



DMA curves for $T_A = 35\text{ }^{\circ}\text{C}$ and $T_A = 45\text{ }^{\circ}\text{C}$.

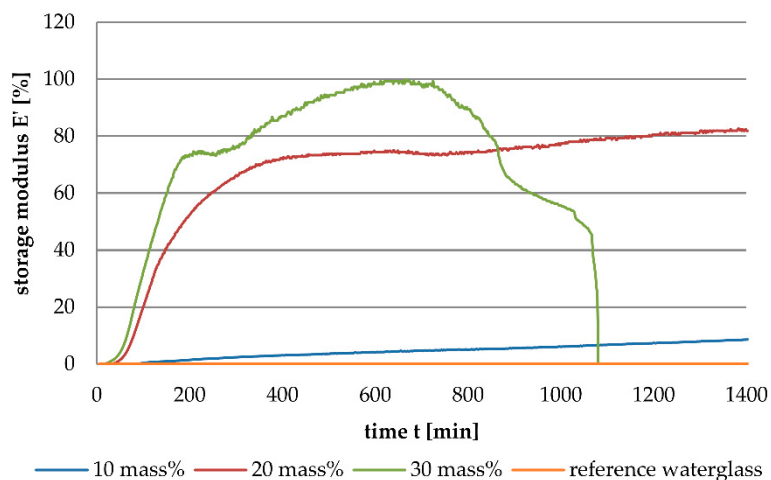


Figure S1. DMA measurements of the waterglass samples with different added content of AlPO_4 hardener at $T_A = 35\text{ }^{\circ}\text{C}$. The reference is a waterglass sample without any hardener added.

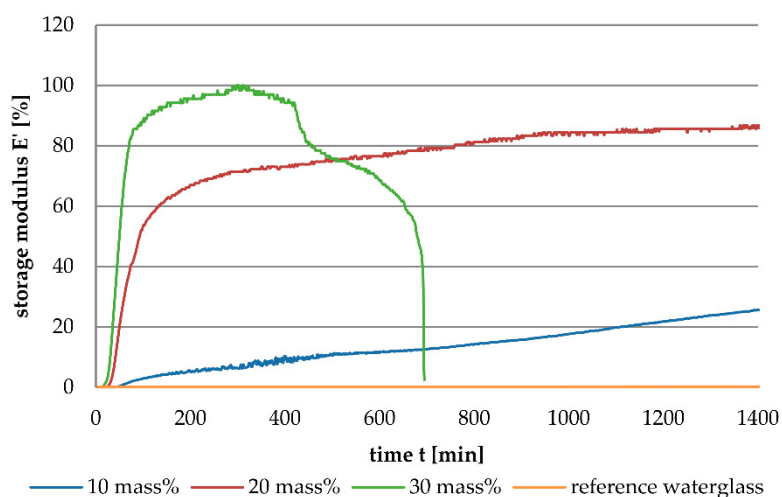


Figure S2. DMA measurements of the waterglass samples with different added content of AlPO_4 hardener at $T_A = 45\text{ }^{\circ}\text{C}$. The reference is a waterglass sample without any hardener added.

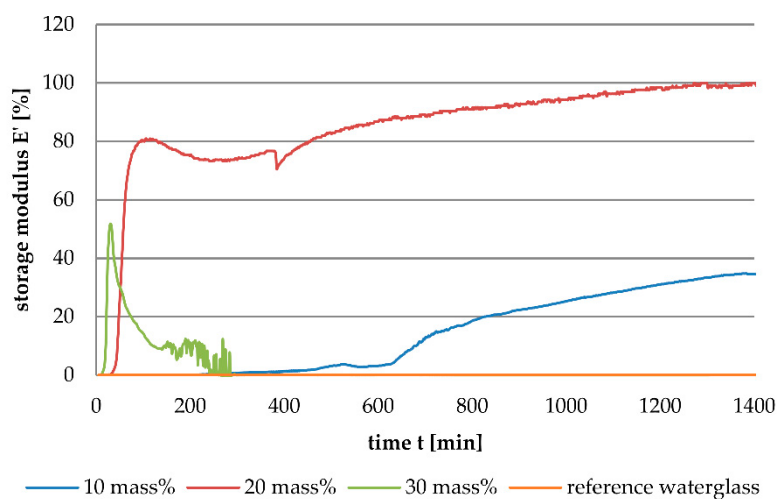


Figure S3. DMA measurements of the waterglass samples with different added content of BPO_4 hardener at $T_A = 35^\circ\text{C}$. The reference is a waterglass sample without any hardener added.

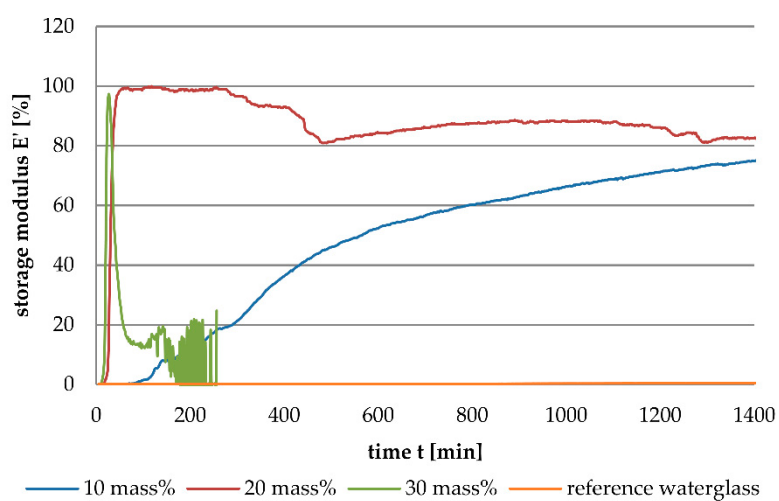


Figure S4. DMA measurements of the waterglass samples with different added content of BPO_4 hardener at $T_A = 45^\circ\text{C}$. The reference is a waterglass sample without any hardener added.

