

Appendix to the article entitled:

Effect of the composition on physicochemical properties of cross-linked poly(sodium acrylate)/sodium silicate hydrogels

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1. Rheological measurements: gelation kinetics

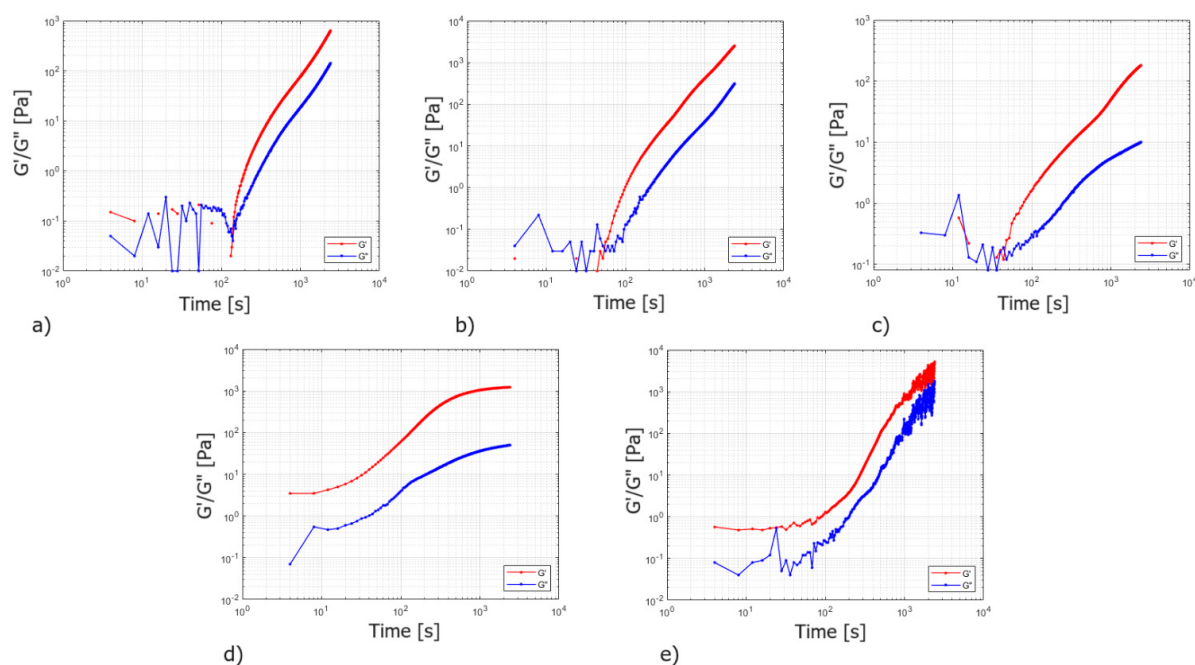


Figure S1. Graphs of gelation kinetics of silicate-polymer systems (20 wt.% of ANa aq.): a) 5%/1:9, b) 20%/1:9, c) 5%/1:1, d) 20%/1:1, e) 5%/9:1.

