

## Supporting information

# A solvent-free approach to crosslinked hydrophobic polymeric coatings on paper using vegetable oil

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Table S1: Attribution of IR spectral bands of oleic acid/thiol mixture to functional groups.<sup>[23]</sup>

Wavenumber (cm <sup>-1</sup> )	Functional group
3005	H-C= <sub>cis</sub>
2957	CH <sub>3</sub>
2924	CH <sub>2</sub>
2852	CH <sub>2</sub>
1709	C=O
1462	CH <sub>2</sub>
1434	CH <sub>3</sub>
1412	H-C= <sub>cis</sub>
1378	CH <sub>3</sub>
1343	O-H
1283, 1246	CH <sub>2</sub>
1118	-C-O (ester)
1091	-C-O (ester)
998	C=C <sub>conj</sub> * <sup>[20]</sup>
967	C=C <sub>trans</sub> *
934	C=C <sub>cis</sub>
723	C=C <sub>cis</sub> and -(CH <sub>2</sub> ) <sub>n</sub> -

\*only observed after crosslinking

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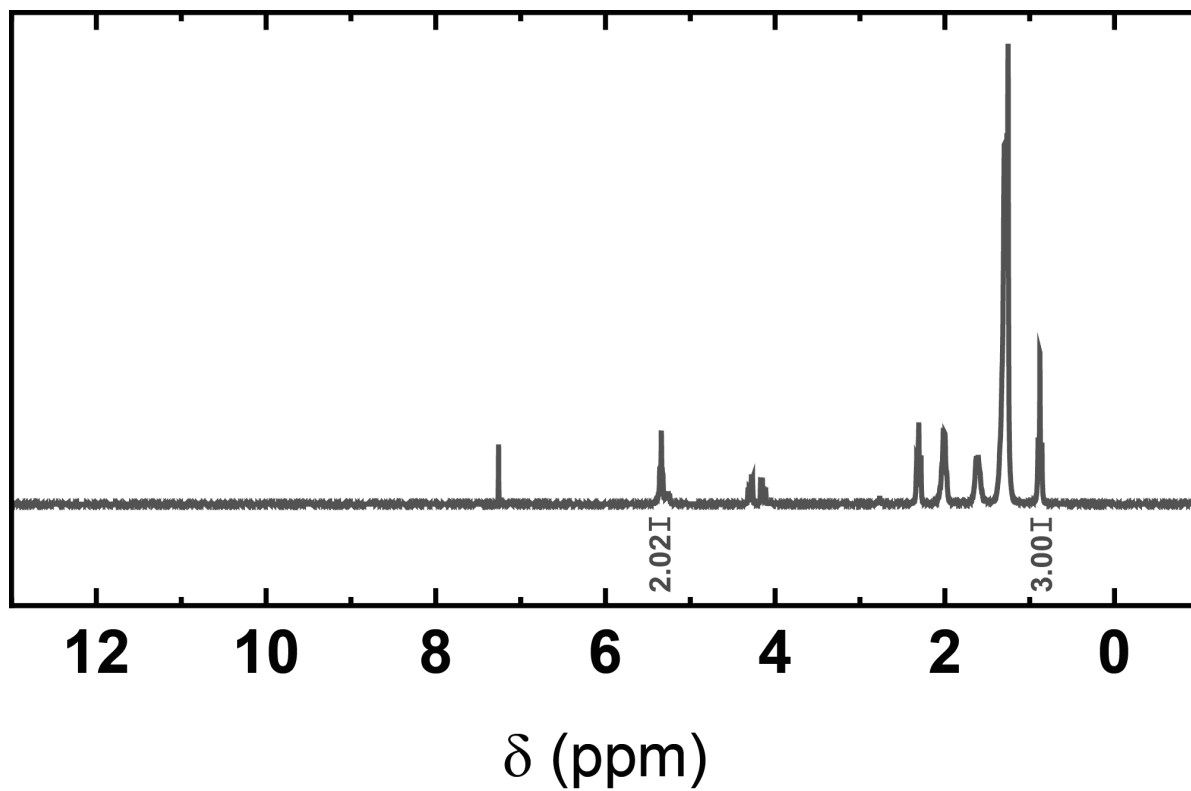


Figure S1: <sup>1</sup>H-NMR spectrum of olive oil.

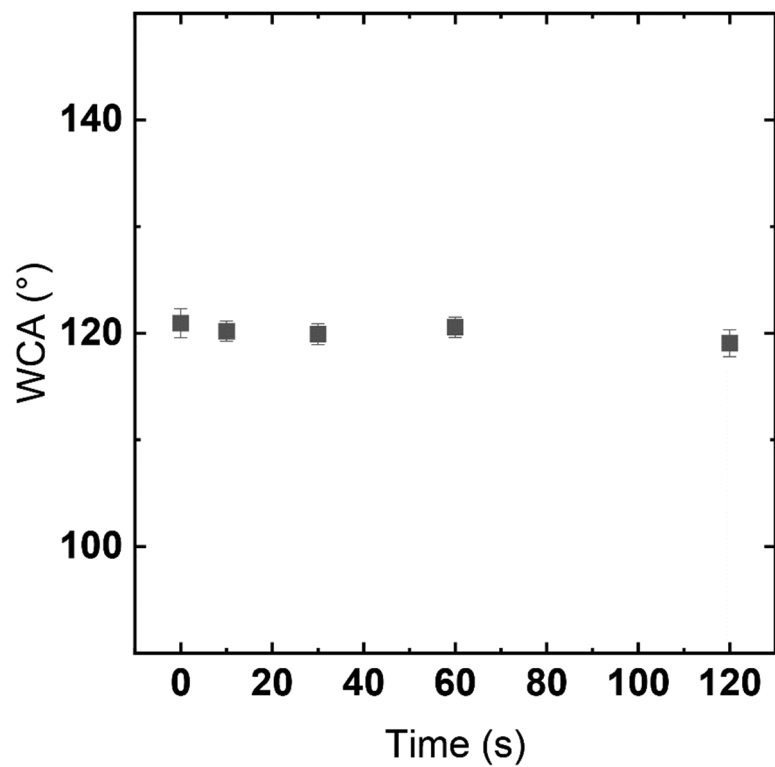


Figure S2: Time-dependent evolution of contact angles on cotton linters paper coated with crosslinked olive oil/1,8-ODT mixture.