

## Supporting Information

### **A robust fully bio-based aromatic-aliphatic ketone epoxide monomer for high-performance epoxy resin containing imine structural moiety**

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## Supplementary Figures

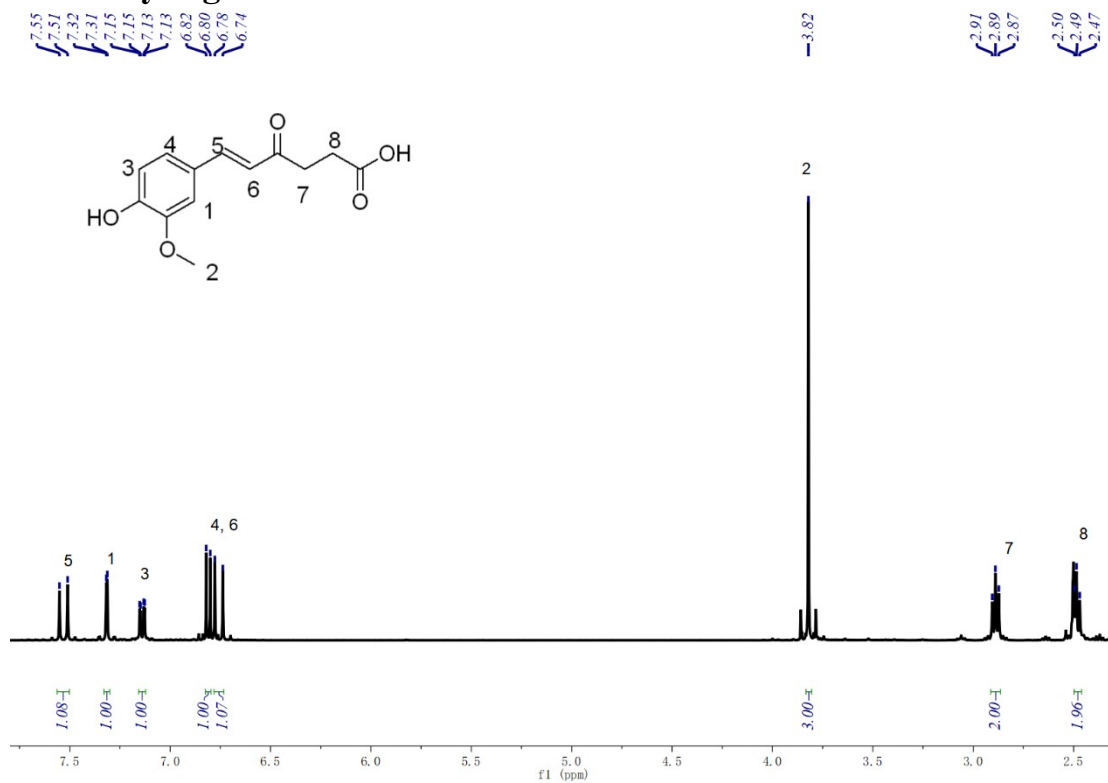


Figure S1.  $^1\text{H}$  NMR spectrum of VL (400 MHz,  $\text{DMSO-}d_6$ ).