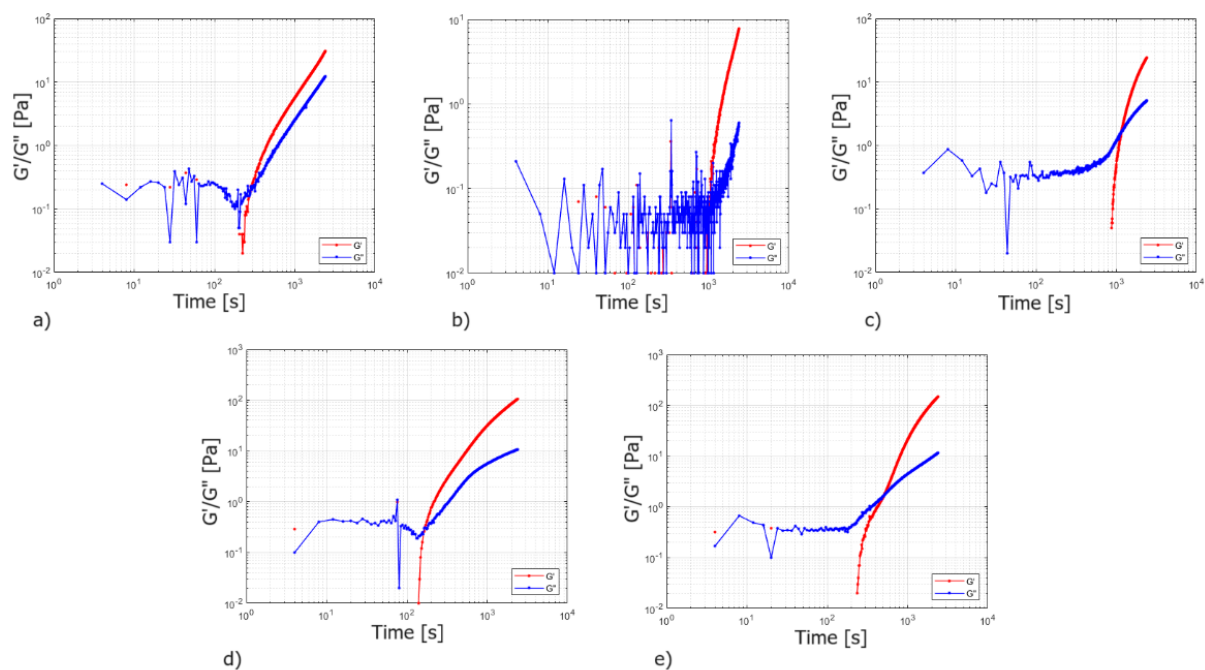


Figure S2. Graphs of gelation kinetics of silicate-polymer systems (15 wt.% of ANa aq.): a) 5%/1:9, b) 20%/1:9, c) 5%/1:1, d) 20%/1:1, e) 5%/9:1.

2. Rheological measurements: oscillation measurements

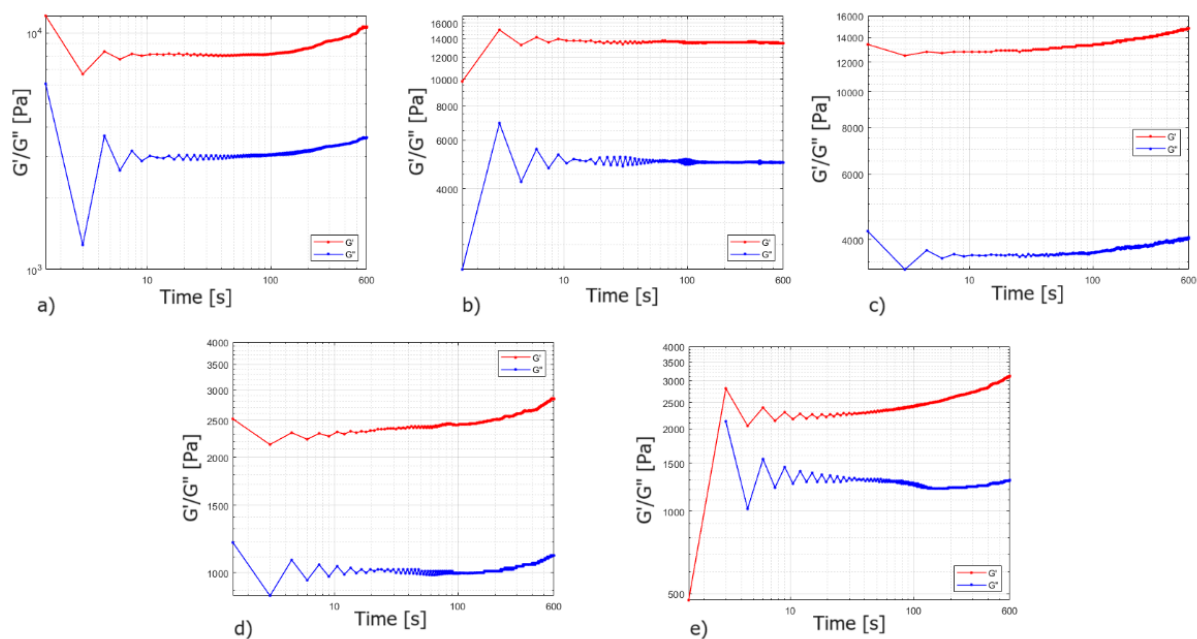


Figure S3. Graphs obtained during the oscillation tests (20 wt.% of ANa aq.): a) 5%/1:9, b) 20%/1:9, c) 5%/1:1, d) 20%/1:1, e) 5%/9:1.