Determination of the gel and glass points

1. AlPO_4 hardener

a) Gel point determination: Point of frequency-independence of the $\tan\delta$. $T_A = 25\text{ }^\circ\text{C}$: frequency-independence of the $\tan\delta$ in detail, curing time is corrected with regard to the time for preparation of the measurement (= 5 minutes)

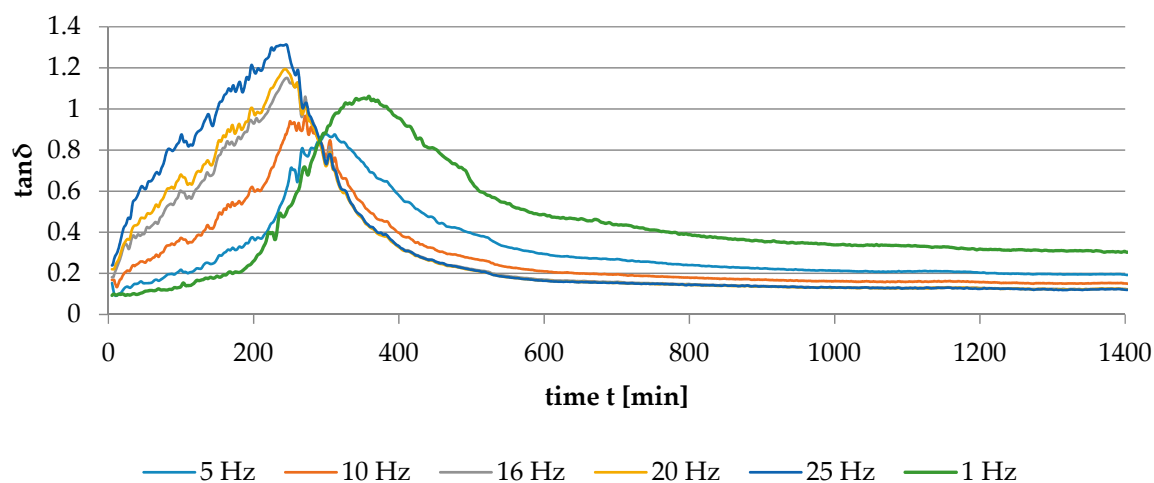


Figure S5. 10 mass%, $T_A = 25\text{ }^\circ\text{C}$.

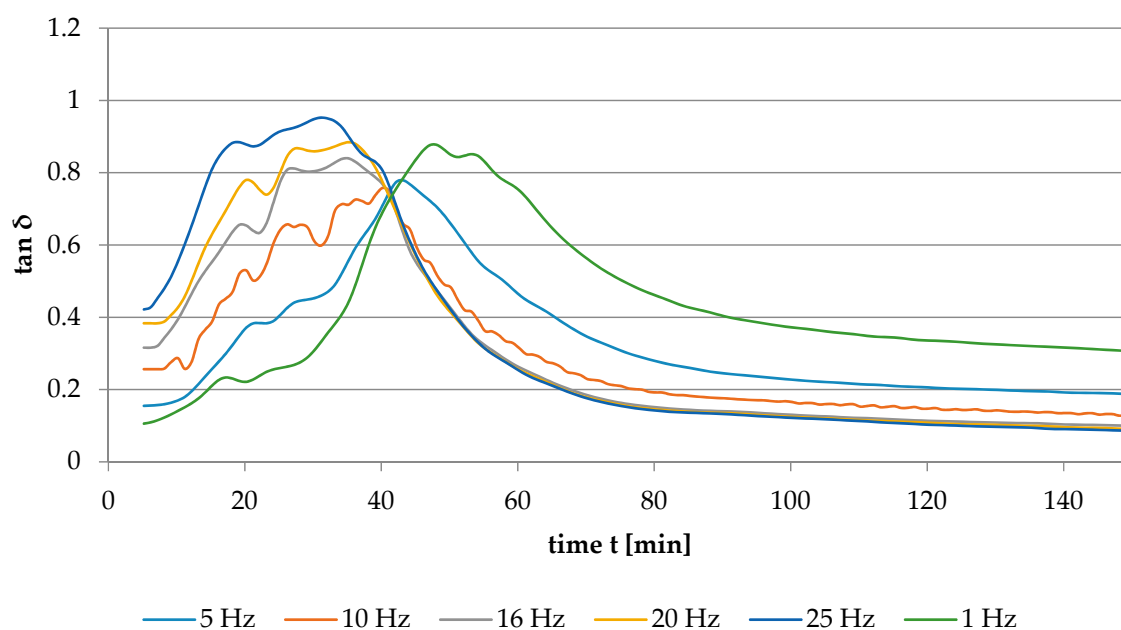


Figure S6. 20 mass%, $T_A = 25\text{ }^\circ\text{C}$.

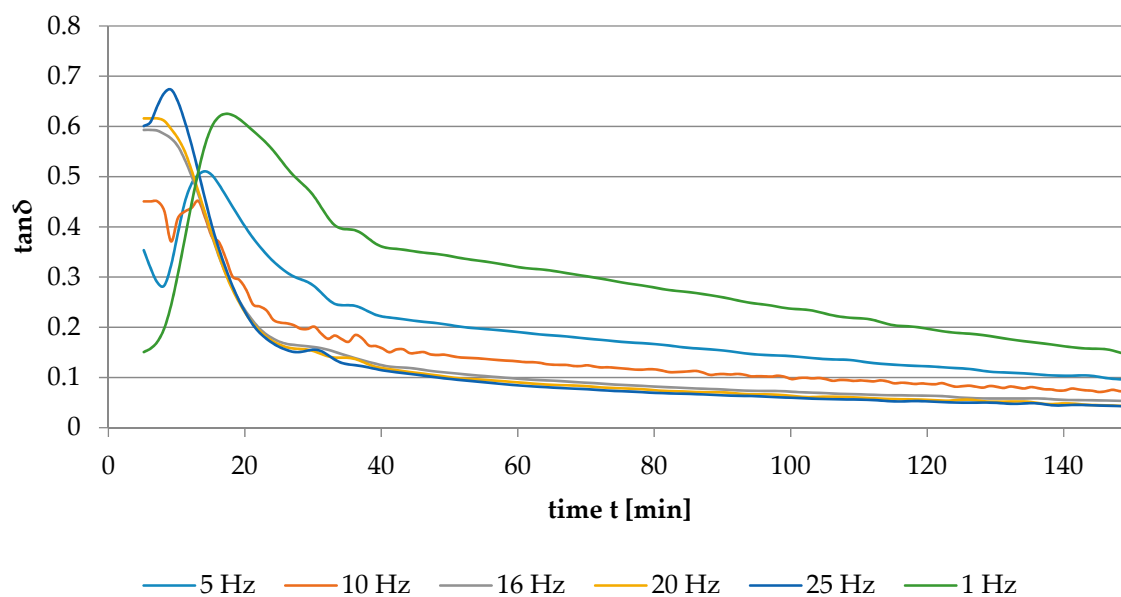


Figure S7. 30 mass%, $T_A = 25\text{ }^{\circ}\text{C}$.