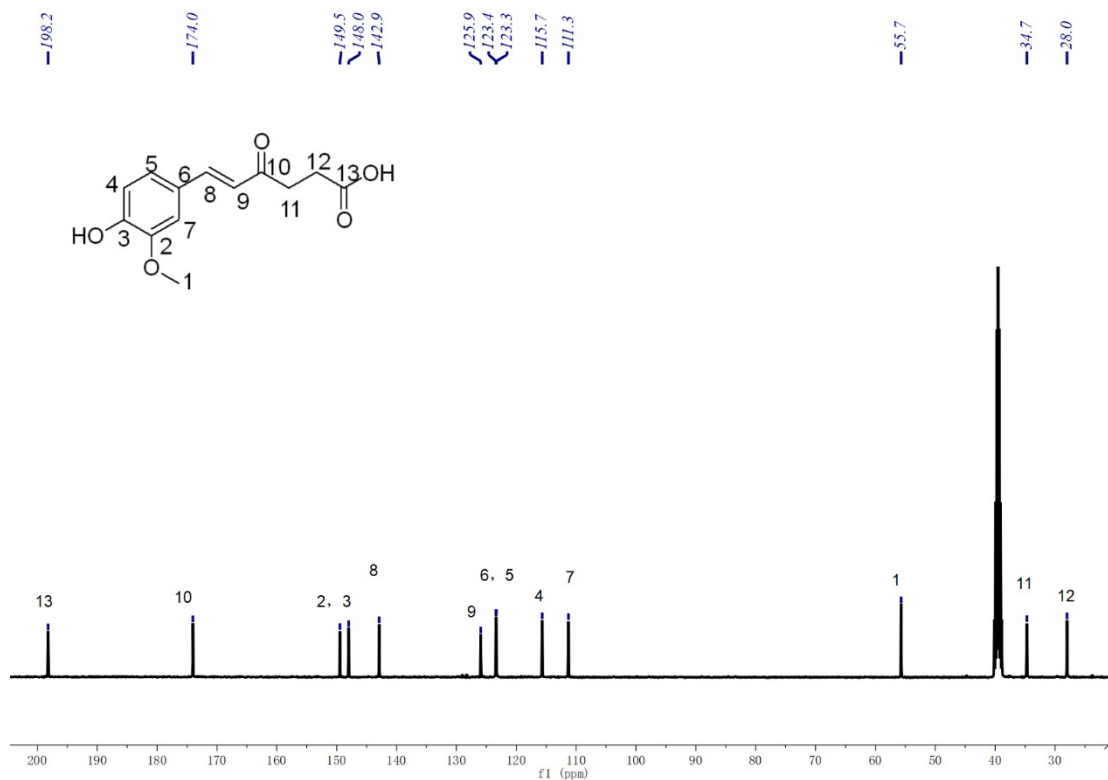


Figure S2.  $^{13}\text{C}$  NMR spectrum of VL (100 MHz,  $\text{DMSO-}d_6$ ).

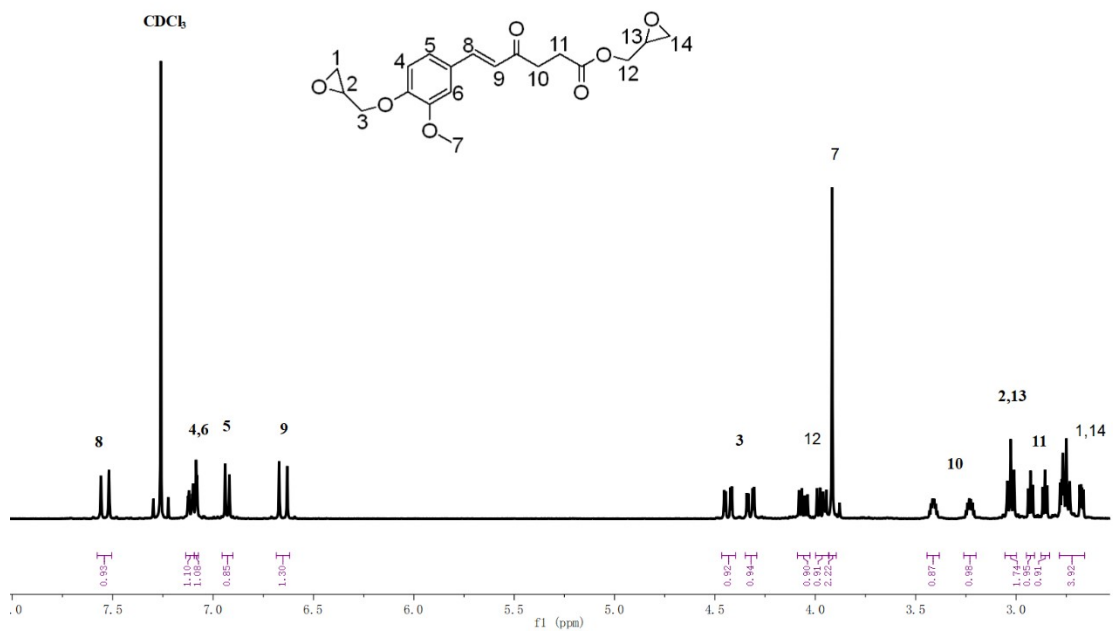


Figure S3. <sup>1</sup>H NMR spectrum of VLE (400 MHz, CDCl<sub>3</sub>).

