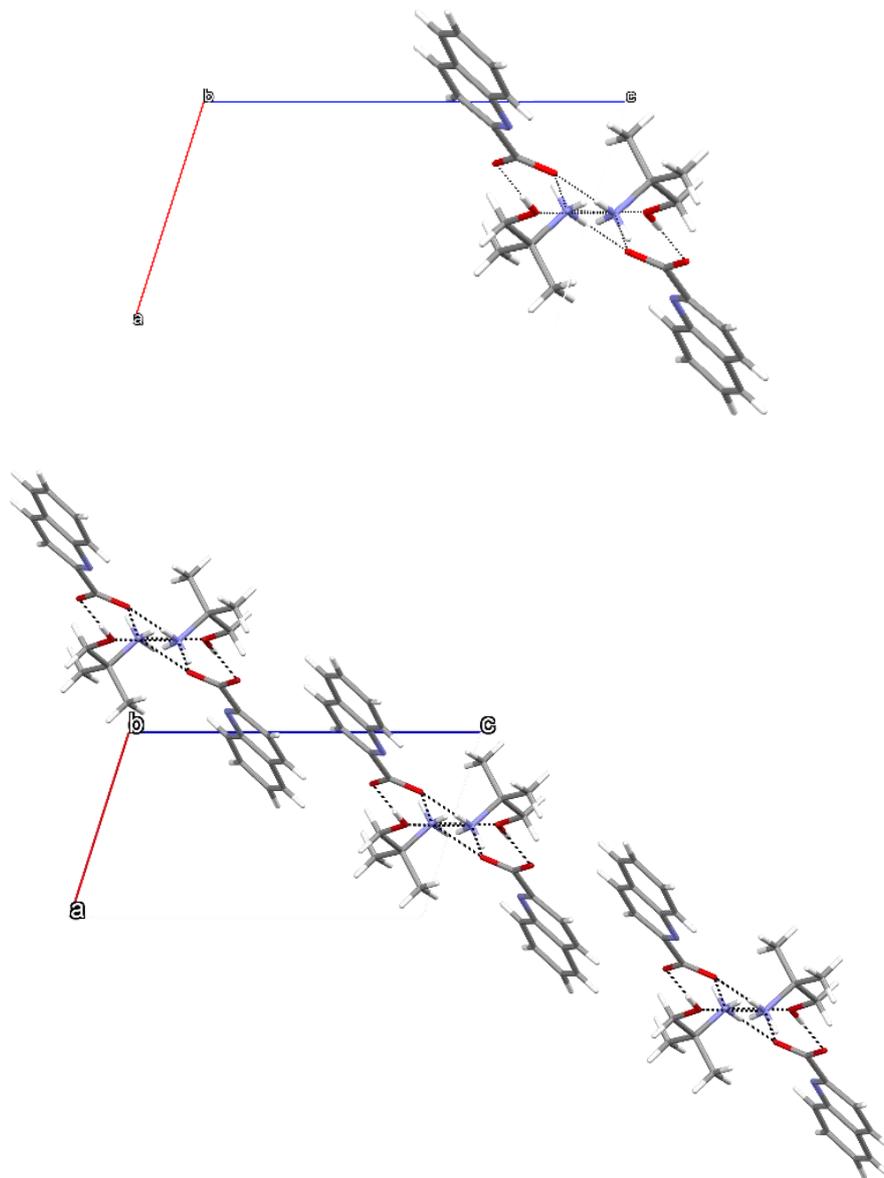


Figure S6. A view along one (top) or three (bottom) chains in the **3b** polymorph. From these two projections, $\pi\cdots\pi$ stacking interactions occurring between quinaldinates from adjacent chains may be seen.



3. IR spectra

Figure S7. IR spectrum of **1**.