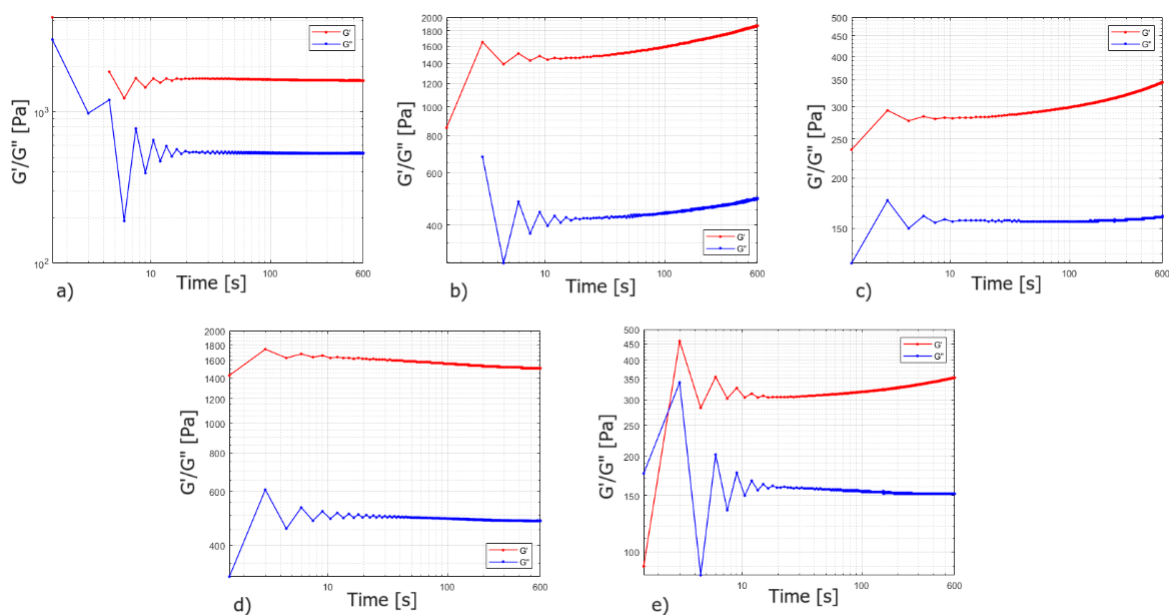


Figure S4. Graphs obtained during the oscillation tests (15 wt.% of ANa aq.): a) 5%/1:9, b) 20%/1:9, c) 5%/1:1, d)20%/1:1, e) 5%/9:1.