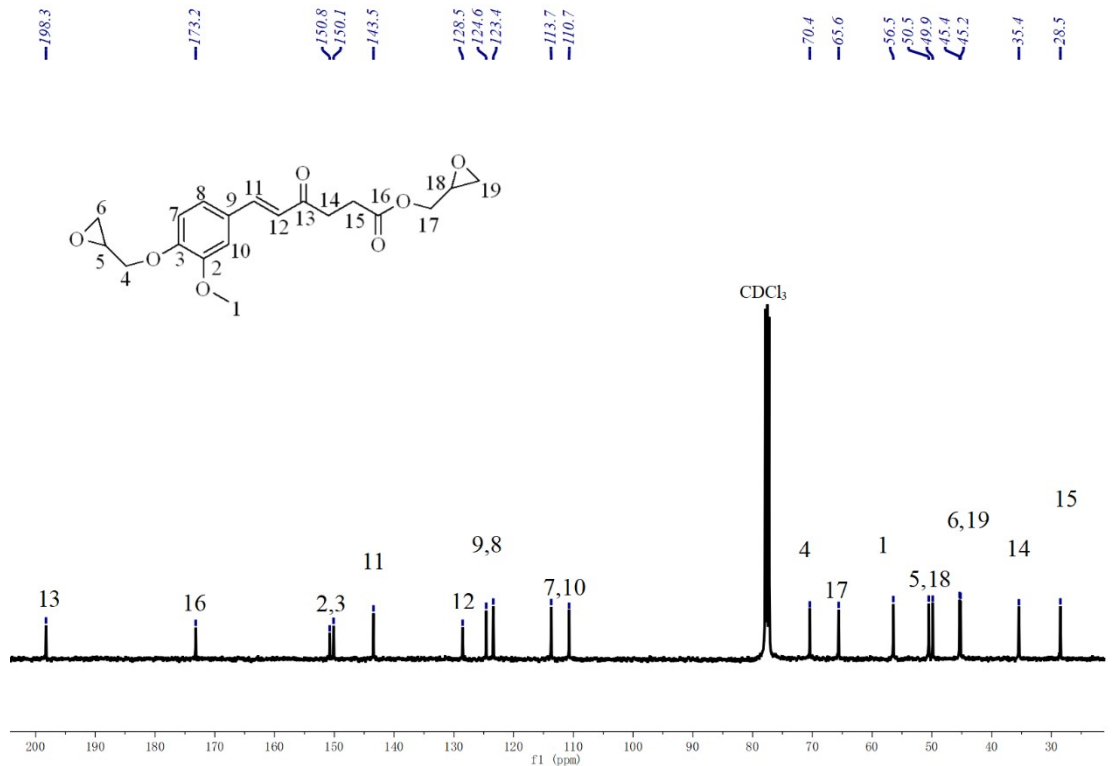


Figure S4. <sup>13</sup>C NMR spectrum of VLE (100 MHz, CDCl<sub>3</sub>).