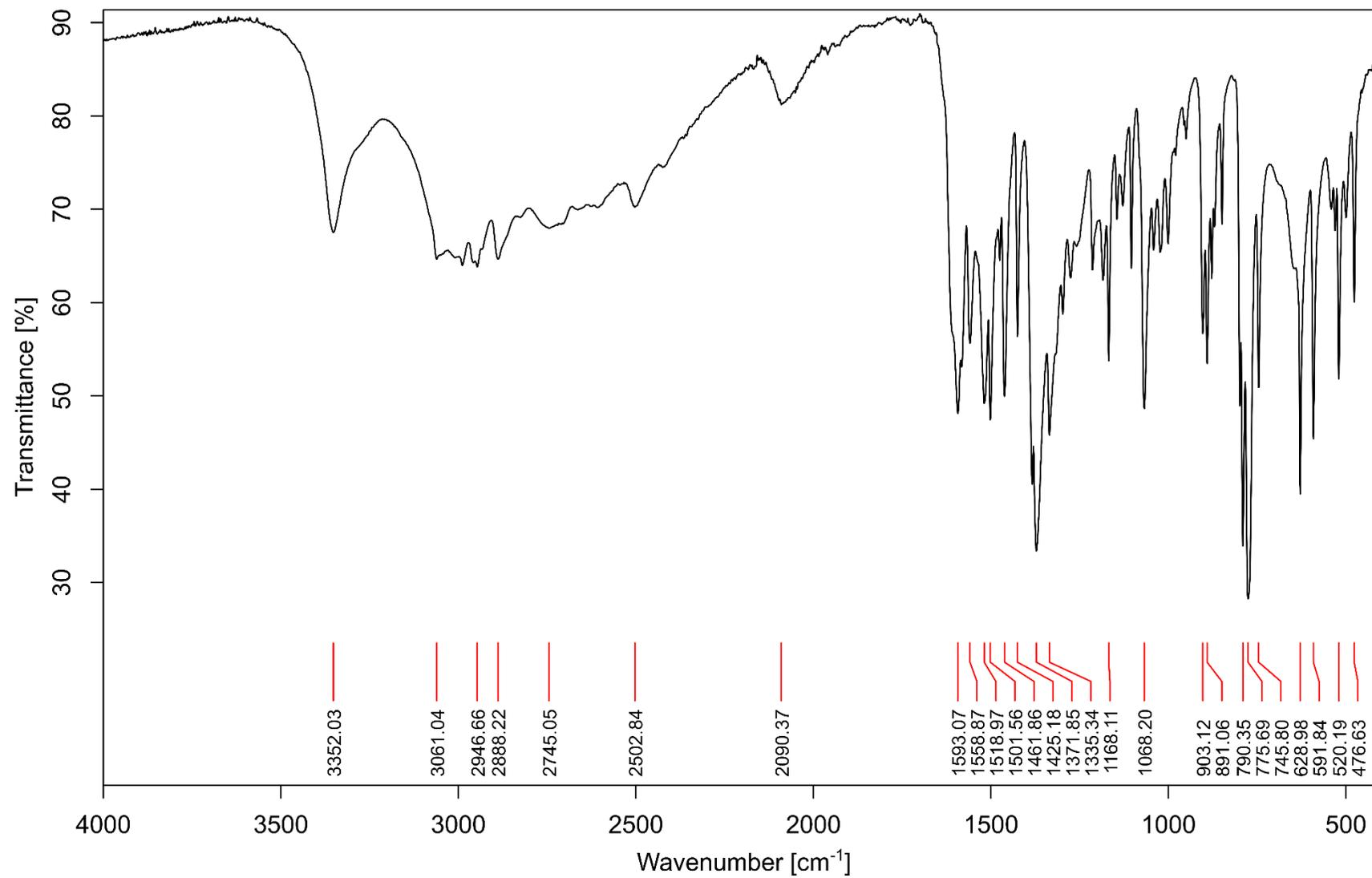


Figure S8. IR spectrum of the 2a polymorph.

