

Supporting Information for:

**Deep eutectic solvent (DES) as both Solvent and Catalyst for
Oxidation of Furfural to Maleic acid and Fumaric acid**

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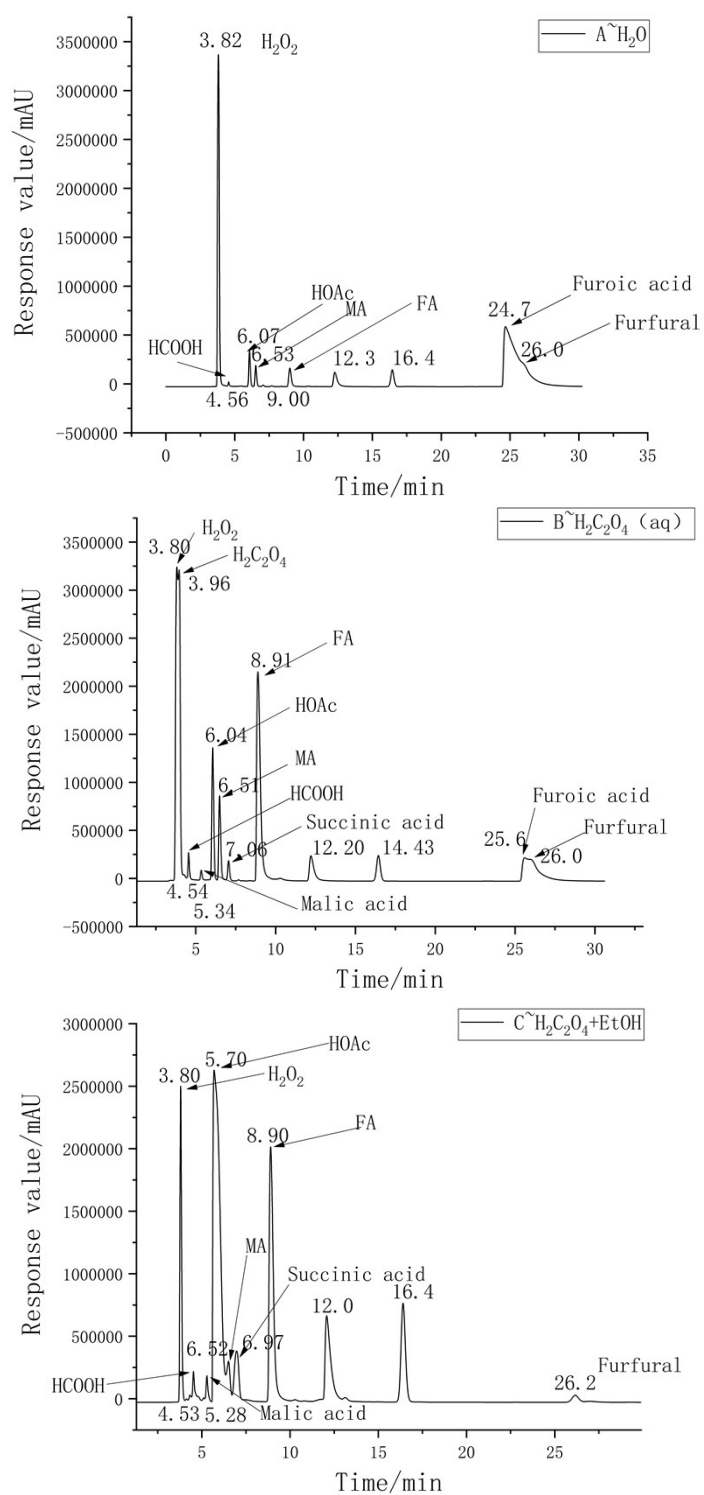


Figure S1. HPLC of products obtained from furfural oxidation in various solvents: A) pure water; B) saturated oxalic acid aqueous solution; C) saturated oxalic acid ethanol solution.

Table S1. Yield of MA and FA when the reaction was carried out in various solvents

Solvent	MA (%)	FA (%)	MA+FA (%)
H ₂ O	0.4	0.6	1.0
H ₂ O+OA	2.0	9.0	11.0
Ethanol+OA	1.5	8.4	9.8