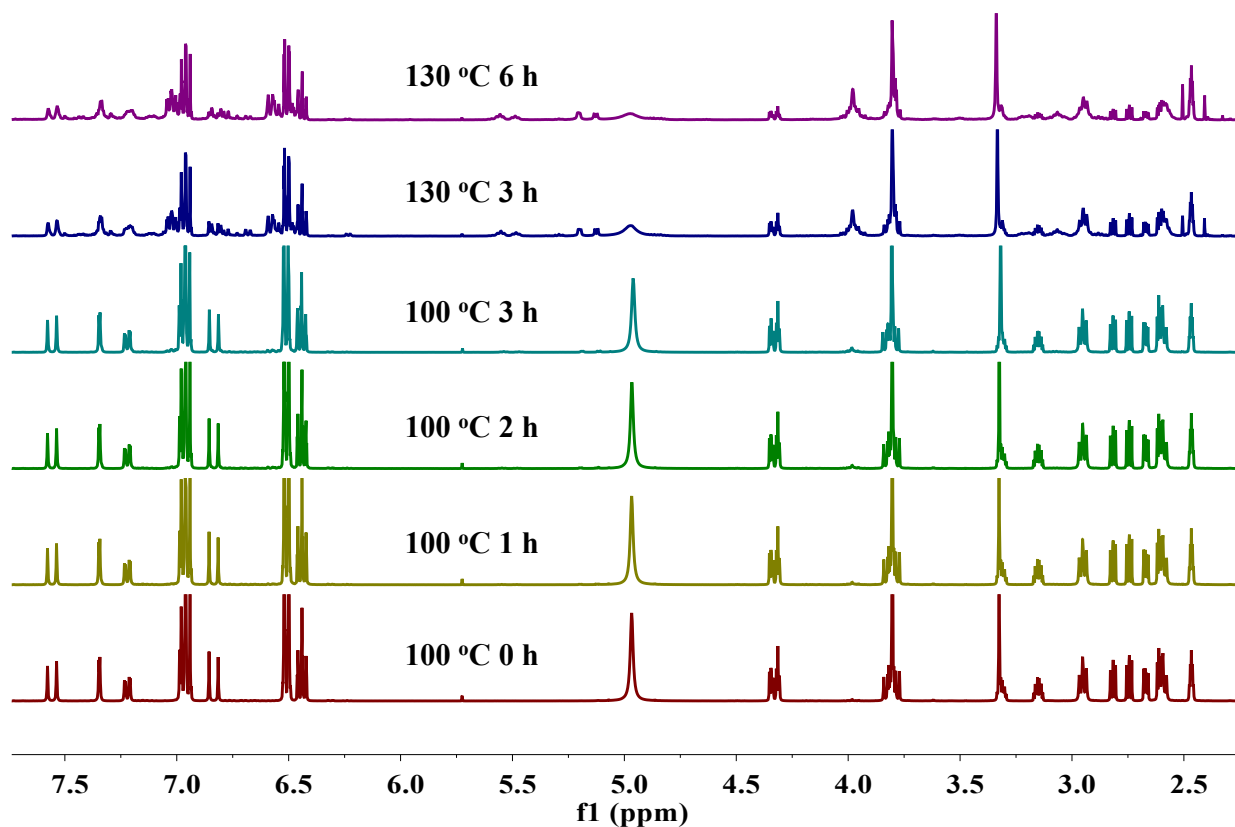


Figure S5. The *in-situ*  $^1\text{H}$  NMR spectra of the model reaction between VLE and aniline.

