## **Supporting Information**

## Vanillin-derived α,ω-diene monomer for Thermosets Preparation via Thiol-ene

## **Click polymerization**

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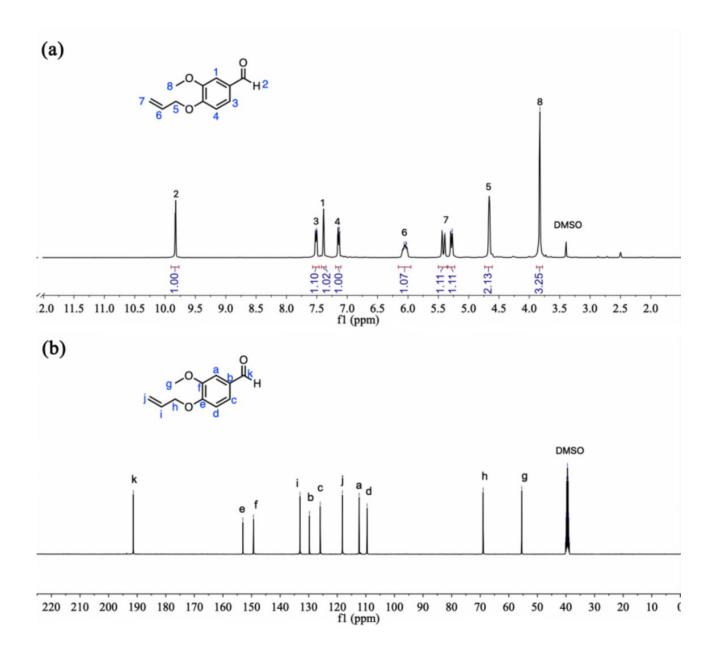
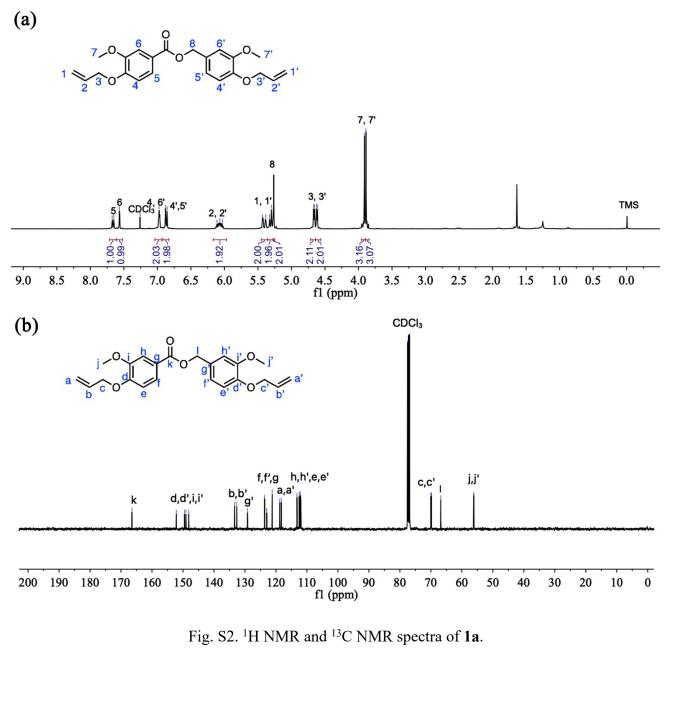
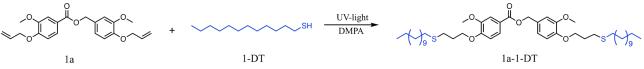


Fig. S1. <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of **AM**.





Scheme S1 Click reaction between 1a and 1-dodecanethiol

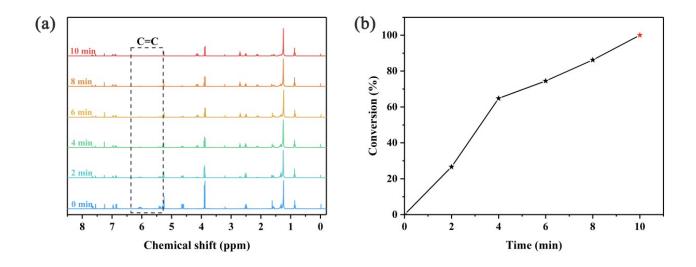


Fig. S3. (a) <sup>1</sup>H NMR spectra of the click reaction between **1a** and 1-DT every 2 minutes, and (b) the conversion of vinyl double bonds every 2 minutes under UV light.

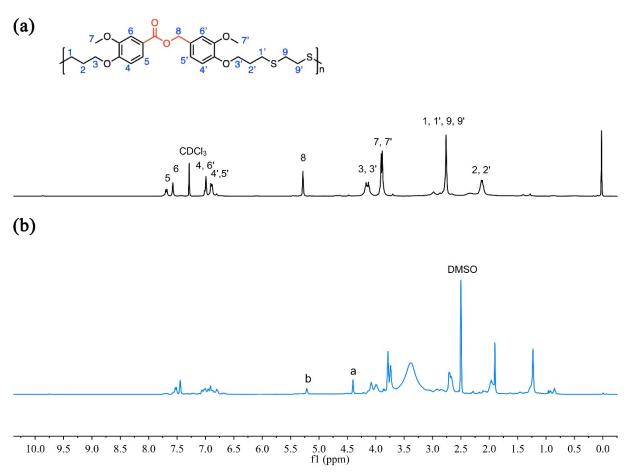


Fig. S4 Comparison of the 1H NMR spectra of polyester before and after degradation in 1M NaOH: (a) before degradation, (b) after degradation.



Fig. S5. Degradation of **P1a2d** in 1 M NaOH solutions (acetone/water = 5/5, v/v)