AlPO ₄ Content	Gel Point at $T_A = 25\text{ }^{\circ}\text{C}$ [min]
10 mass%	290
20 mass%	42.5
30 mass%	14.75

$T_A = 35\text{ }^{\circ}\text{C}$ and $T_A = 45\text{ }^{\circ}\text{C}$: Overview of frequency-independence of the $\tan\delta$ directly from the software (that means without time correction).

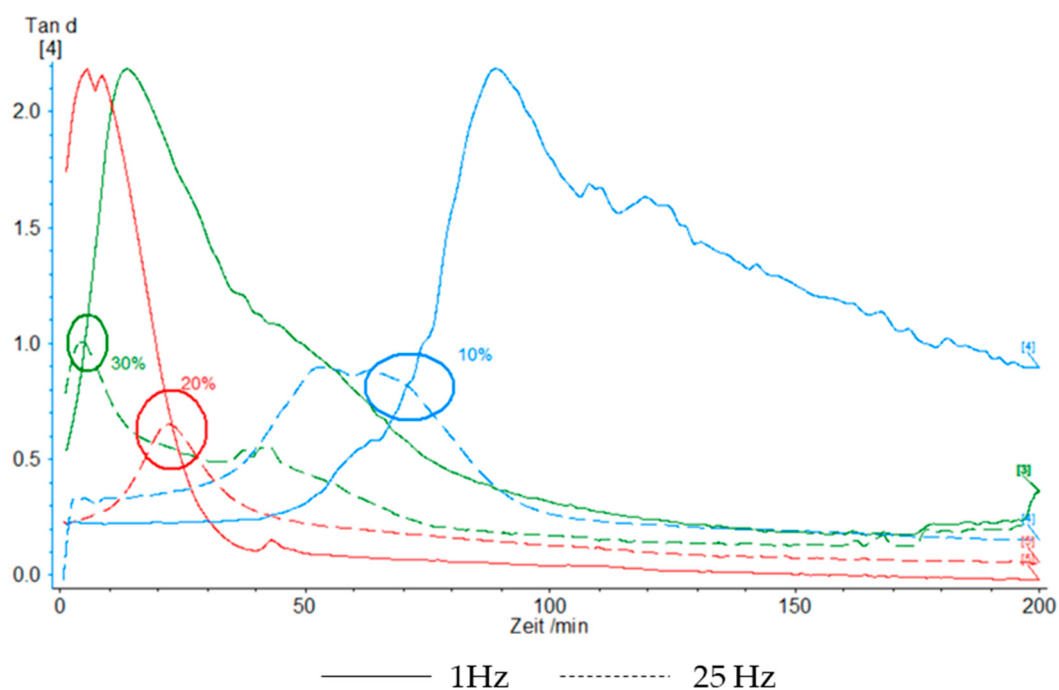


Figure S8. AlPO_4 , $T_A = 35\text{ }^{\circ}\text{C}$.

AlPO_4 Content	Gel Point at $T_A = 35\text{ }^{\circ}\text{C}$ [min]
10 mass%	77.8
20 mass%	27
30 mass%	11

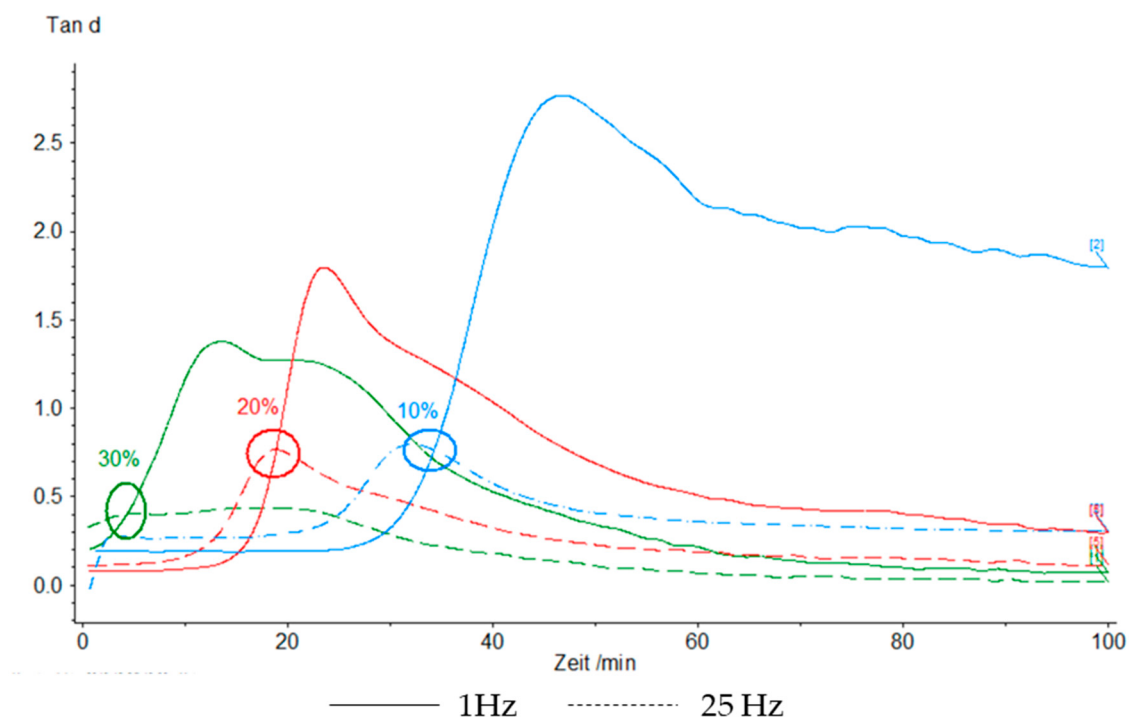


Figure S9. AlPO₄, T_A = 45 °C.