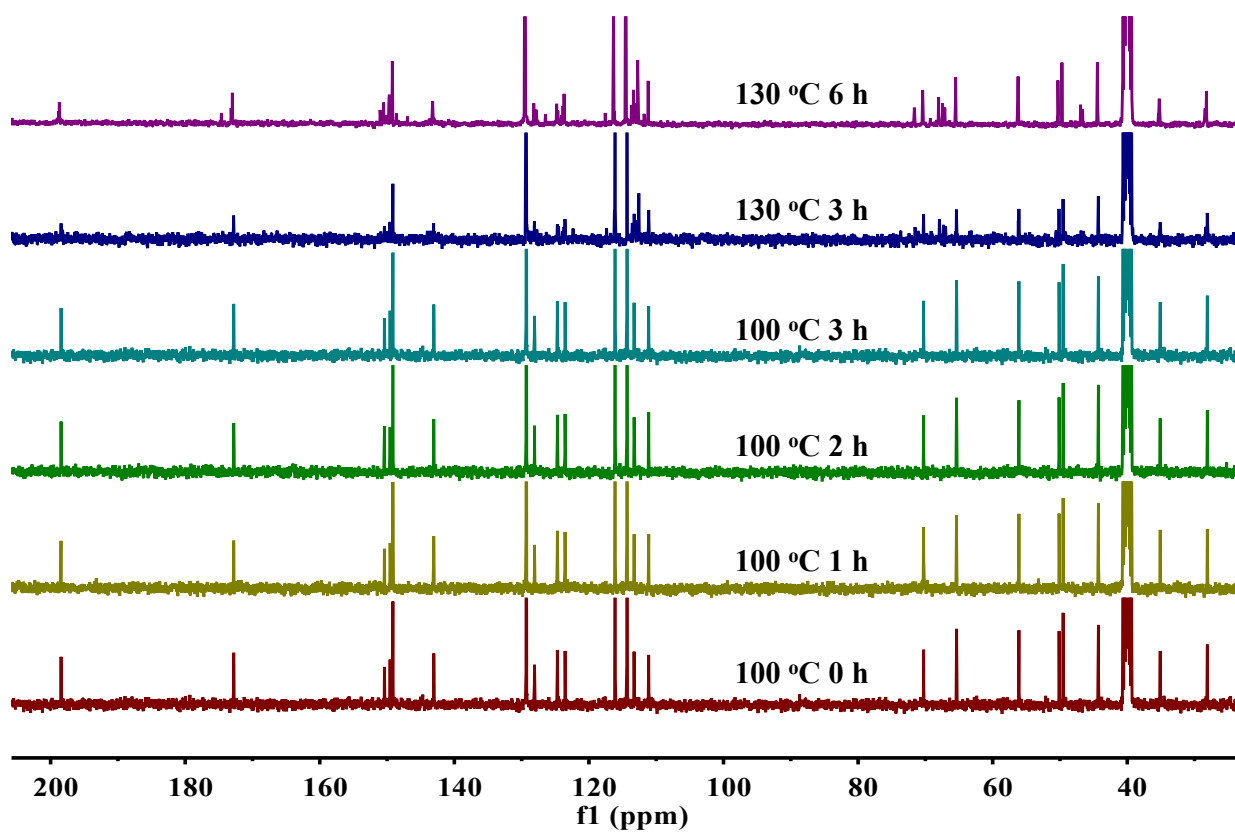
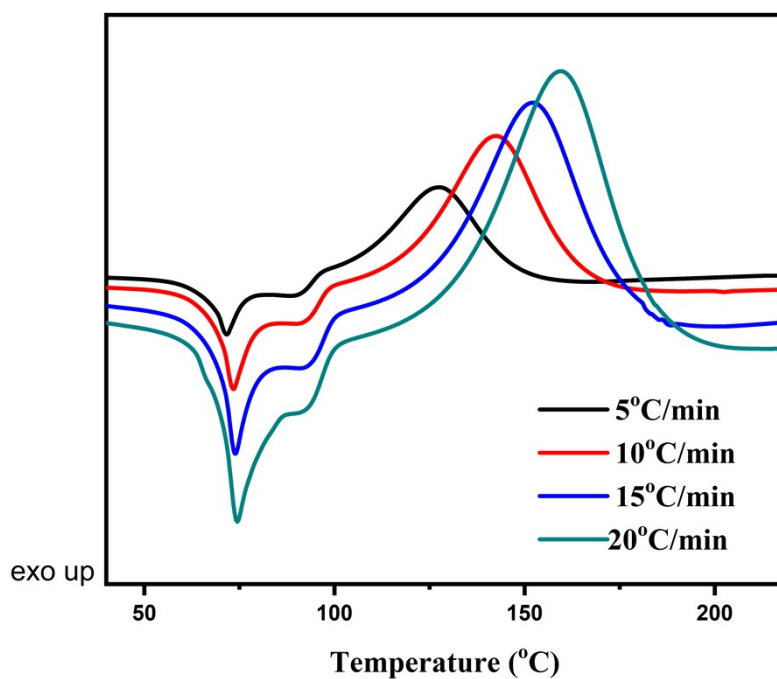
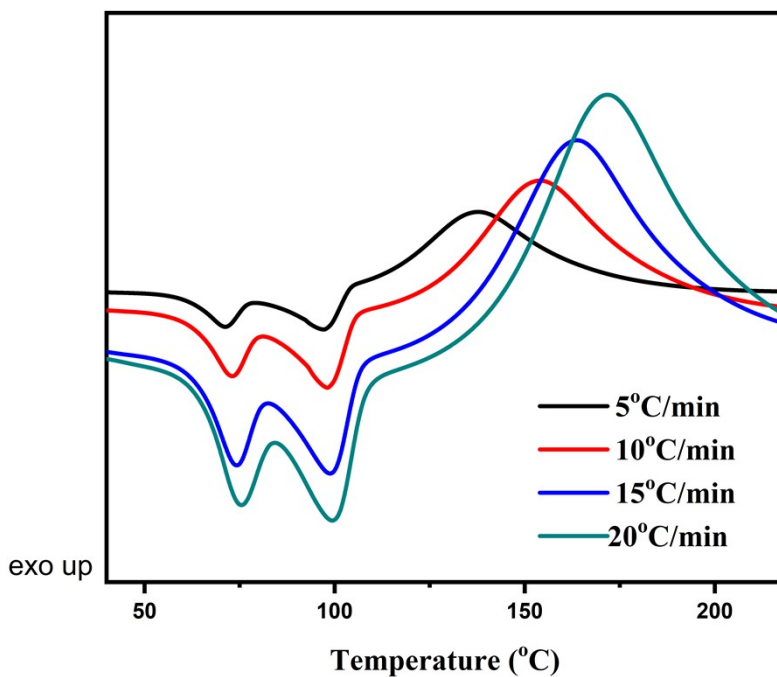


