

Supplementary information

Multifunctional thermoregulating and water repellent cellulosic textile

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Figure S1. Preparation of swatch from developed fibers.

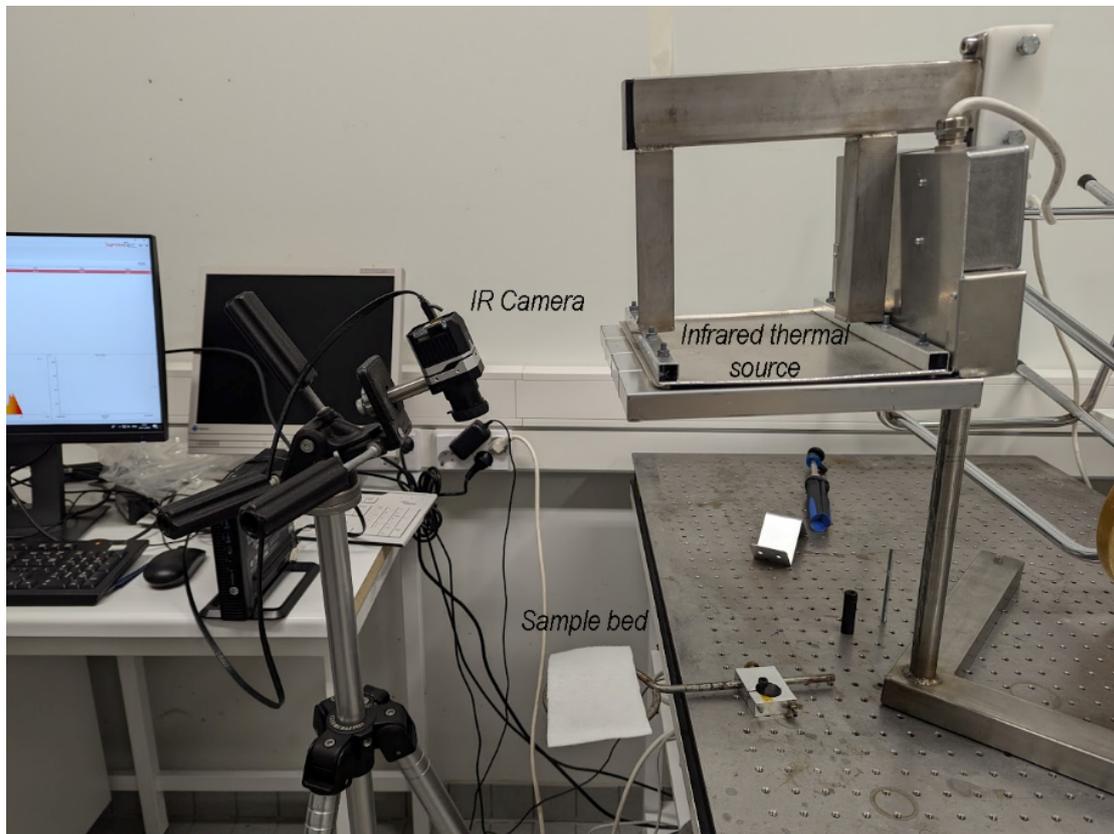
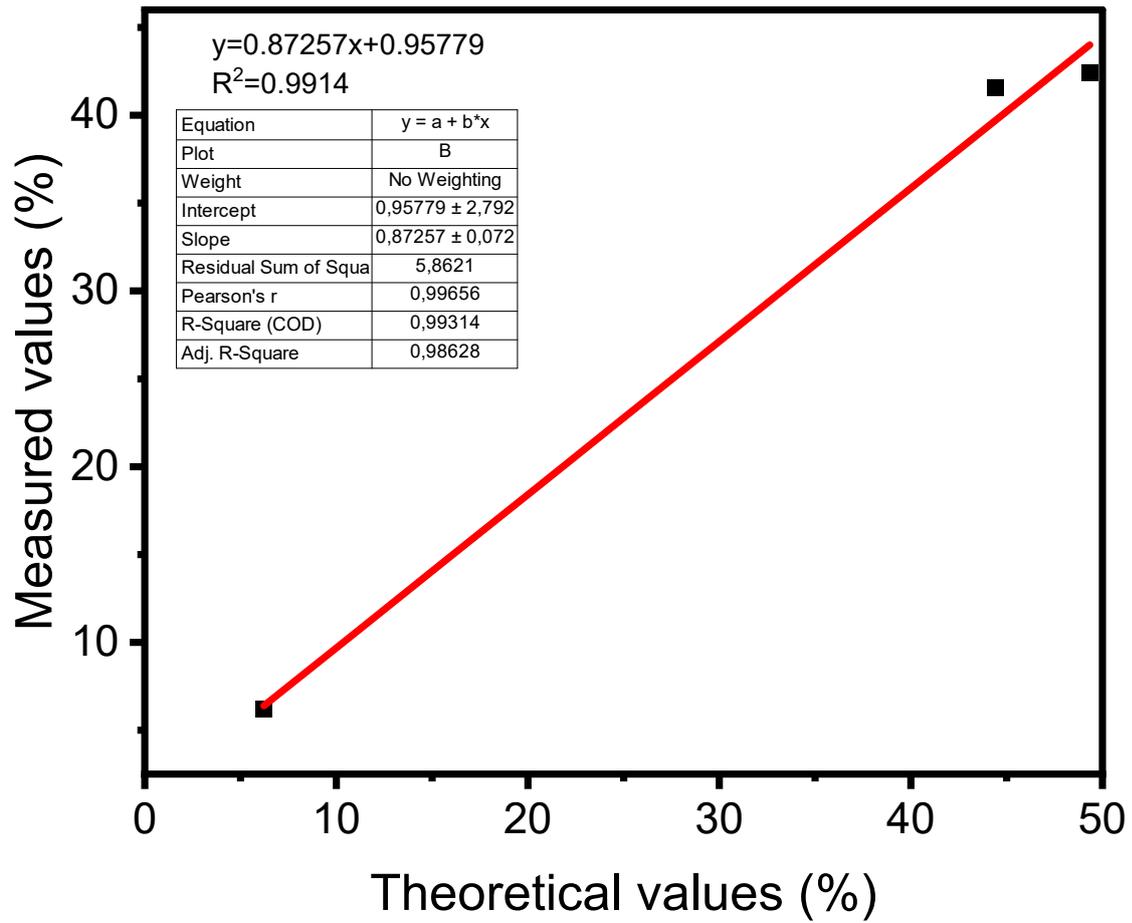