3. Fire tests

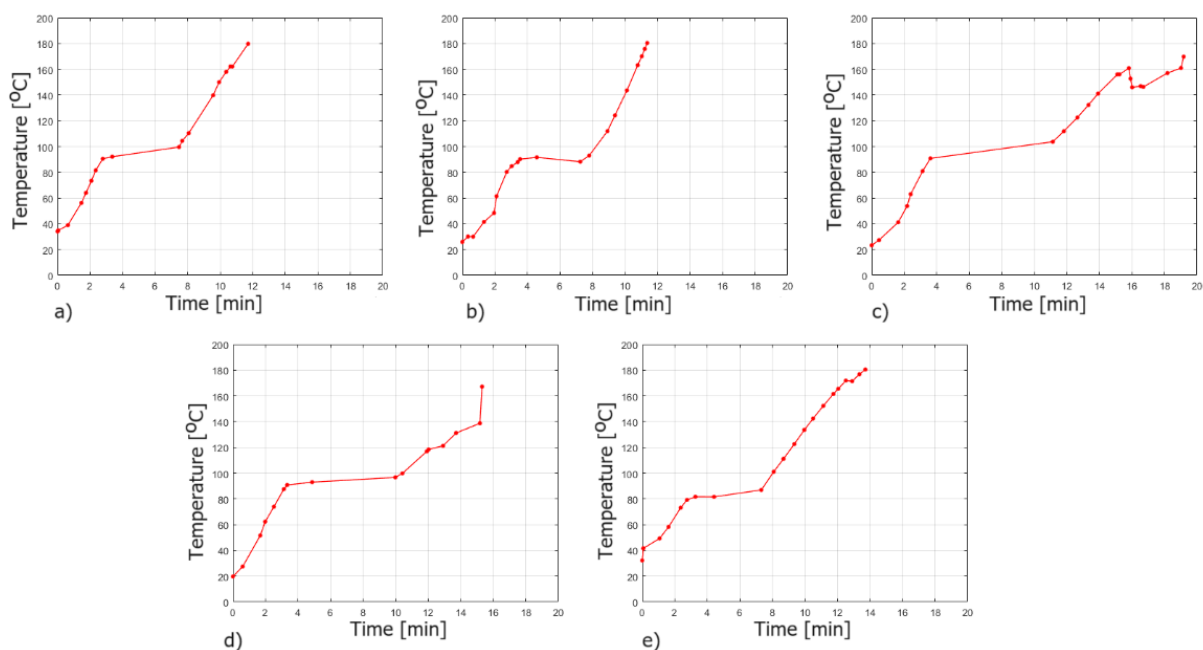


Figure S5. Temperature versus time during the fire test (20 wt.% of ANa aq.): a) 5%/1:9, b) 20%/1:9, c) 5%/1:1, d)20%/1:1, e) 5%/9:1.

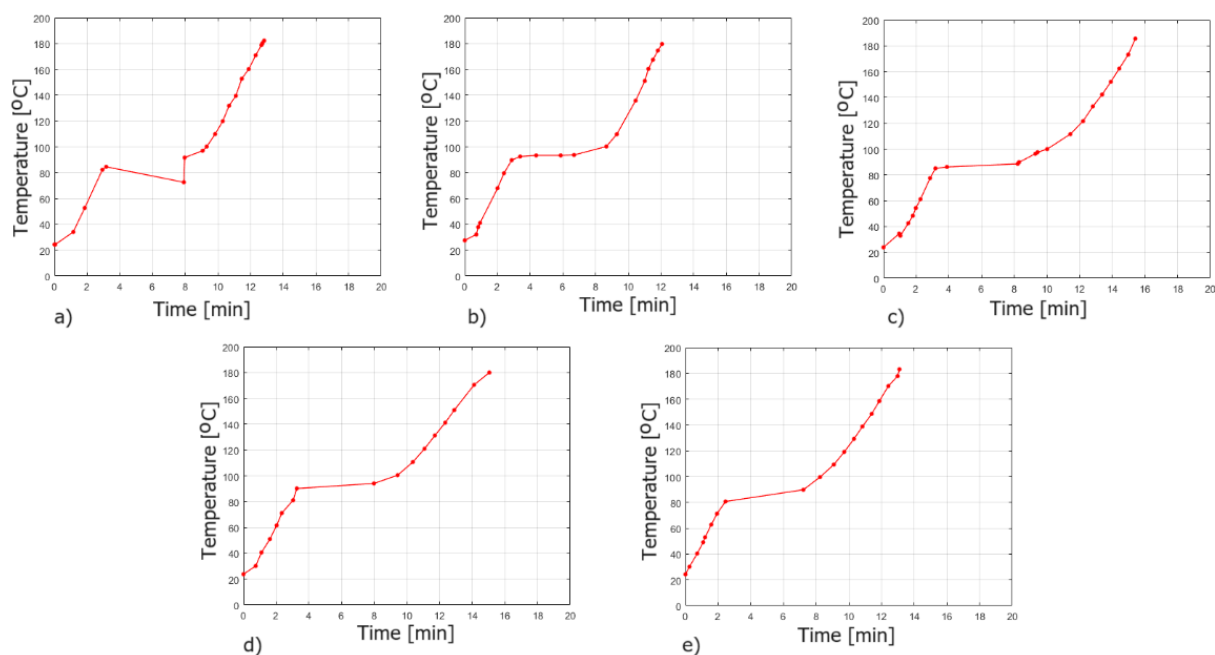


Figure S6. Temperature versus time during the fire test (15 wt.% of ANa aq.): a) 5%/1:9, b) 20%/1:9, c) 5%/1:1, d) 20%/1:1, e) 5%/9:1.