AlPO ₄ Content	Gel Point at T _A = 45 °C [min]
10 mass%	39.5
20 mass%	23
30 mass%	9.2

b) Glass point determination: Maximum of the Loss modulus E'' (1 Hz). $T_A = 25\text{ }^{\circ}\text{C}$: Glass point determination in detail, curing time is corrected with regard to the time for preparation of the measurement (= 5 minutes).

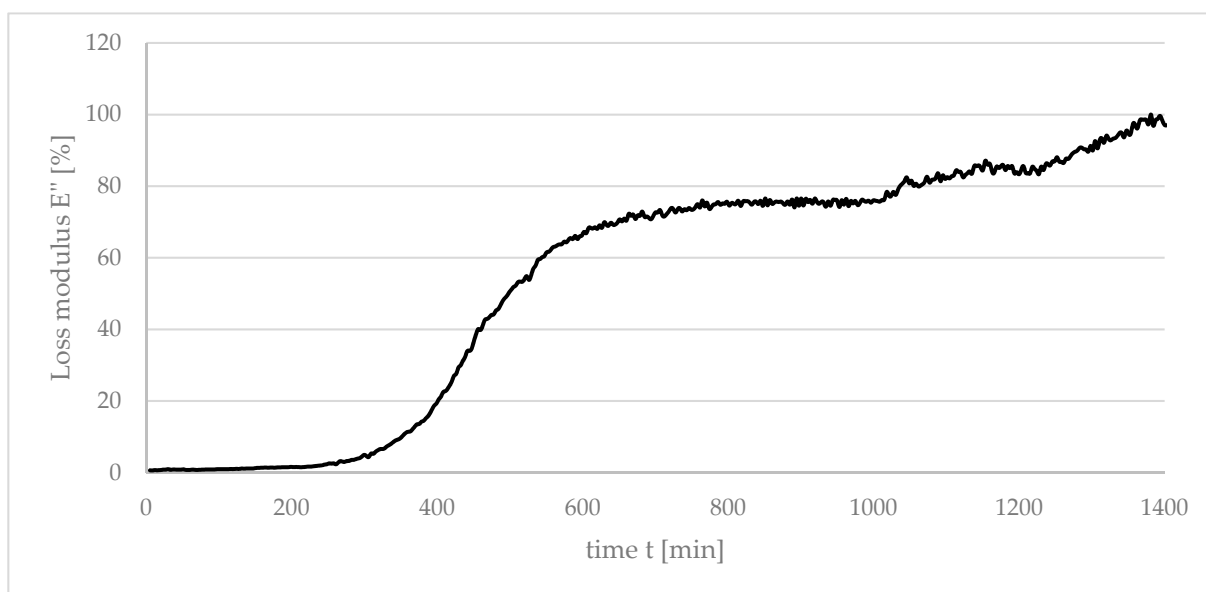


Figure S10. 10 mass%, $T_A = 25\text{ }^{\circ}\text{C}$.

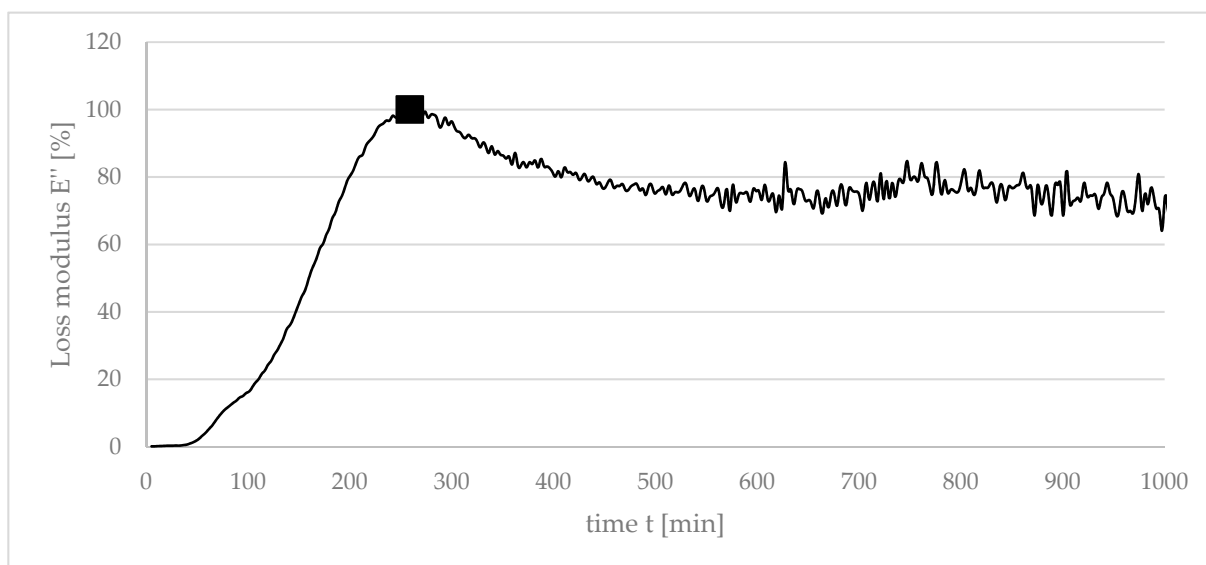


Figure S11. 20 mass%, $T_A = 25\text{ }^{\circ}\text{C}$.