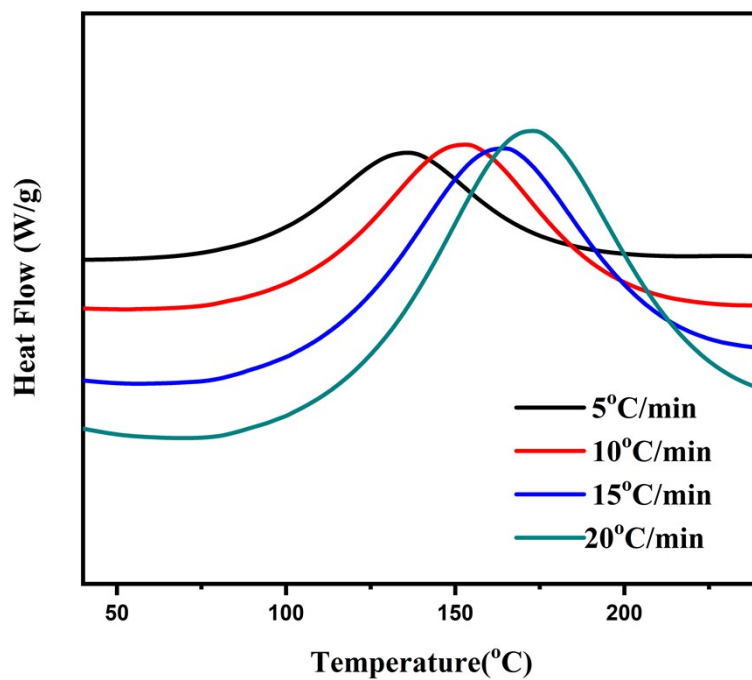
Figure S6. The *in-situ*  $^{13}\text{C}$  NMR spectra of the model reaction between VLE and aniline.



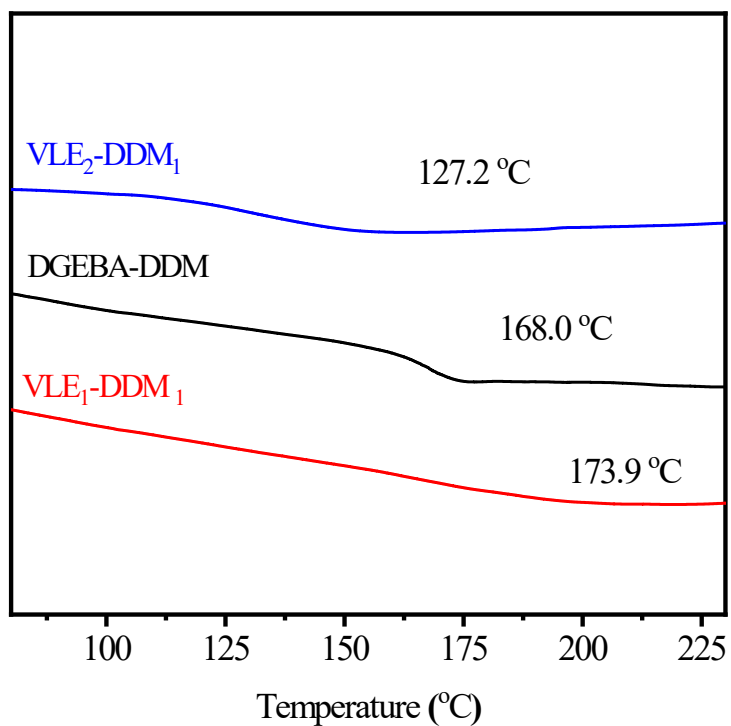
**Figure S7.** Non-isothermal DSC curves of the VLE<sub>1</sub>-DDM<sub>1</sub> system at different heating rates



**Figure S8.** Non-isothermal DSC curves of the VLE<sub>2</sub>-DDM<sub>1</sub> system at different heating rates



**Figure S9.** Non-isothermal DSC curves of the DGEAB-DDM system at different heating rates



**Figure S10.** DSC curves of cured epoxy resins



**t=0**



**t=3 day**



**t=5 day**



**t=8 day**

**Figure S11.** Degradation of VLE<sub>1</sub>-DDM<sub>1</sub> in 0.1M HCL: CH<sub>3</sub>OH=1:1