4. Thermal analysis: TG/DSC analysis

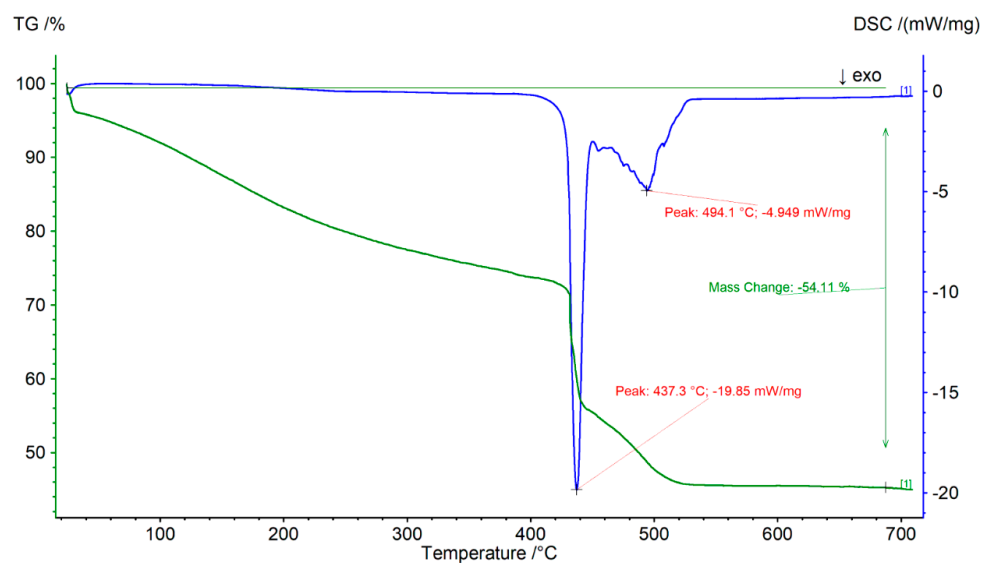


Figure S7. TG/DSC thermogram of sample 5%/1:9 (20 wt.% of ANa aq.).

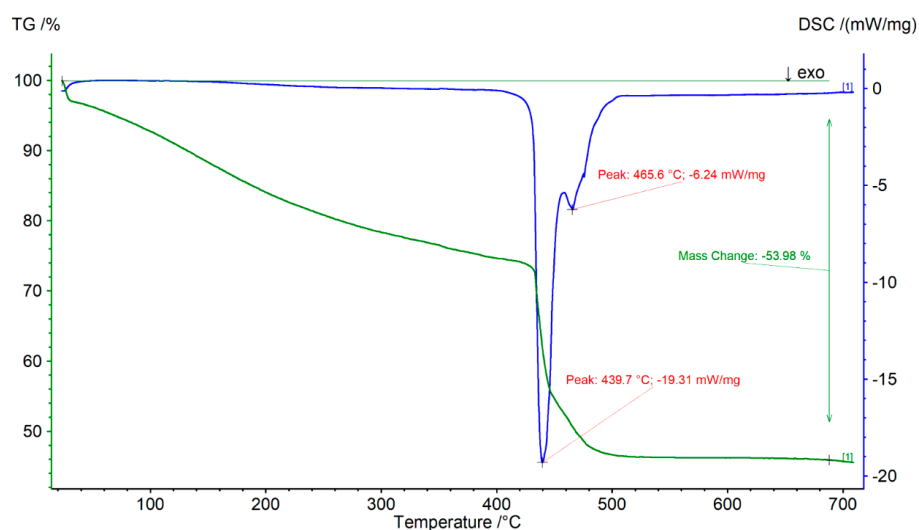


Figure S8. TG/DSC thermogram of sample 20%/1:9 (20 wt.% of ANa aq.).

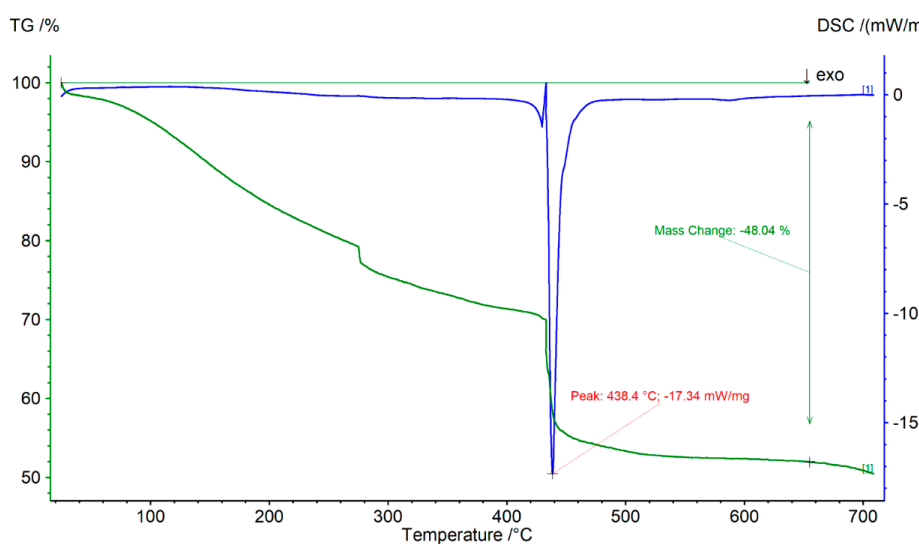


Figure S9. TG/DSC thermogram of sample 5%/1:1 (20 wt.% of ANa aq.).