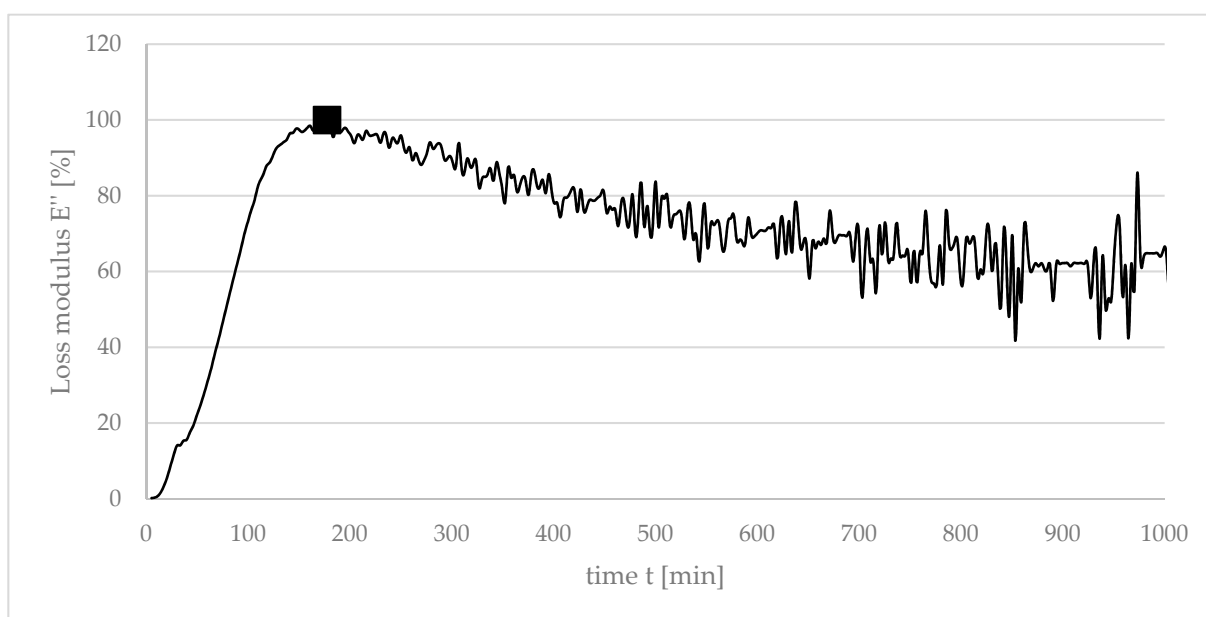


Figure S12. 30 mass%, $T_A = 25\text{ }^{\circ}\text{C}$.

AlPO₄ Content	Glass Point at $T_A = 25\text{ }^{\circ}\text{C}$ [min]
10 mass%	-
20 mass%	258.8
30 mass%	173.3

$T_A = 35\text{ }^{\circ}\text{C}$ and $T_A = 45\text{ }^{\circ}\text{C}$: Overview of the glass point determination directly from the software (that means without time correction).

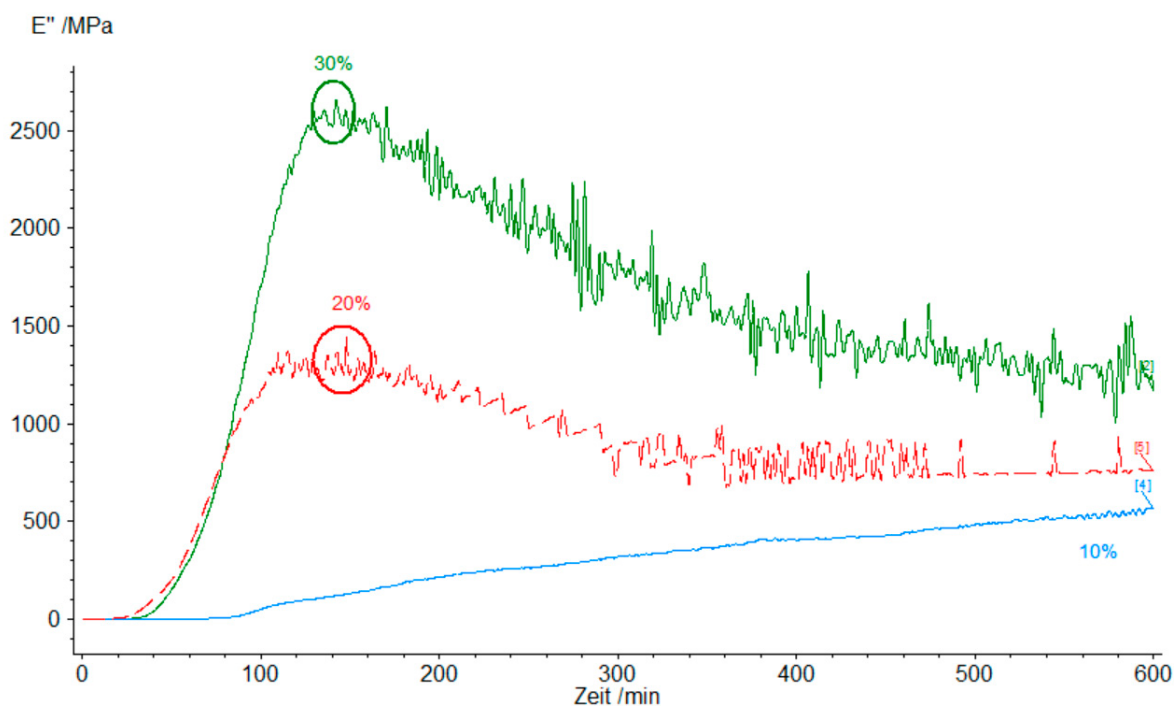


Figure S13. AlPO_4 , $T_A = 35\text{ }^{\circ}\text{C}$.