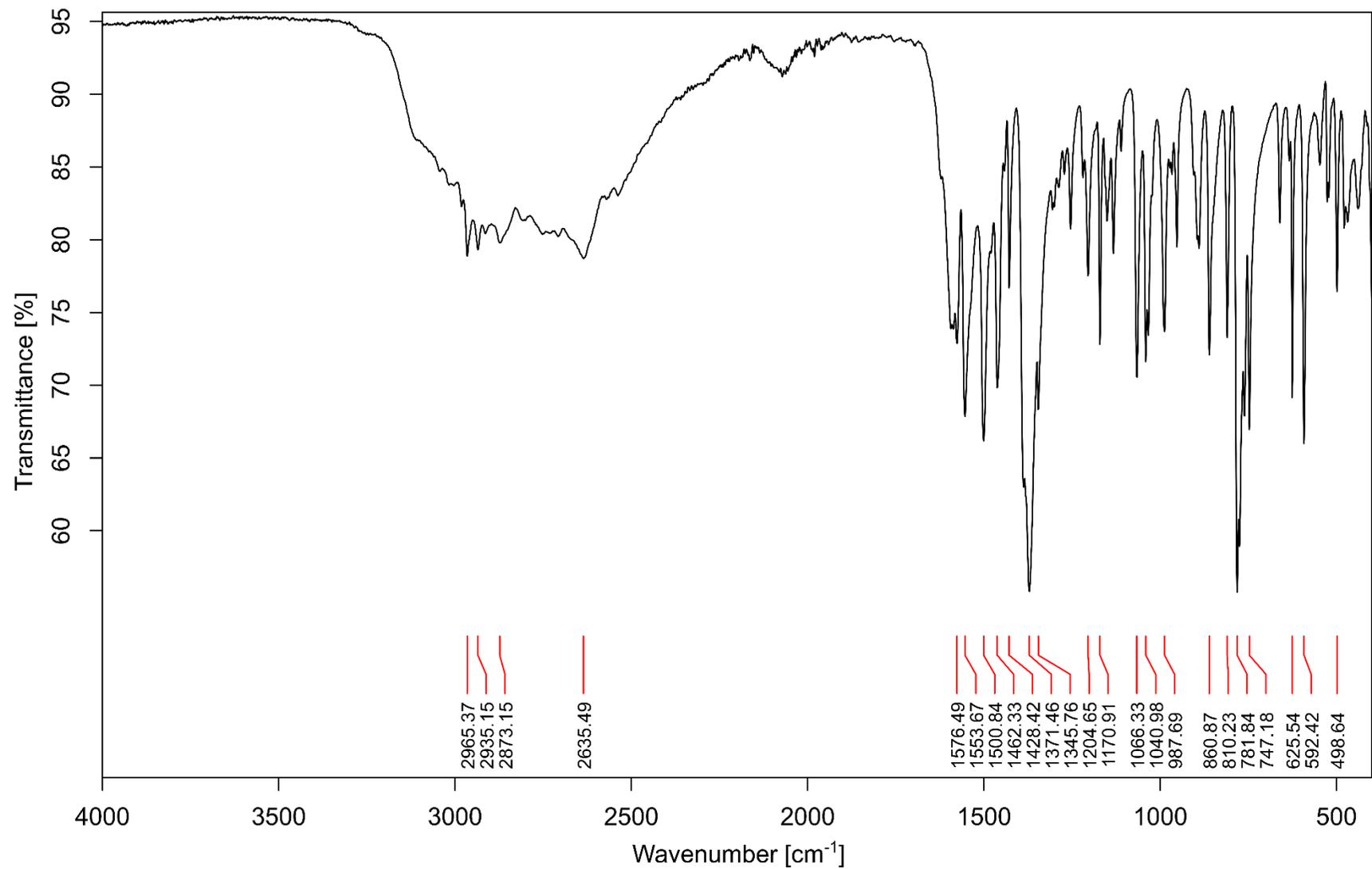


Figure S9. IR spectrum of the **2b** polymorph.

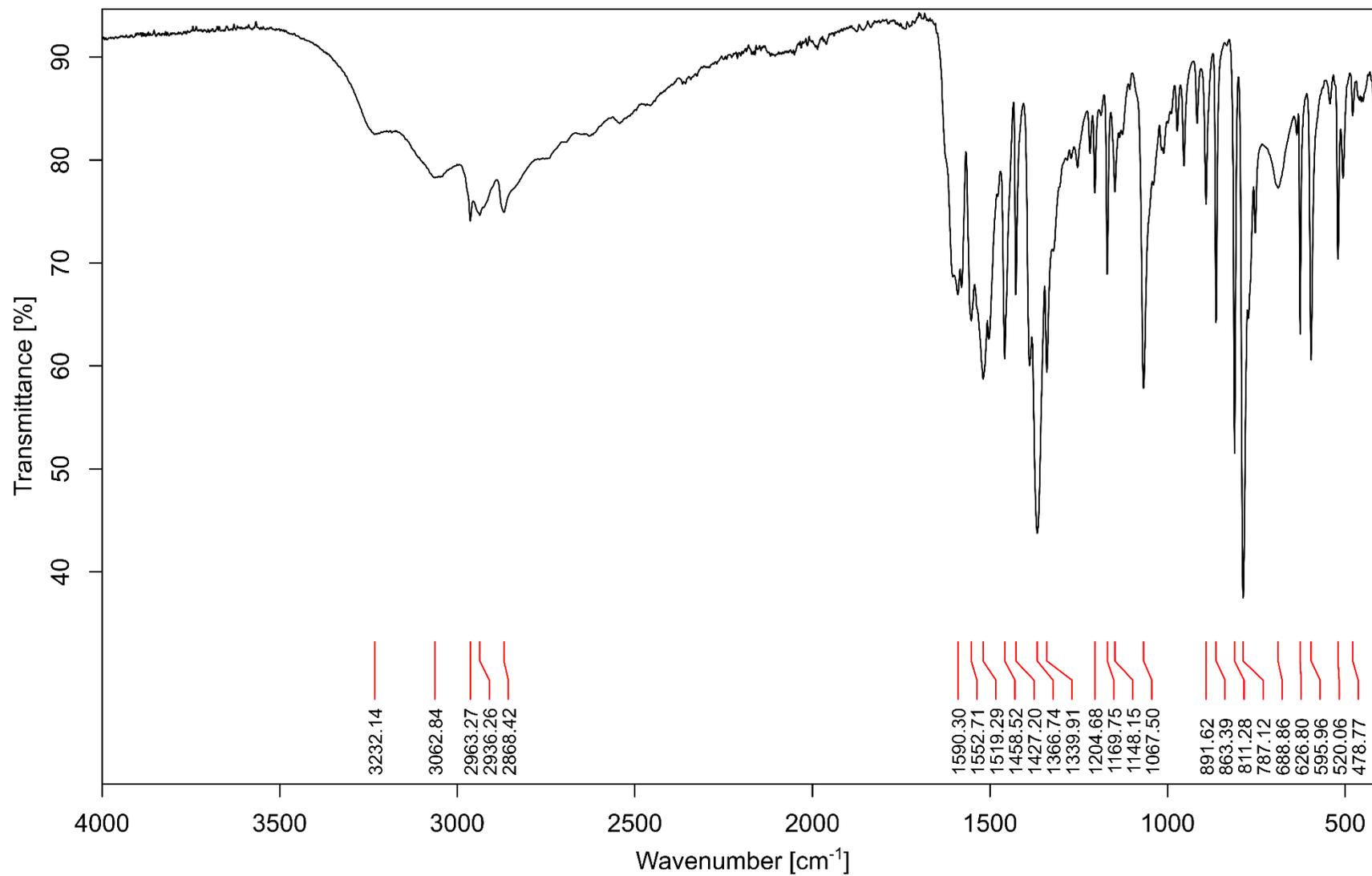


Figure S10. IR spectrum of the **3a** polymorph.