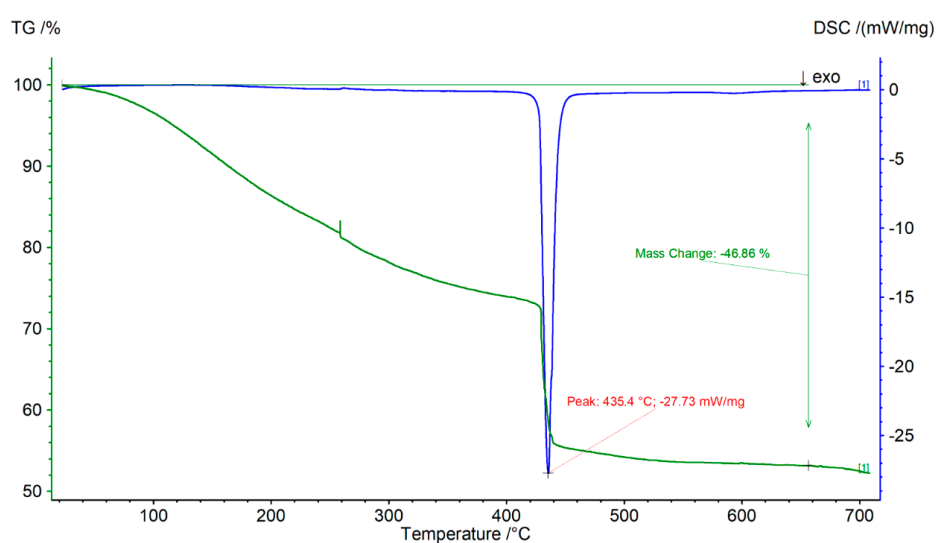


Figure S10. TG/DSC thermogram of sample 20%/1:1 (20 wt.% of ANa aq.).

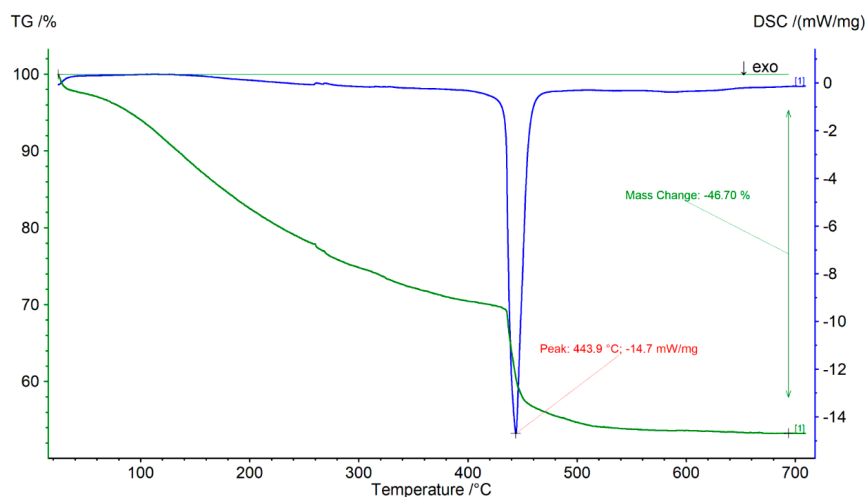


Figure S11. TG/DSC thermogram of sample 5%/9:1 (20 wt.% of ANa aq.).