AlPO_4 Content	Glass Point at $T_A = 35\text{ }^{\circ}\text{C}$ [min]
10 mass%	-
20 mass%	153
30 mass%	146.4

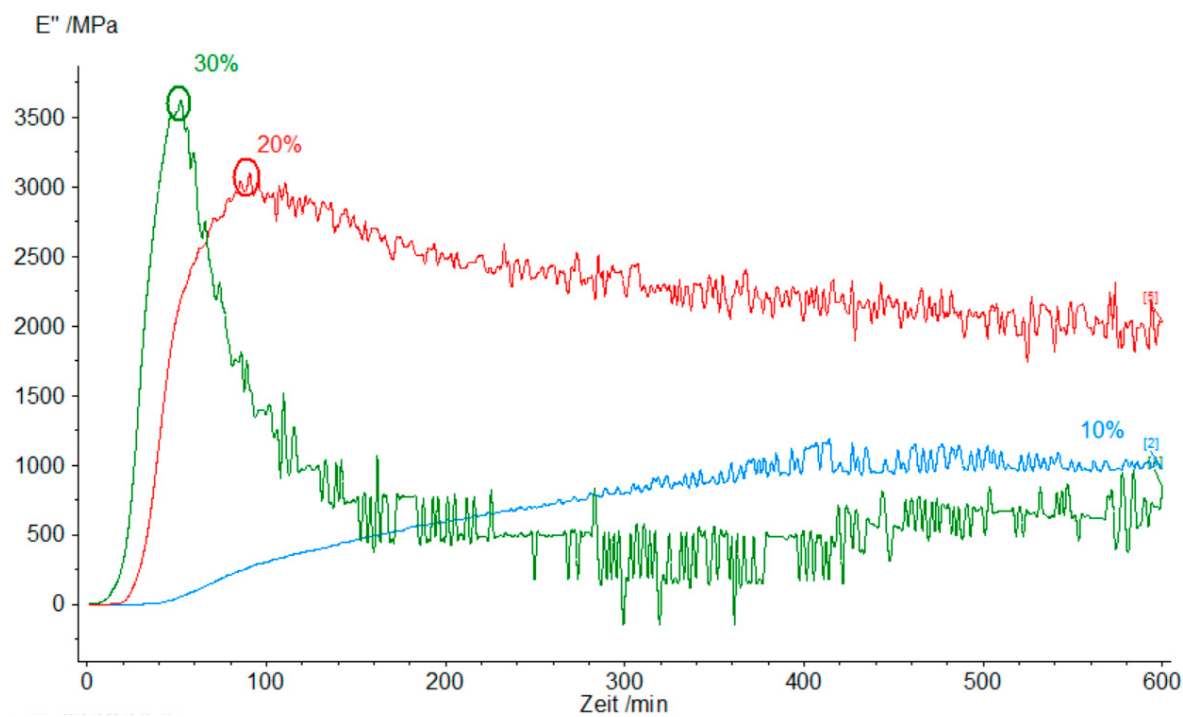


Figure S14. AlPO₄, T_A = 45 °C.

AlPO ₄ Content	Glass Point at T _A = 45 °C [min]
10 mass%	-
20 mass%	95.5
30 mass%	57.3

2. BPO₄ Hardener

a) Gel point determination: Point of frequency-independence of the $\tan\delta$. Overview directly from the software (that means without time correction).

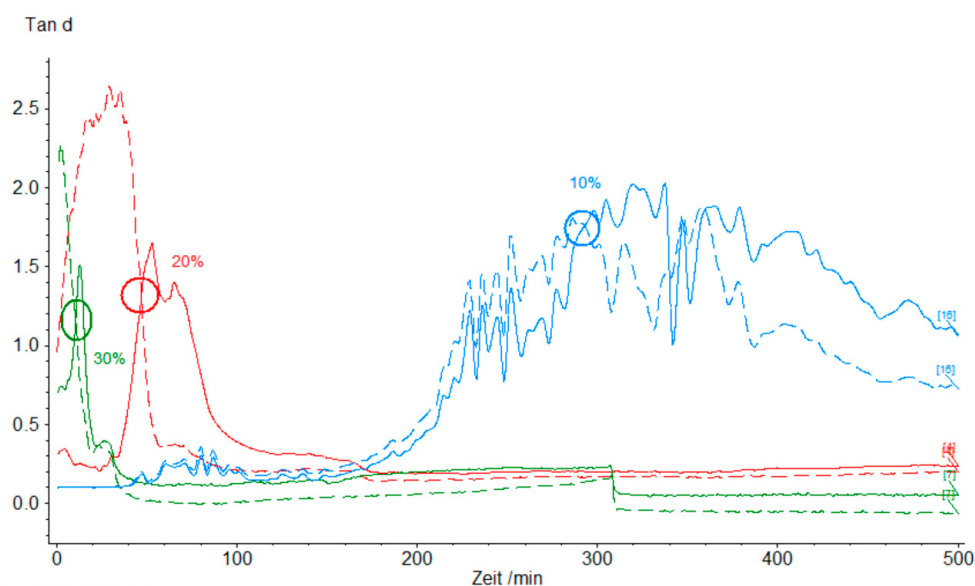


Figure S15. BPO₄, T_A = 25 °C.

BPO ₄ Content	Gel Point at T _A = 25 °C [min]
10 mass%	295
20 mass%	52.4
30 mass%	15.7

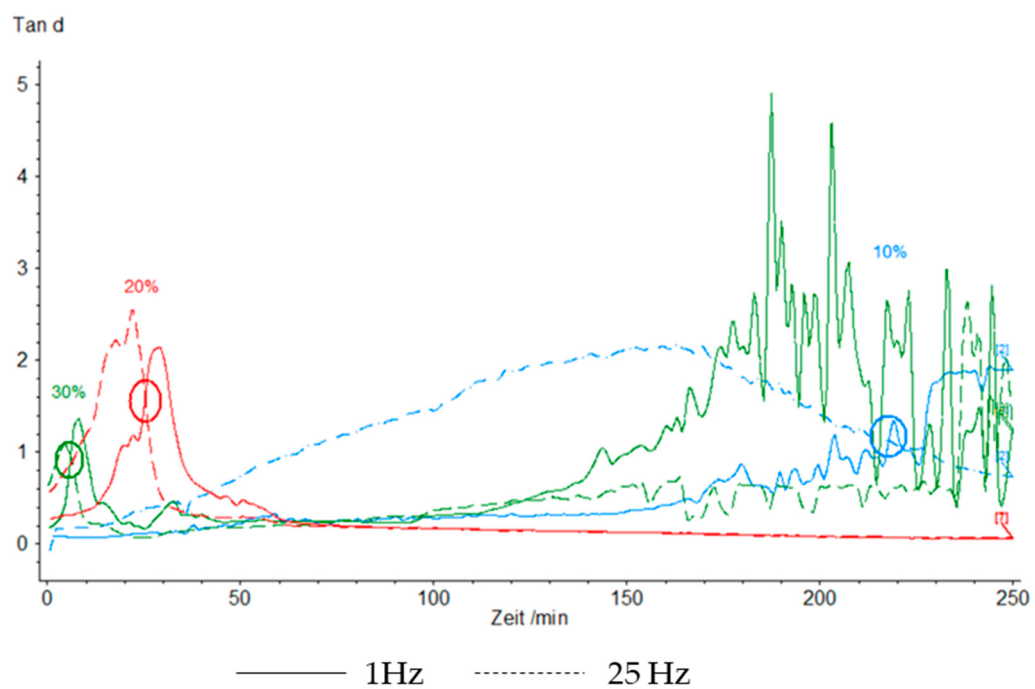


Figure S16. BPO₄, T_A = 35 °C.

