

Rosin-Based Epoxy Vitrimers with Dynamic Boronic Ester Bonds

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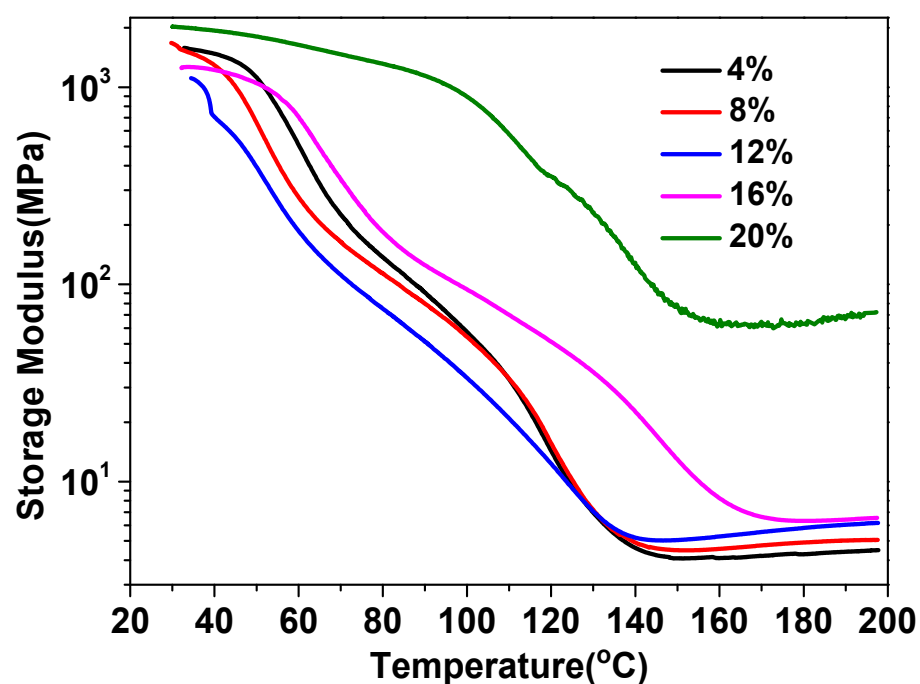


Figure S1 Storage module curves.

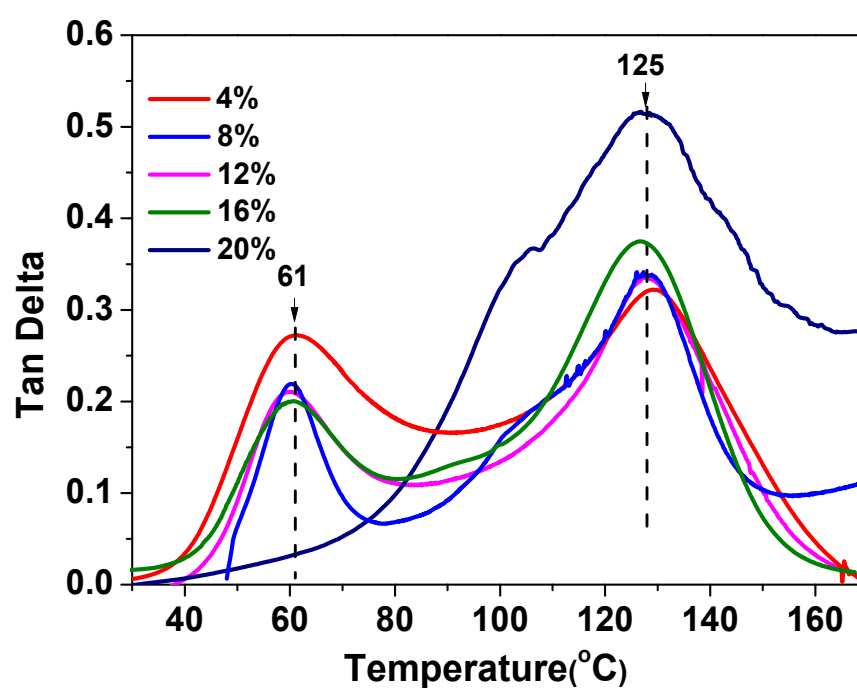


Figure S2 Tan δ curves of C-FPAE series from the DMA.