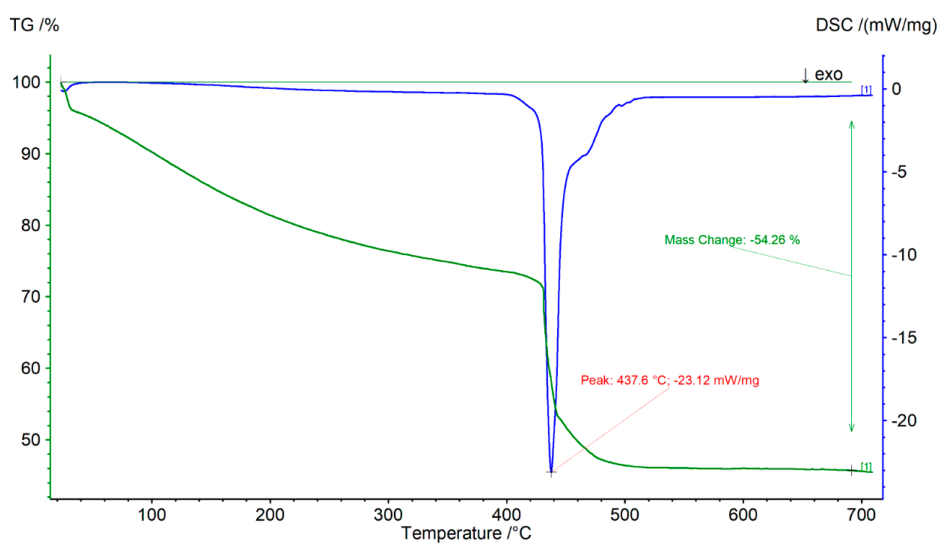


Figure S12. TG/DSC thermogram of sample 5%/1:9 (15 wt.% of ANa aq.).

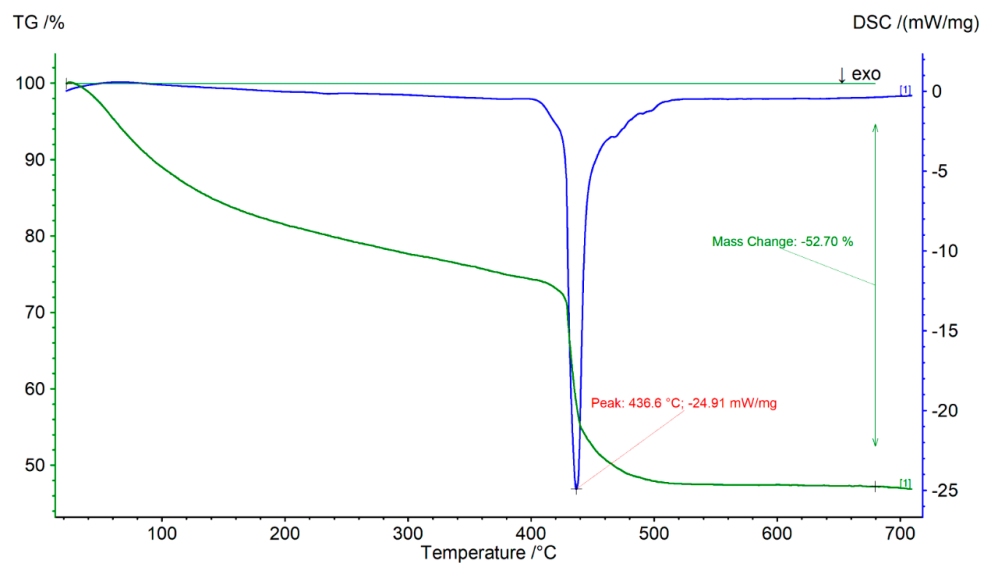


Figure S13. TG/DSC thermogram of sample 20%/1:9 (15 wt.% of ANa aq.).