Figure S2. Thermal camera setup for thermal measurement.



re S3. Cellulose elemental calibration curve.

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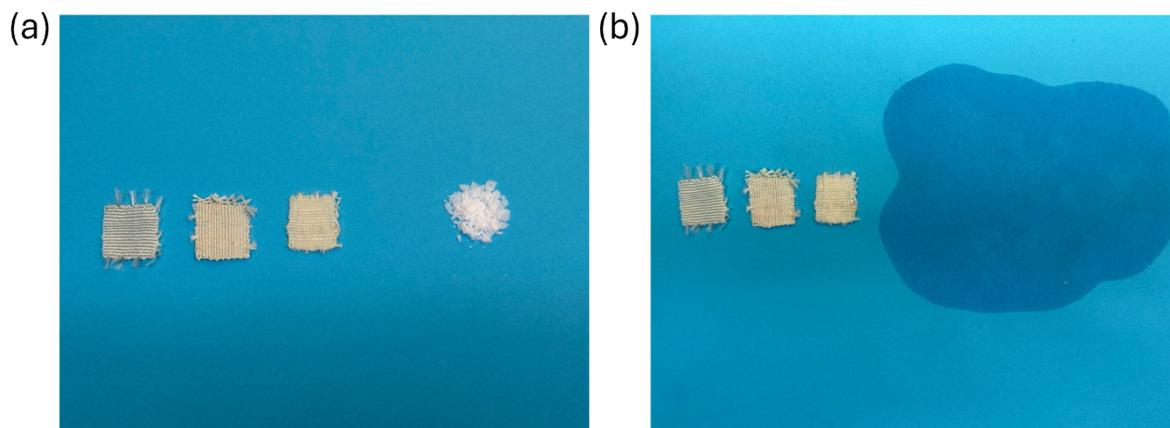


Figure S4. The leak test (a) before putting it in the oven, and (b) after putting it in the oven at 80°C for 4h.

