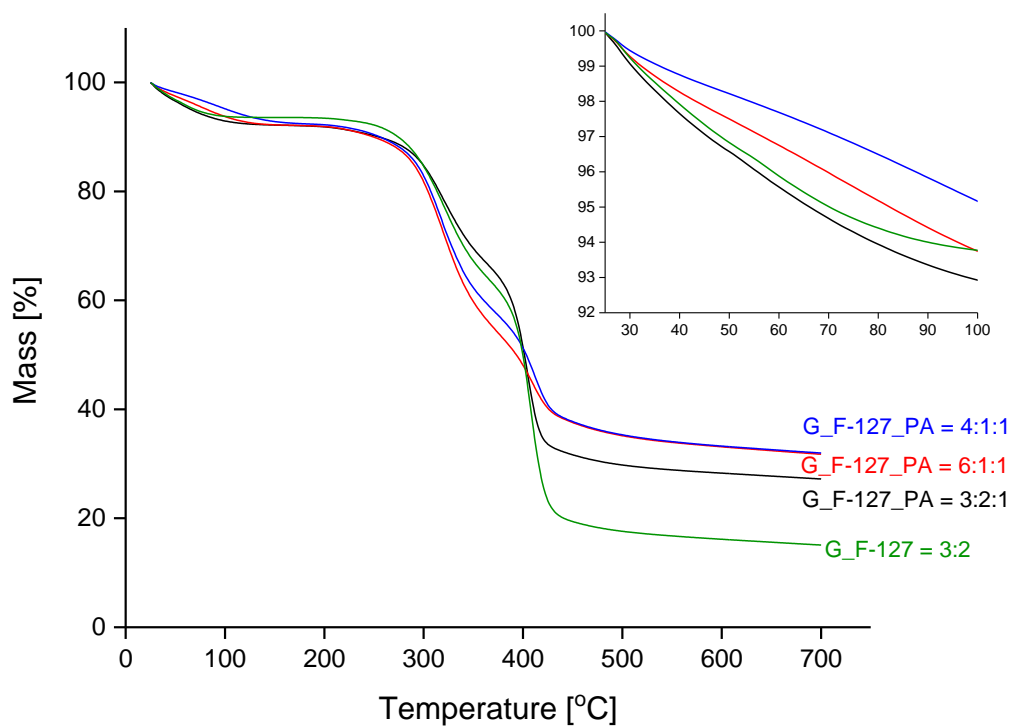


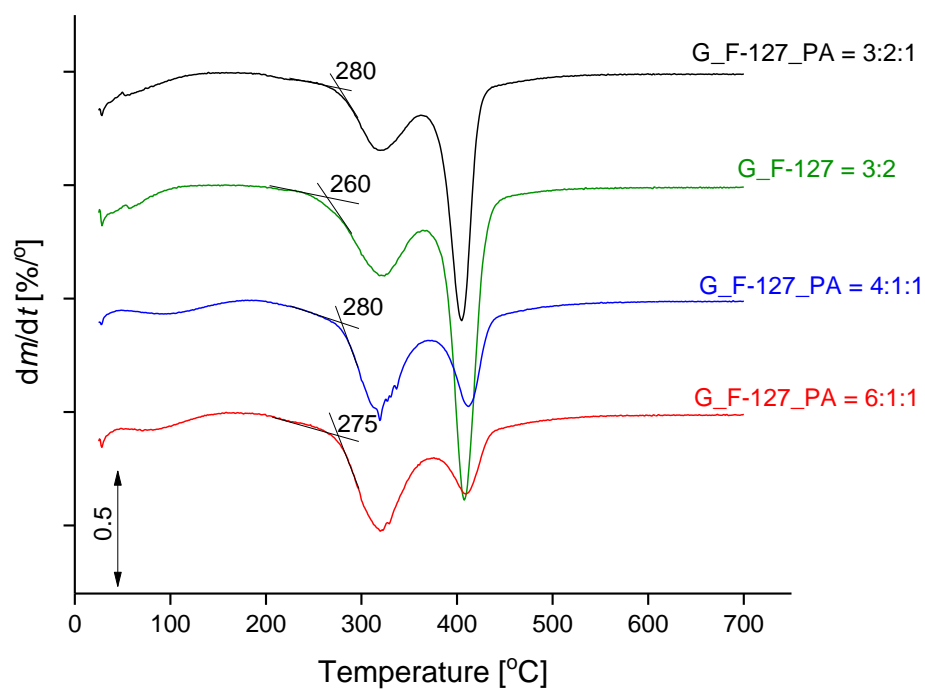
## Supplementary Materials



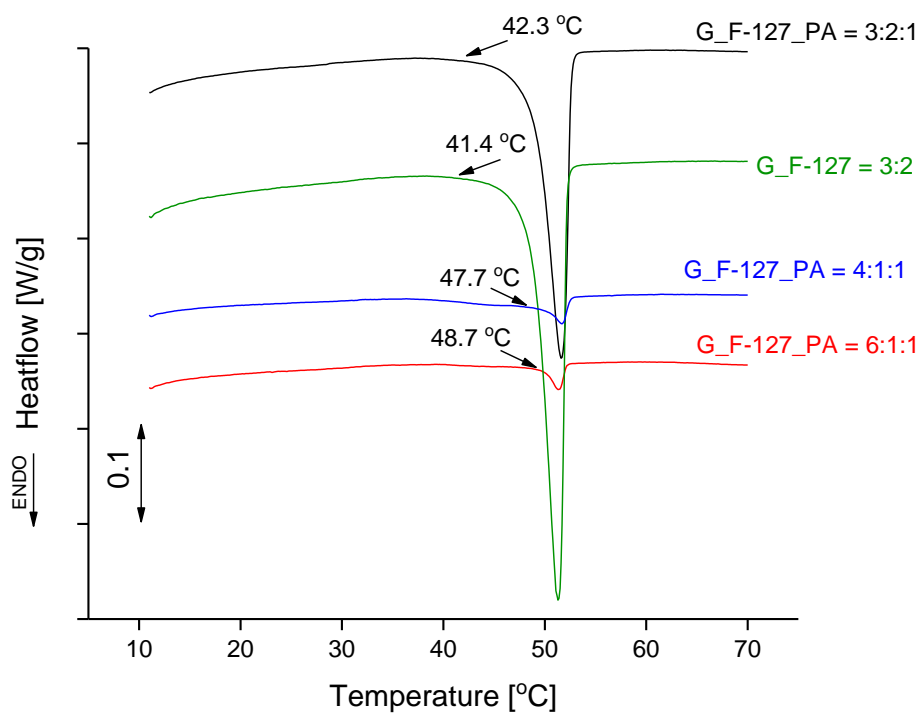
**Figure S1.** Dynamic TG curves of the lyophilized samples. Inset: the enlargement of the temperature range from 25 °C to 100 °C.

**Table S1.** Comparison of the mass loss of lyophilized hydrogels from room temperature to 100 °C.

$\Delta m$ (25–100 °C) / %			
G_F-127_PA = 4:1:1	G_F-127_PA = 6:1:1	G_F-127_PA = 3:2:1	G_F-127 = 3:2
4.83	6.25	7.07	6.22



**Figure S2.** DTG curves of the lyophilized samples.



**Figure S3.** DSC curves of the lyophilized samples.

**Table S2.** Melting temperatures and the corresponding enthalpies of the lyophilized samples.

sample	Onset melting temperature / °C	$\Delta H$ / J g <sup>-1</sup>
G_F-127_PA = 4:1:1	49.6	2.77
G_F-127_PA = 6:1:1	49.9	1.28
G_F-127_PA = 3:2:1	48.9	26.7
G_F-127 = 3:2	48.8	34.2