BPO ₄ Content	Gel Point at T _A = 35 °C [min]
10 mass%	222.5
20 mass%	32.4
30 mass%	10.6

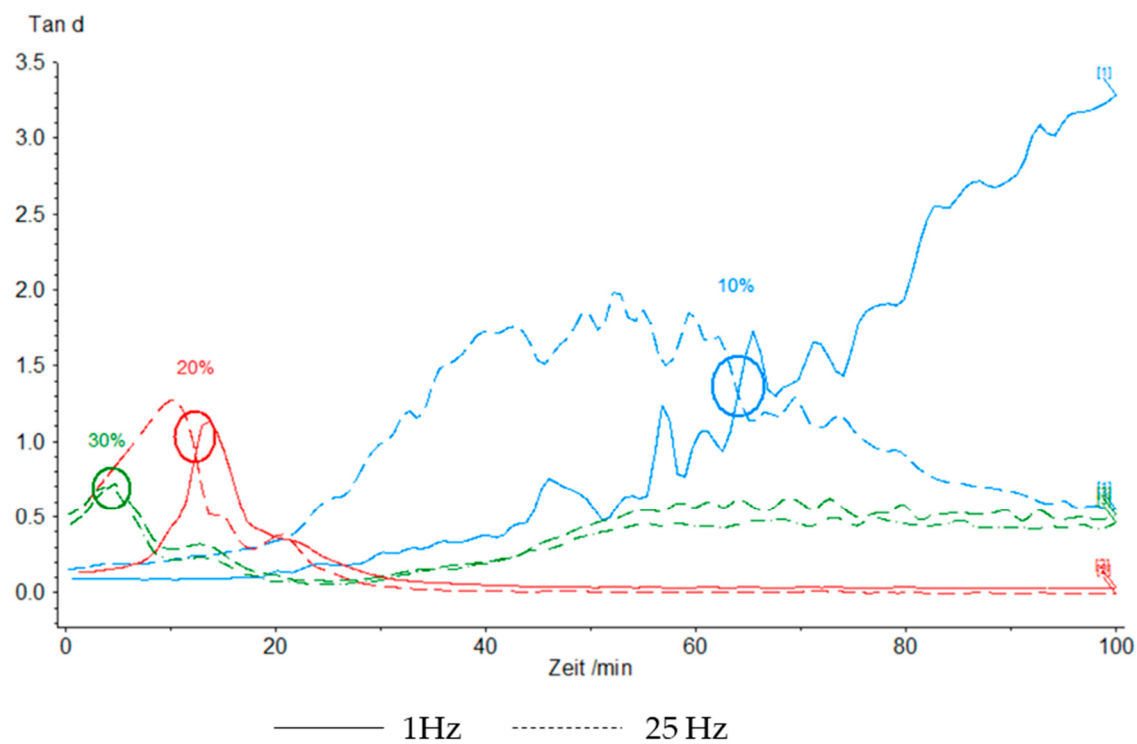
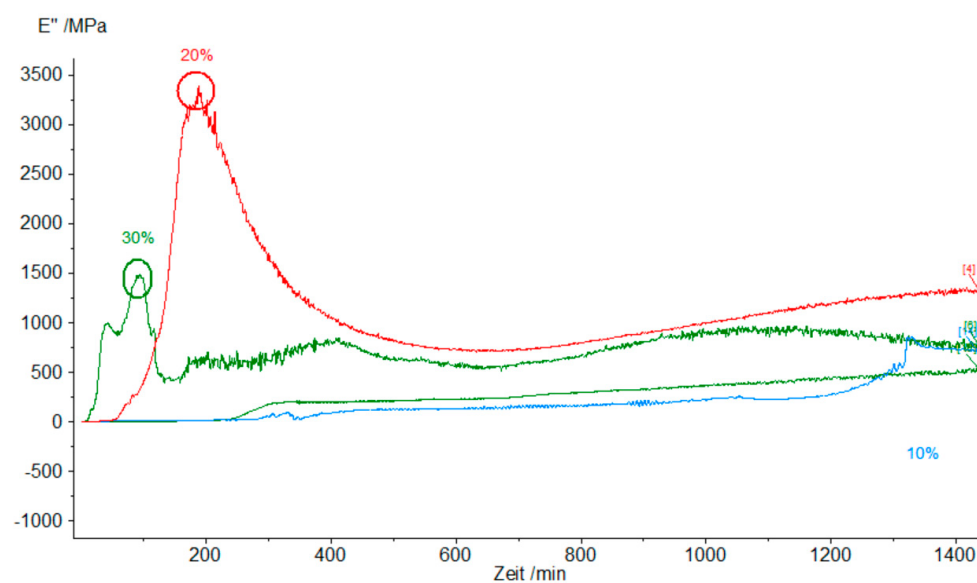


Figure S17. BPO₄, T_A = 45 °C.

BPO ₄ Content	Gel Point at T _A = 45 °C [min]
10 mass%	71
20 mass%	17.5
30 mass%	9.9

b) Glass point determination: Maximum of the Loss modulus E'' (1 Hz).Figure S18. BPO₄, T_A = 25 °C.