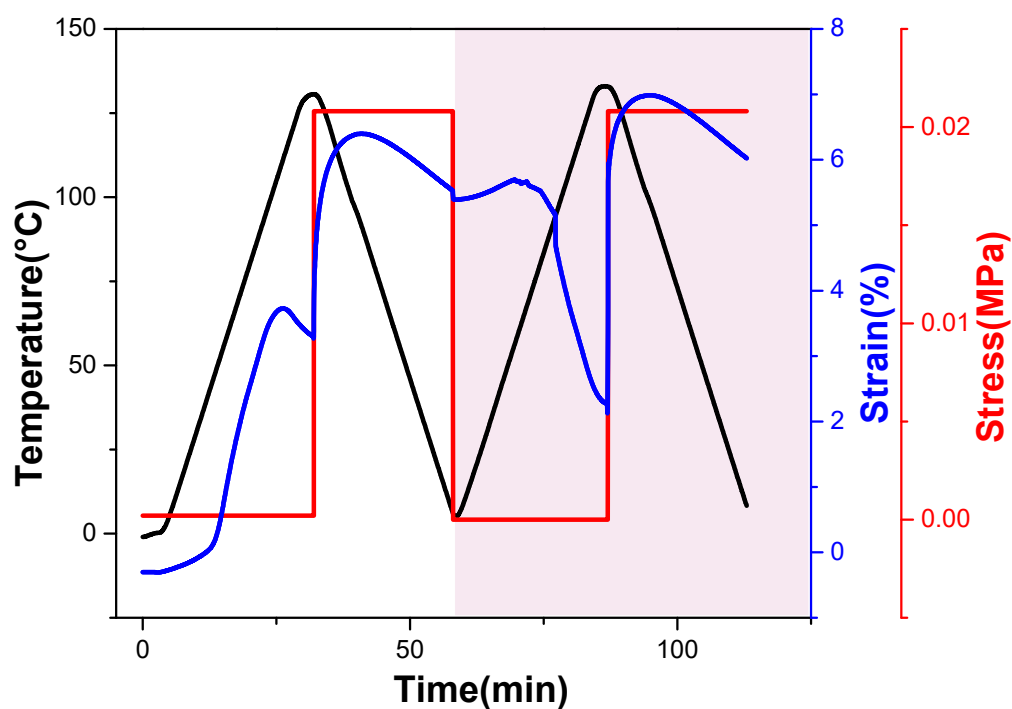


Figure S3 Consecutive shape memory cycles curves of 20% C-FPAE.

Shape fixation ratio (R_f) and shape recovery ratio (R_r) of 20% C-FPAE is defined as following equations. Where ε_1 , ε_2 and ε_m are the strain after programming, residual strain after heating for shape recovery and maximum programming strain, respectively.

$$R_f = \frac{\varepsilon_1}{\varepsilon_m}$$

$$R_r = \frac{\varepsilon_1 - \varepsilon_2}{\varepsilon_1}$$

Table S1. The crosslinking density and other swell parameter of the C-FPAE series with different BDB contents

Sample	Swelling ratio	Sol fraction (%)	m_o (mg)	m_1 (mg)	ρ_0 (g/cm ³)	Cd (mol/cm ³)
4% C-FPAE	55.7	24.2	51.5	94.2	0.98	0.33
8% C-FPAE	47.8	12.5	83.2	114.8	1.02	0.37
12% C-FPAE	30.7	5.2	71.6	91.7	1.08	0.49
16% C-FPAE	20.7	2.3	463.1	573.3	1.15	0.79
20% C-FPAE	12.9	0.6	34.8	41.1	1.18	0.85

Article, Review, Communication, etc.)