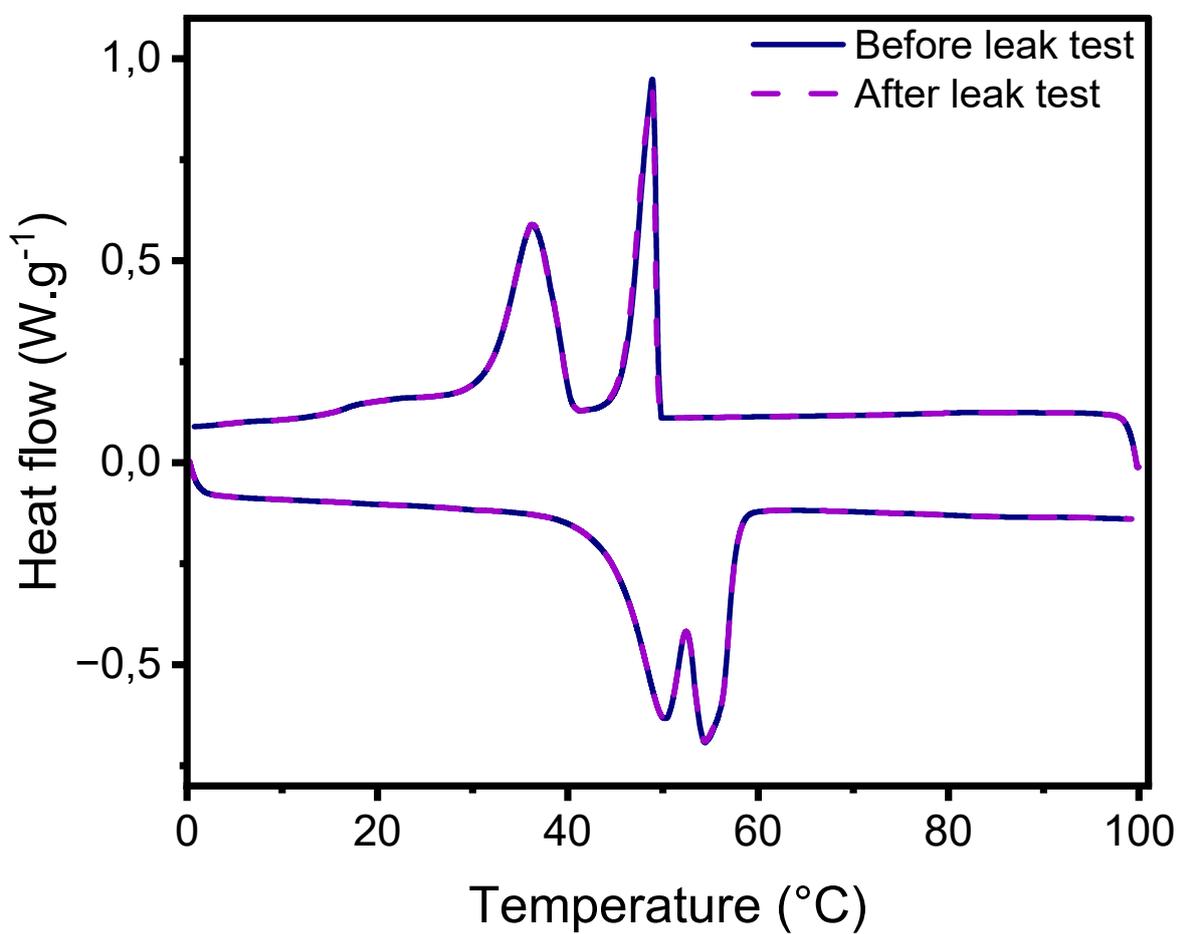
