

Supplementary Information

Kinetic model for the reduction of furfural through MPV reaction (Equation (1)–(3)):

$$\frac{dC_{Furfural}}{dt} = -k_1 \cdot C_{Furfural} \quad (1)$$

$$\frac{dC_{Furfuryl\ alcohol}}{dt} = k_1 \cdot C_{Furfural} - k_2 \cdot C_{Furfuryl\ alcohol} \quad (2)$$

$$\frac{dC_{Furfuryl-iPropyl\ Ether}}{dt} = k_2 \cdot C_{Furfuryl-iPropyl\ Ether} \quad (3)$$

Objective Function—Sum of squares error for each reaction time (t) and for each chemical (c) (Equation (4)).

$$Obj = \sum_c \sum_{t=0}^t (C_{c\ experimental} - C_{c\ calculated})^2 \quad (4)$$

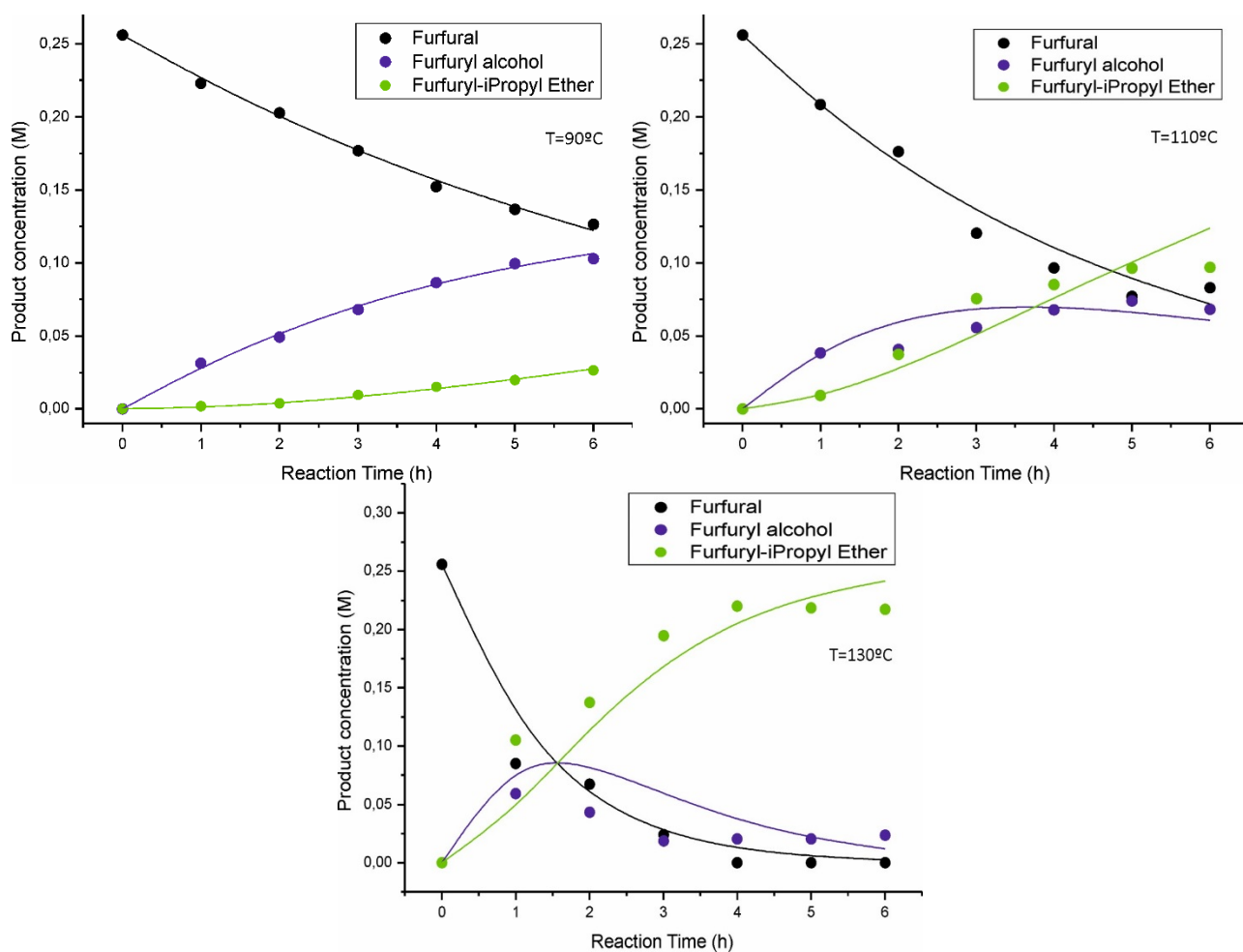


Figure S1. Evolution of the products distribution with the reaction time as a function of temperature. Dots: experimental data; Lines: model predicted values.

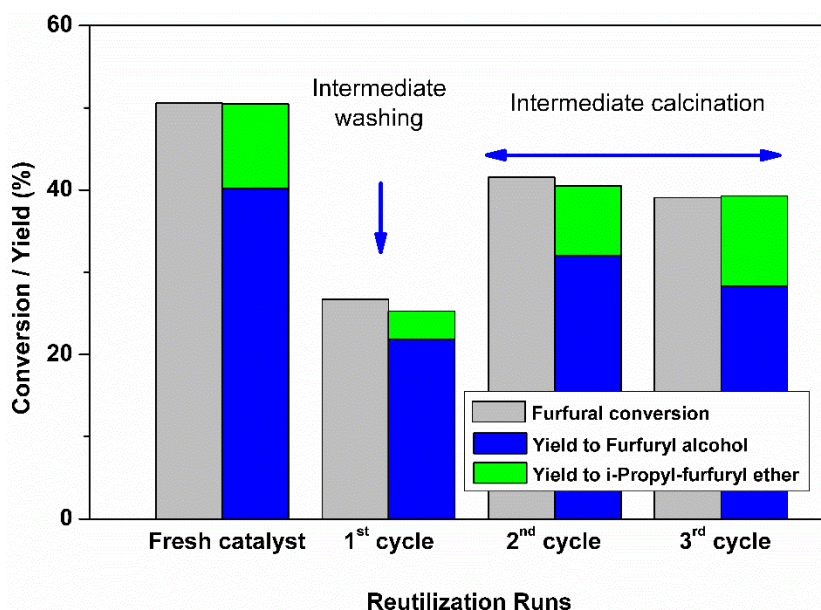
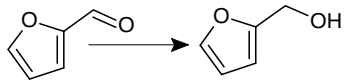
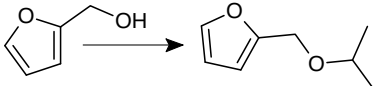


Figure S2. MPV reduction of furfural with *i*-PrOH—Recycling Tests. Reaction Conditions: Catalyst loading: 0.2 g; reaction temperature: 90; furfural to catalyst mass ratio: 1.0; *i*-PrOH to furfural molar ratio: 50; reaction time: 6 h.

Table S1. Pre-exponential factor and apparent activation energy for the kinetic constants determined for MPV reduction of furfural

Reactions	k_0 (h ⁻¹)	E_A (J·mol ⁻¹ ·K ⁻¹)
	33.8	11.7×10^5
	1204.8	19.9×10^5