BPO ₄ Content	Glass Point at T _A = 25 °C [min]
10 mass%	-
20 mass%	189
30 mass%	99.1

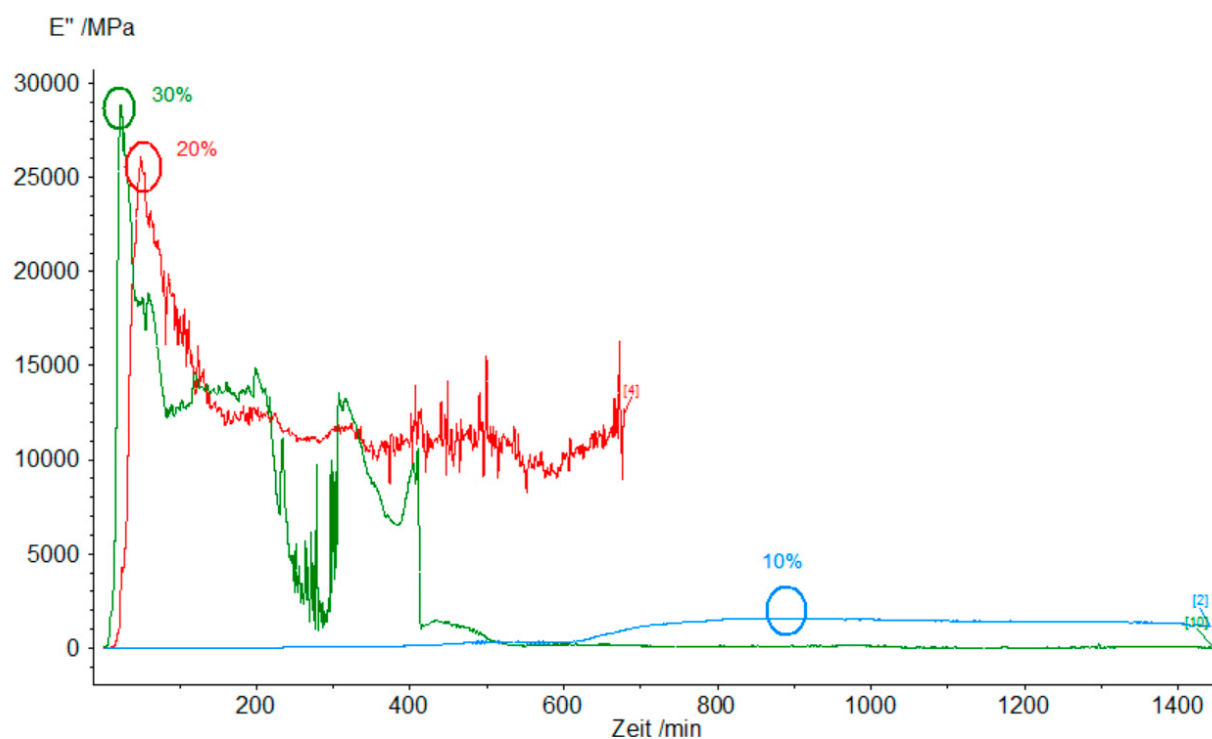


Figure S19. BPO₄, T_A = 35 °C.

BPO ₄ Content	Glass Point at T _A = 35 °C [min]
10 mass%	893.2
20 mass%	55.8
30 mass%	35.8

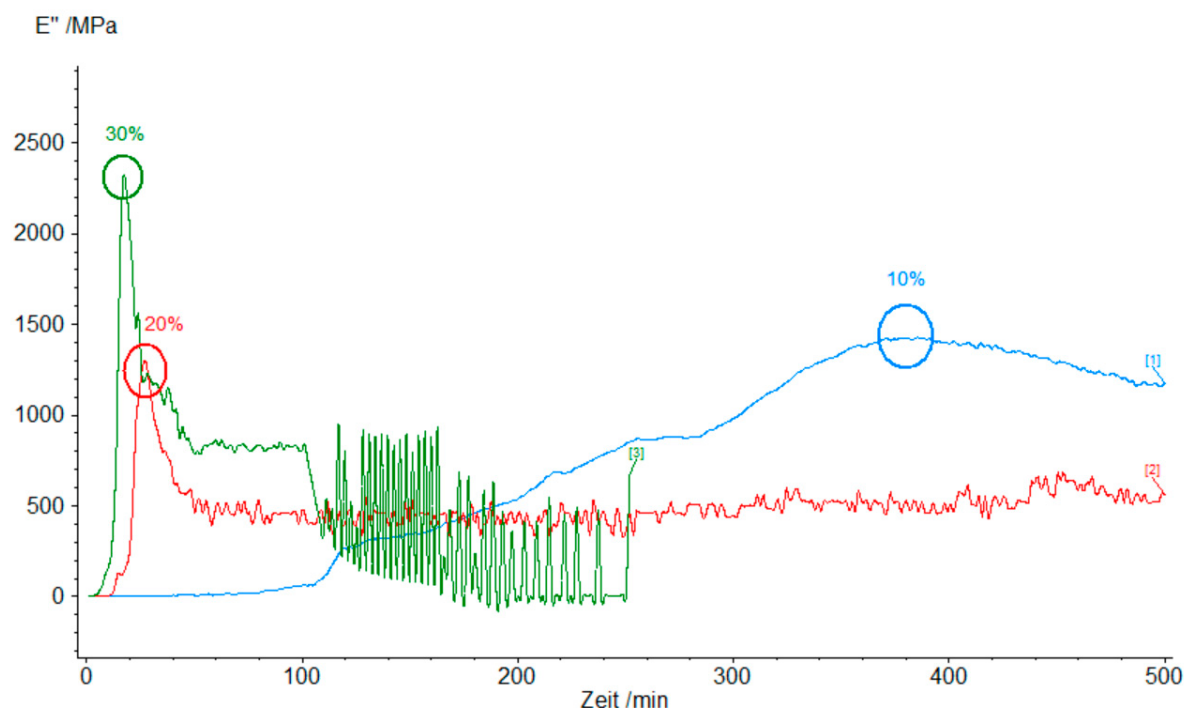


Figure 20. BPO₄, T_A = 45 °C.

BPO ₄ Content	Glass Point at T _A = 45 °C [min]
10 mass%	391
20 mass%	31.6
30 mass%	22.4



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