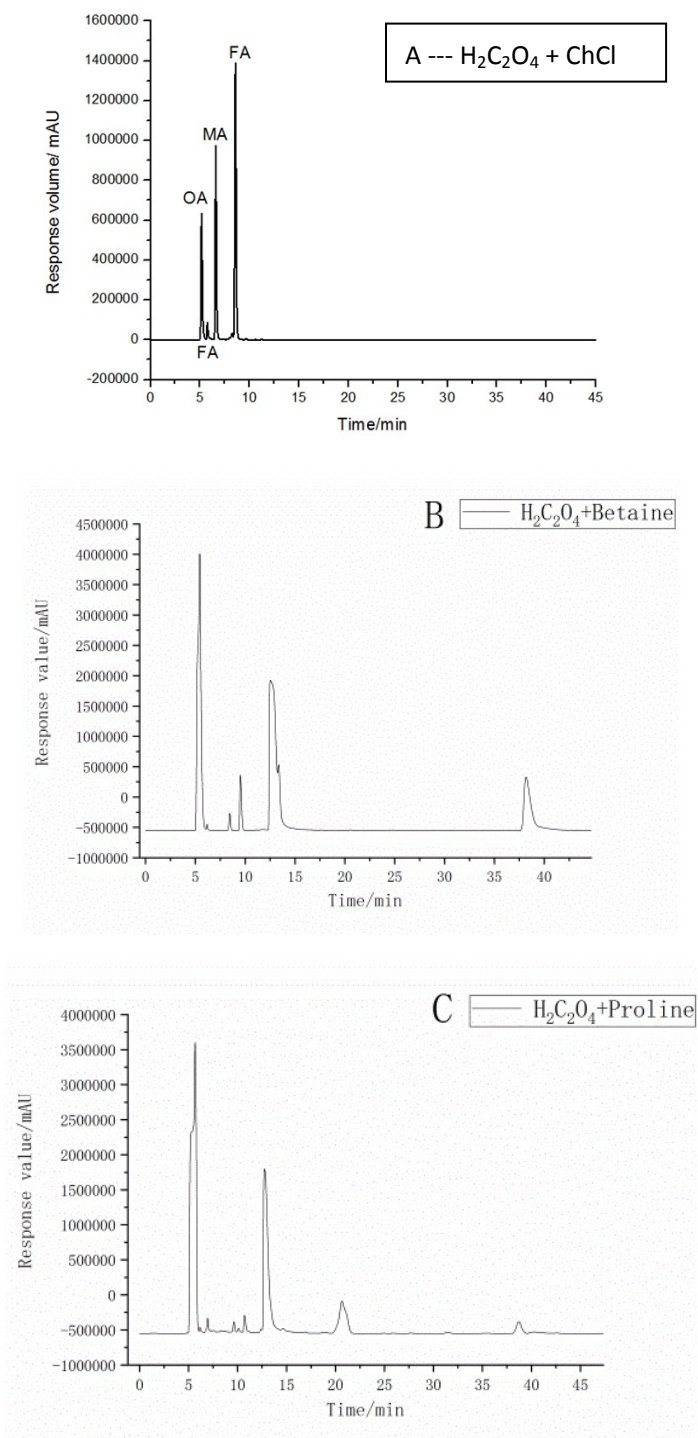


Figure S2. HPLC of products obtained from furfural oxidation in various oxalic acid based DES: A) H₂C₂O₄/ChCl; B) H₂C₂O₄/Betaine; C) H₂C₂O₄/Proline.

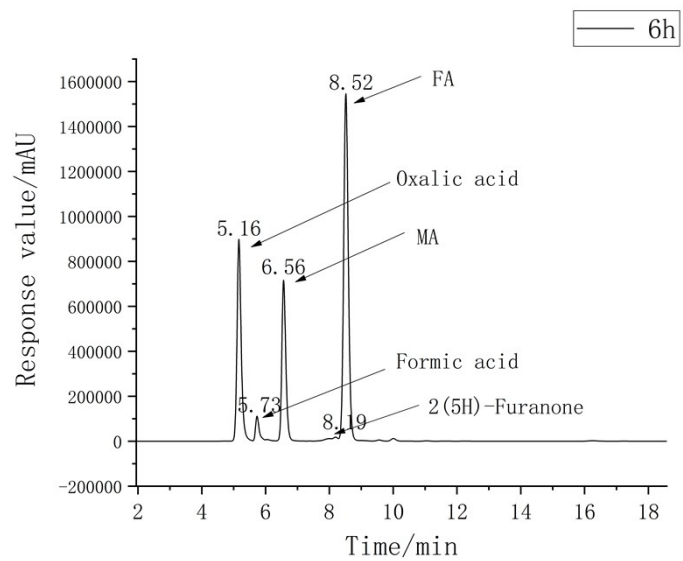


Figure S3. The reaction conditions of this sample: DES ($\text{H}_2\text{C}_2\text{O}_4$:ChCl=1:3, about 0.5 g : 1.8 g), Furfural: 1 mmol, Temperature: 50 °C, Time: 6h.