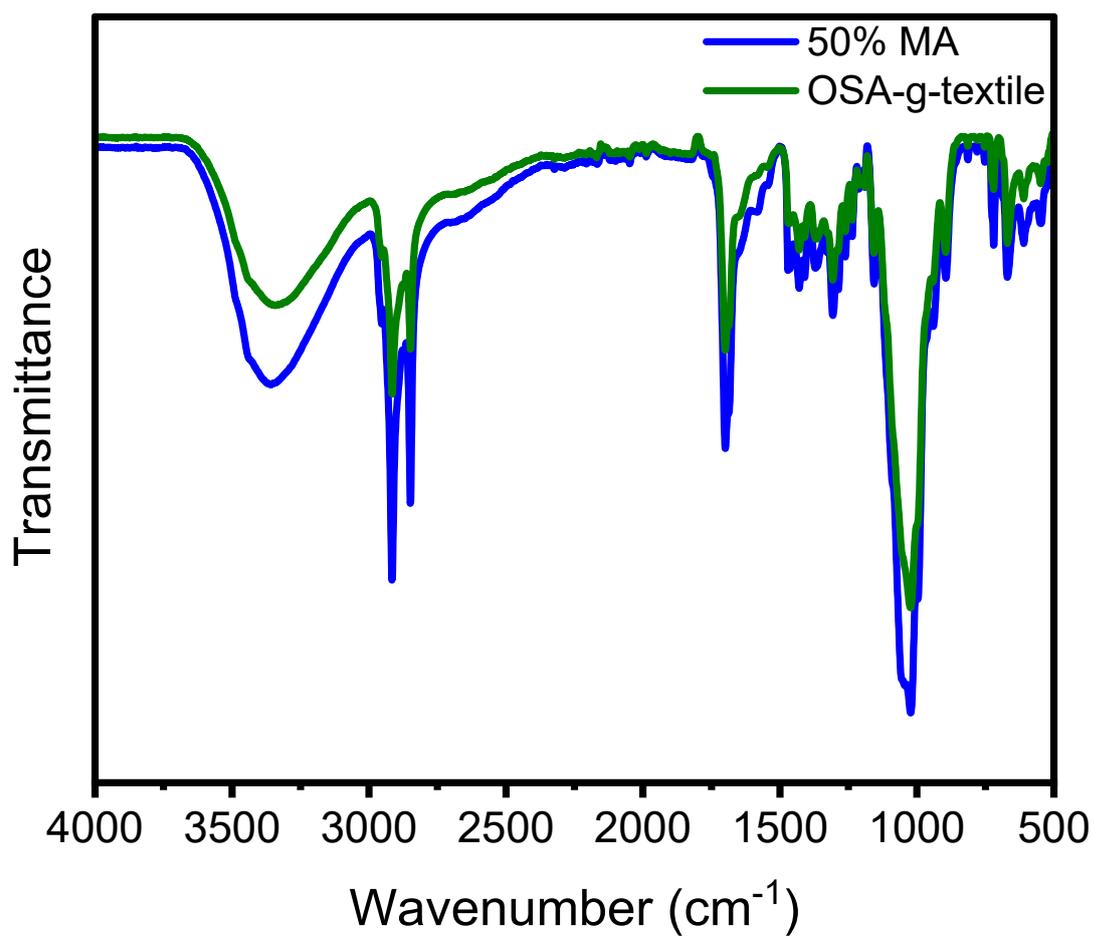