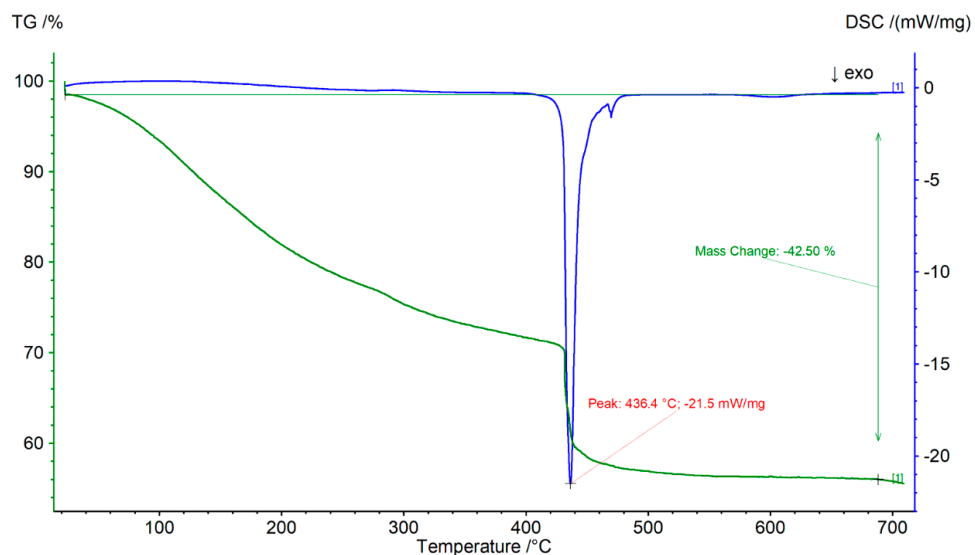


Figure S14. TG/DSC thermogram of sample 5%/1:1 (15 wt.% of ANa aq.).

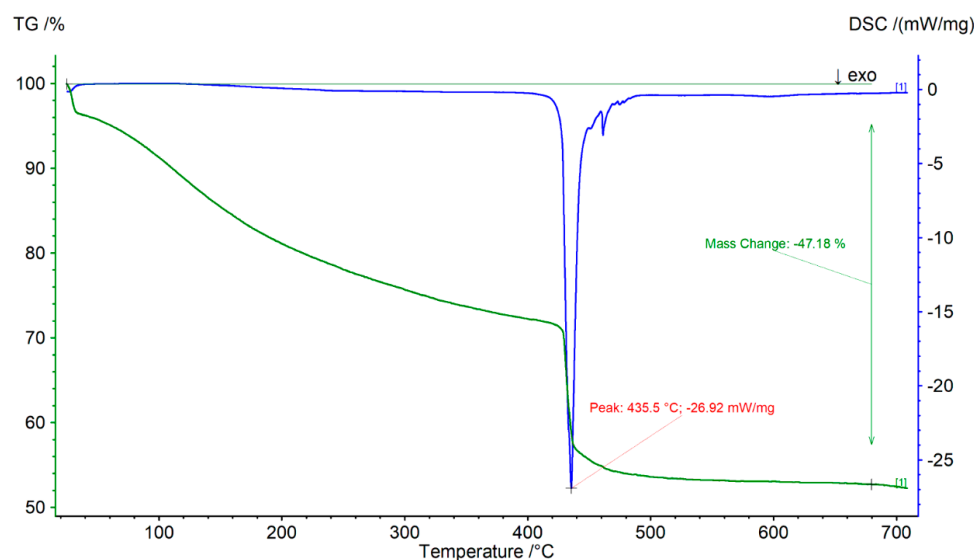


Figure S15. TG/DSC thermogram of sample 20%/1:1 (15 wt.% of ANa aq.).

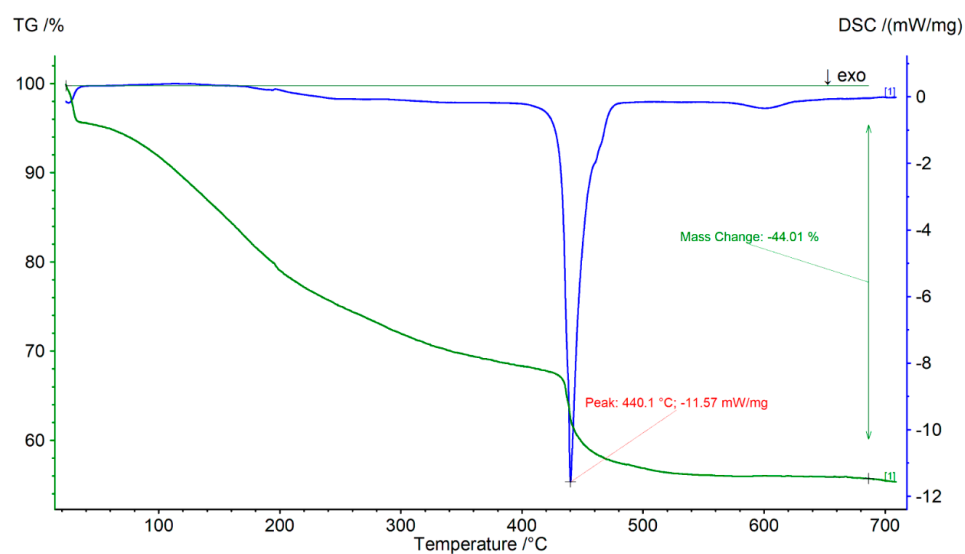


Figure S16. TG/DSC thermogram of sample 5%/9:1 (15 wt.% of ANa aq.).