Supplementary Information:

On the gelation of humins: From transient to covalent networks

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- water 100 5-HMF chlorsulfuron 99 98 intensity (-) mass (%) 97 96 95 94 93 0 50 100 150 200 250 300 time (min)
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Figure S1. Control TGA (red)-MS (blue) experiment of humins. Water (m/z = 18), HMF (m/z = 97) and chlorsulfuron (m/z = 111) intensities are displayed after normalization.



Figure S2. Arrhenius plot showing the temperature dependence of the shear viscosity.



Figure S3. Rheological master curve at 60 $^{\circ}$ C, 80 $^{\circ}$ C and 100 $^{\circ}$ C by applying a time-temperature / time-curing superposition.