Figure S5. DSC analysis of the sample (50% MA) before and after the leak test.

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e S6. FTIR analysis of samples a) before coating, b) after coating.

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Figure S7. Water contact angle measurement of plain cellulose as soon as exposing to the water droplet.

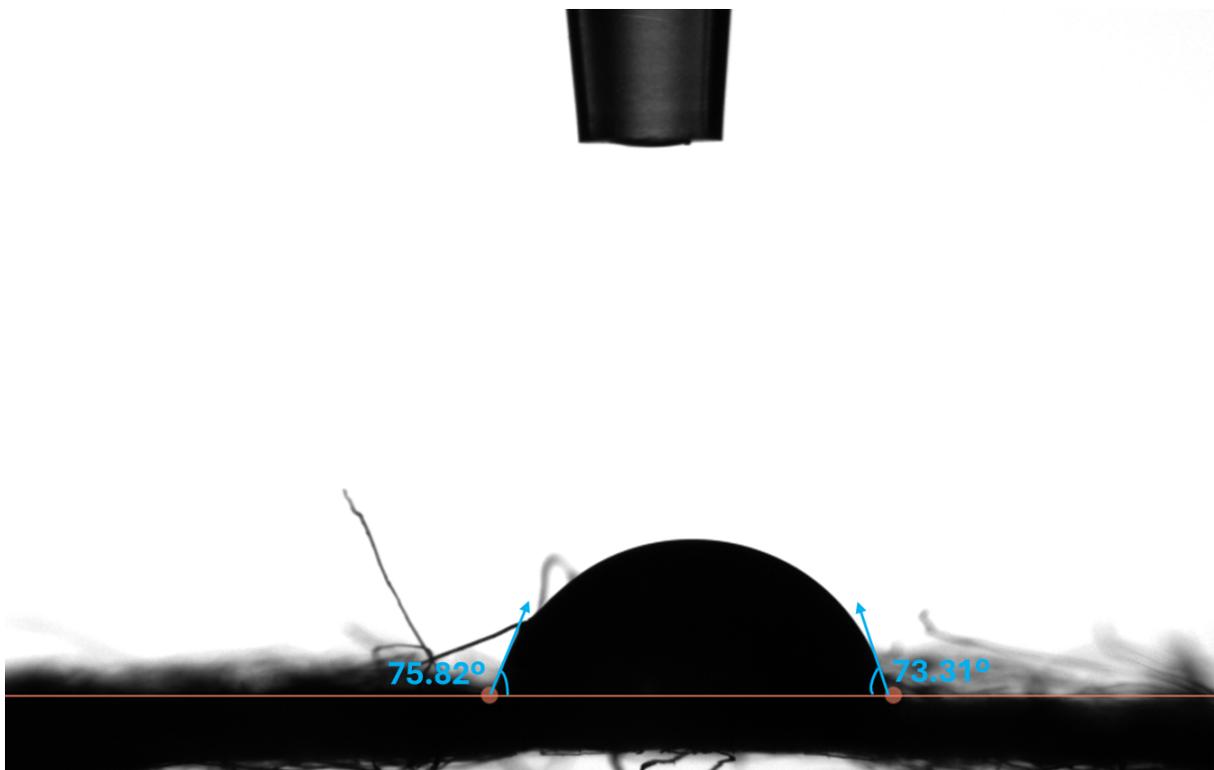


Figure S8. Water contact angle measurement of OSA-g-textile after washing test after 60 seconds.

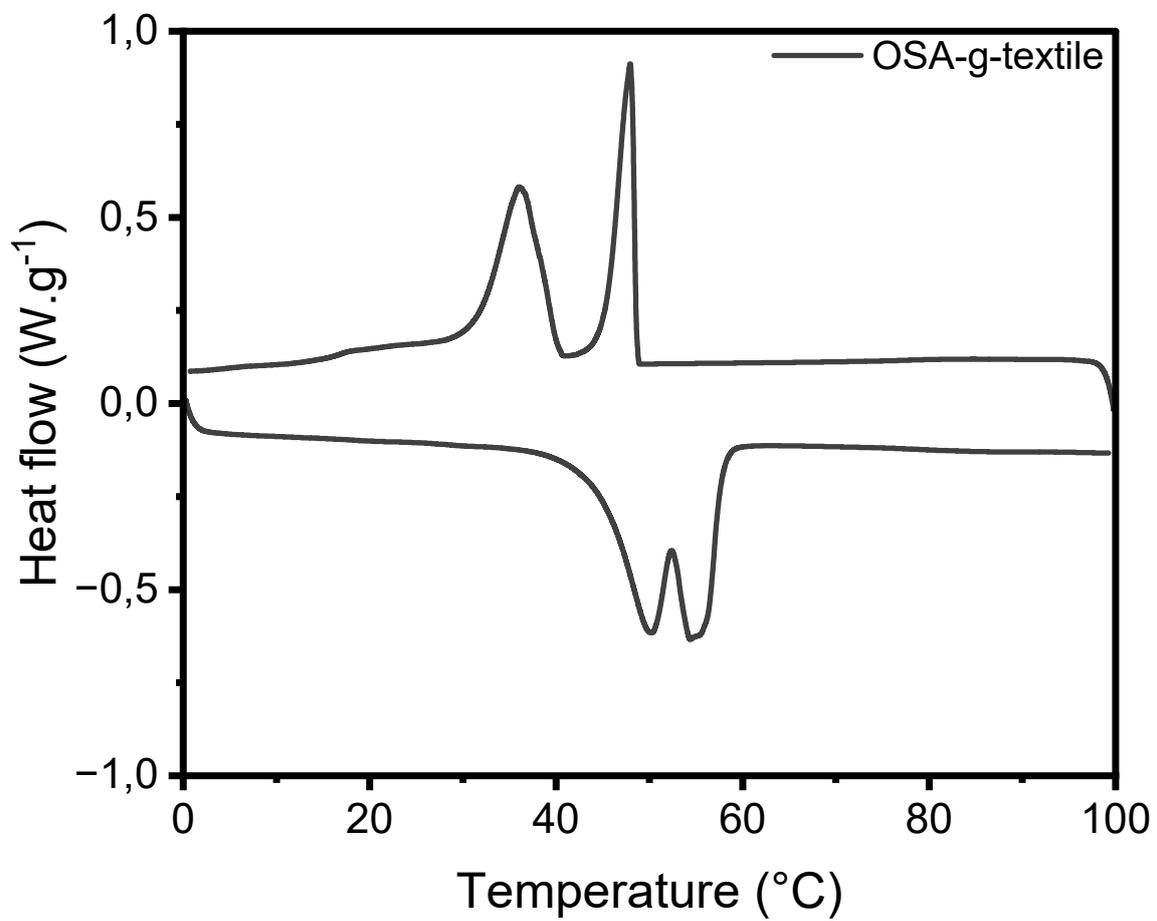


Figure S9. DSC analysis of OSA-g-textile including 50% MA after washing.