Supporting Information (SI)

Structural changes of poplar wood lignin after supercritical pretreatment using carbon dioxide and ethanol-water as co-solvents

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Fig.S1. Supercritical CO$_2$ pretreatment with the ethanol-water as co-solvents (SCEP) device scheme: ($E_1$) reaction vessel; ($S_1$, $S_2$) separators; ($M_1$) mixers; ($P_1$) preheater; ($Q_1$, $Q_2$) quencher; (CW) cooling water.
Fig. S2. Quantitative $^{13}$C-NMR spectra of supercritical carbon dioxide pretreatment dissolution lignin (SCP-DL), enzymatic hydrolysis of original lignin (EHL), and supercritical carbon dioxide pretreatment residual lignin (SCP-RL).
Fig. S3. Quantitative $^{31}$P-NMR spectrum of EHL, SCEP-RL and SCEP-DL derivatized with tmdp using cyclohexanol as internal standard.