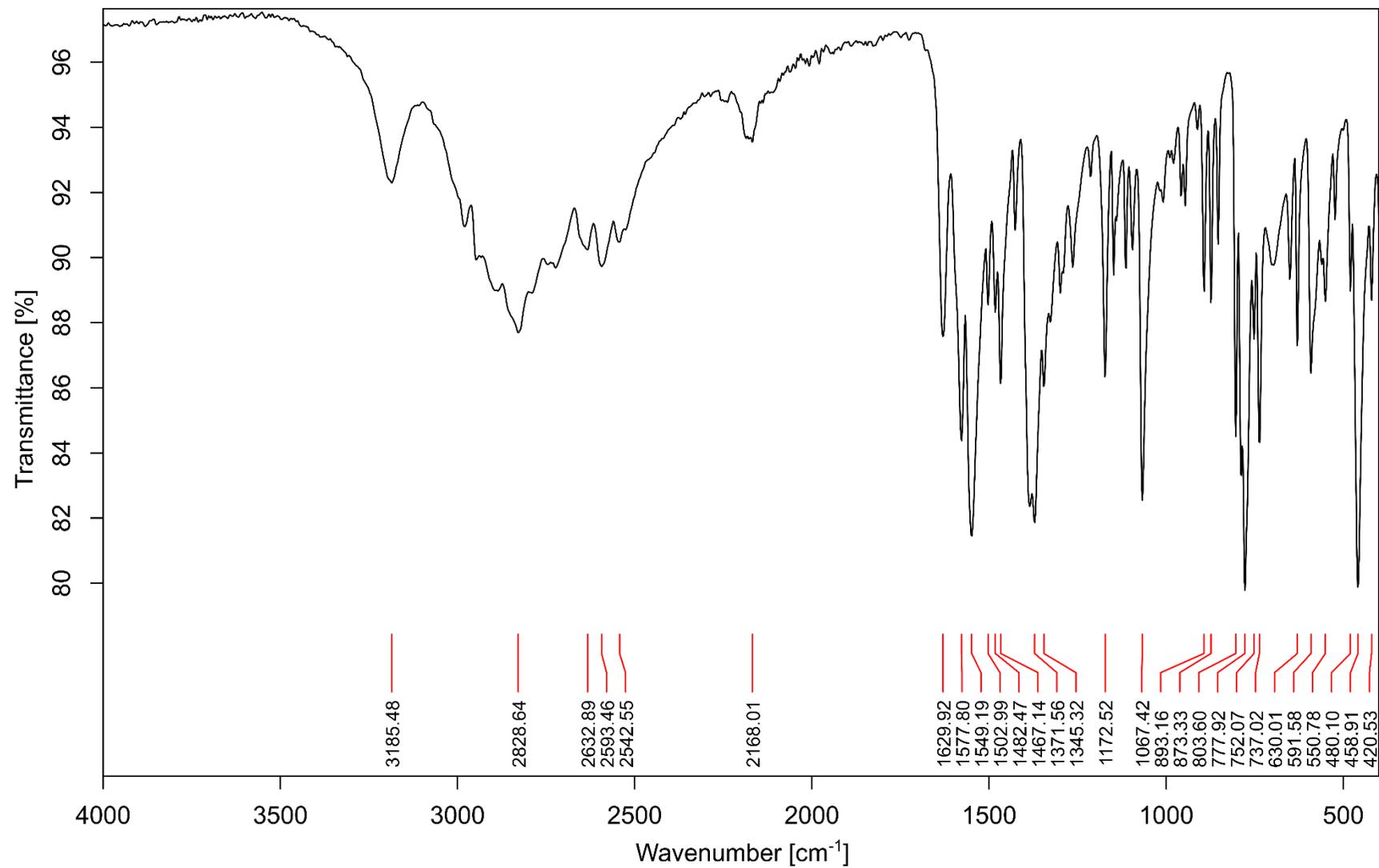
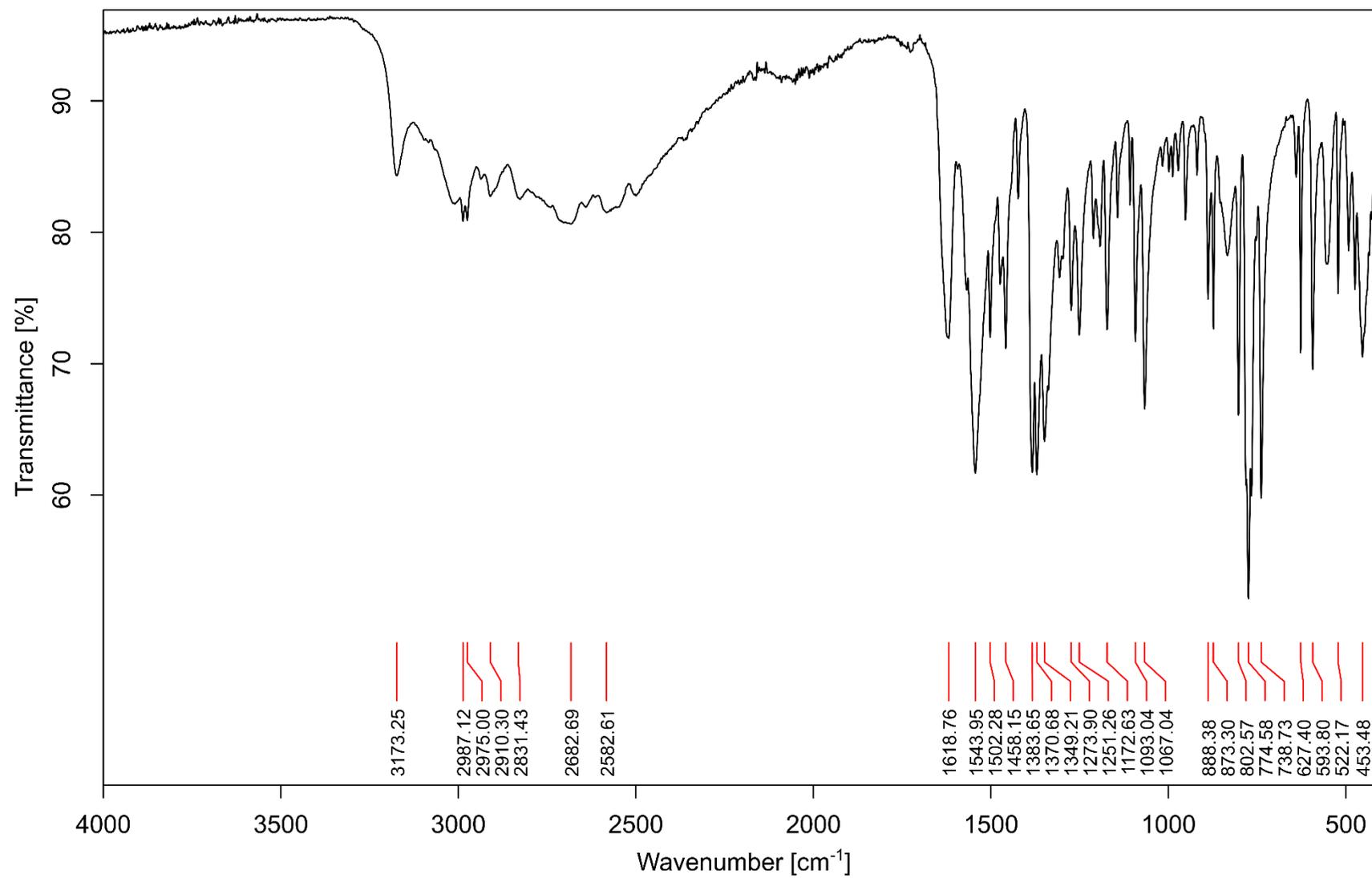


Figure S11. IR spectrum of the **3b** polymorph.



4. ^1H NMR spectra

Figure S12. ^1H NMR spectrum of **1** in $\text{DMSO-}d_6$.

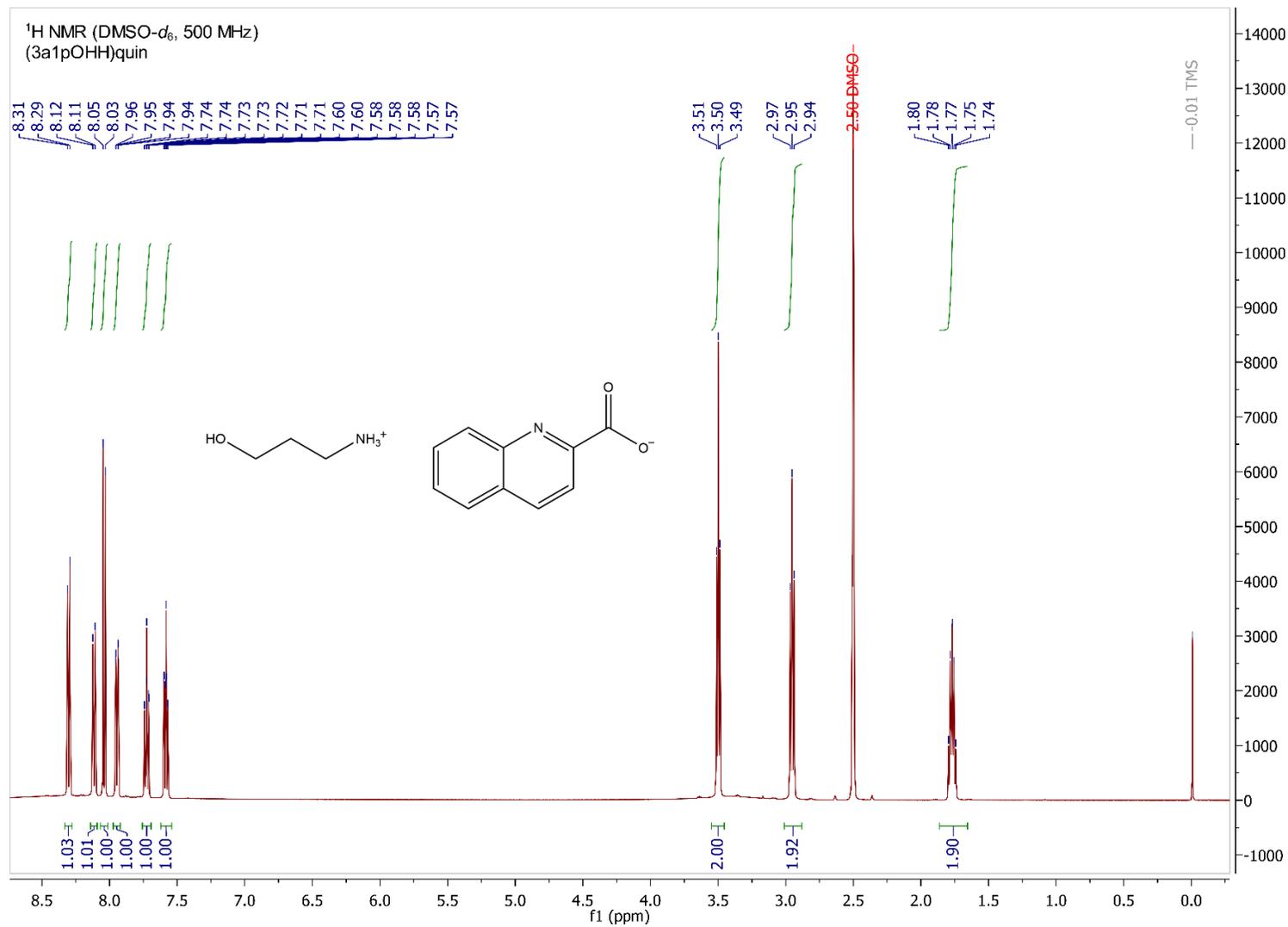


Figure S13. ¹H NMR spectrum of **2** in DMSO-*d*₆.

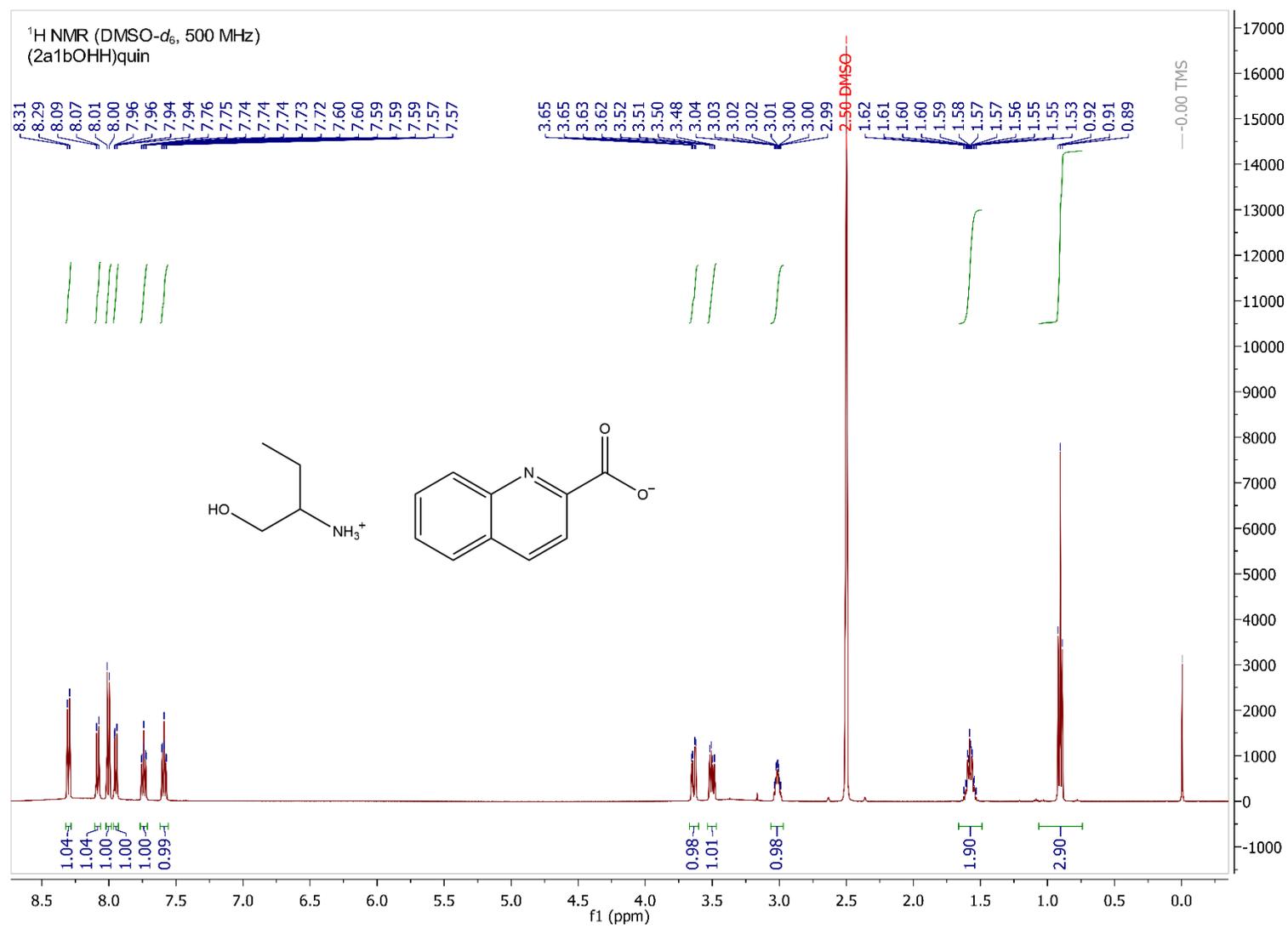
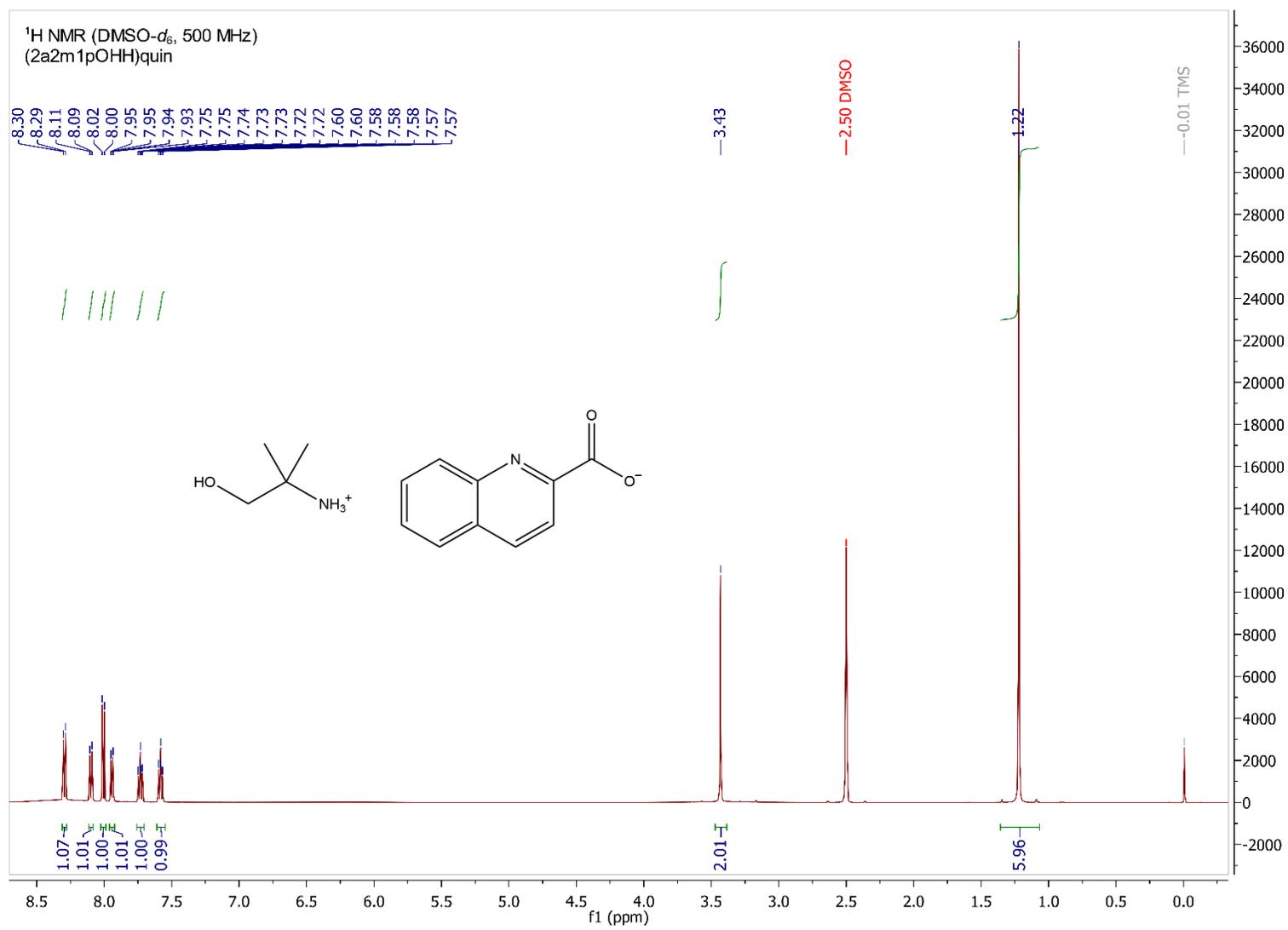


Figure S14. ¹H NMR spectrum of **3** in DMSO-d₆.



5. TG/DSC curves.

Figure S15. TG and DSC curves for **1**.

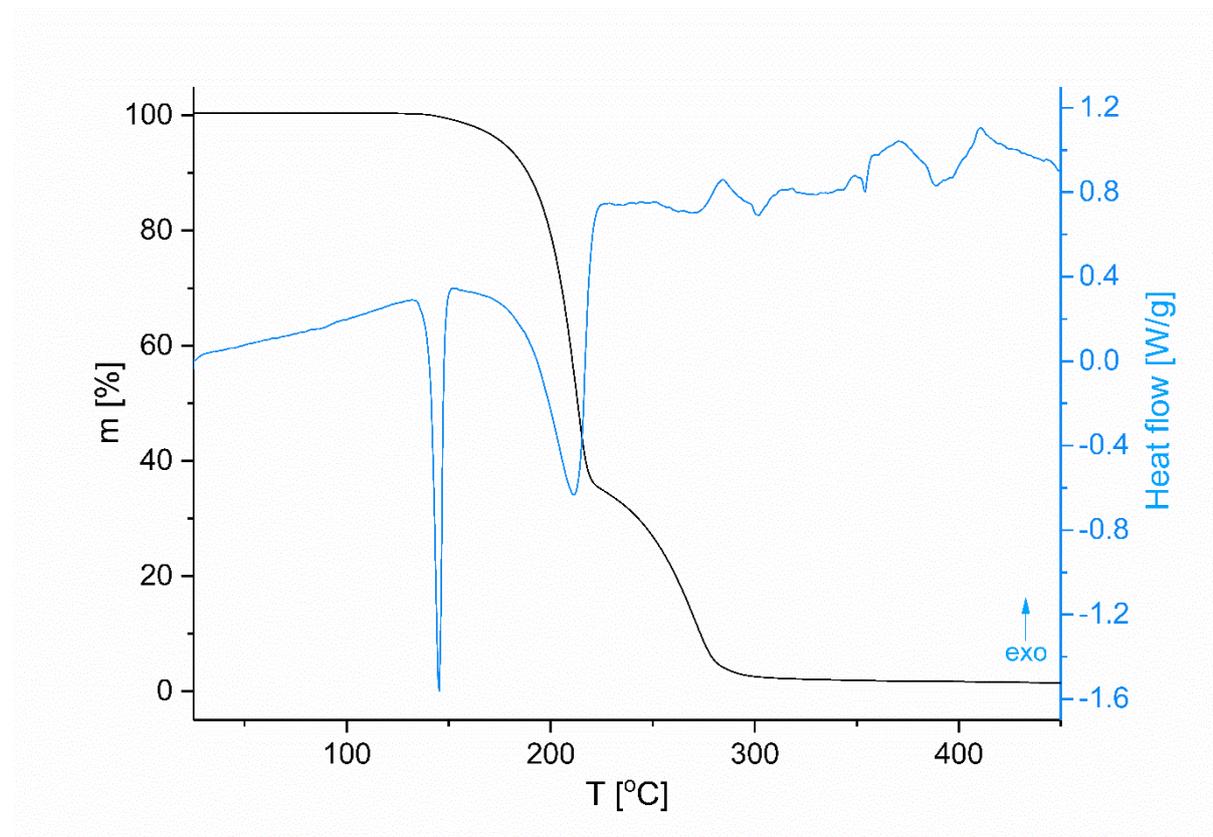


Figure S16. TG and DSC curves for **2b**.

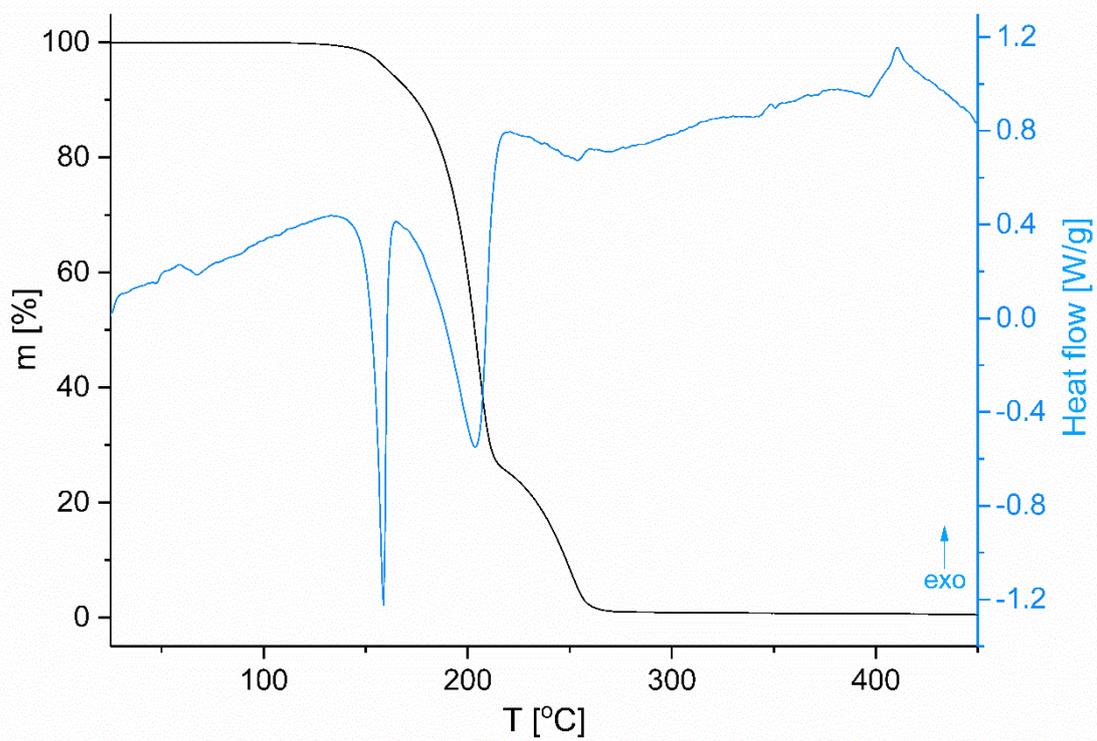


Figure S17. TG and DSC curves for **3b**.

